50 years of hurdles and hope in anxiolytic drug discovery

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Abstract | Anxiety disorders are the most prevalent group of psychiatric diseases, and have high personal and societal costs. The search for novel pharmacological treatments for these conditions is driven by the growing medical need to improve on the effectiveness and the side effect profile of existing drugs. A huge volume of data has been generated by anxiolytic drug discovery studies, which has led to the progression of numerous new molecules into clinical trials. However, the clinical outcome of these efforts has been disappointing, as promising results with novel agents in rodent studies have very rarely translated into effectiveness in humans. Here, we analyse the major trends from preclinical studies over the past 50 years conducted in the search for new drugs beyond those that target the prototypical anxiety-associated GABA (γ-aminobutyric acid)–benzodiazepine system, which have focused most intensively on the serotonin, neuropeptide, glutamate and endocannabinoid systems. We highlight various key issues that may have hampered progress in the field, and offer recommendations for how anxiolytic drug discovery can be more effective in the future.

Anxiety disorders are chronic, disabling conditions that impose enormous costs both on individuals and on society[1–5]. These disorders are the most frequently diagnosed neuropsychiatric diseases in Western countries. According to a recent 3-year multi-method study covering 30 European countries and a population of 514 million people, anxiety disorders had the highest 12-month prevalence estimates (a total of 14%) compared to all other psychiatric conditions[2].

There are currently seven recognized anxiety syndromes: panic disorder, agoraphobia, social anxiety disorder (SAD), generalized anxiety disorder (GAD), specific phobias, obsessive compulsive disorder (OCD) and post-traumatic stress disorder (PTSD) (TABLE 1). However, it should be borne in mind that the categorization of anxiety disorders is constantly evolving and very recently changed with the pending revision of the Diagnostic and Statistical Manual of Mental Disorders. There has also been renewed debate about the validity of imposing strict categorical boundaries between neuropsychiatric disorders; some authors have argued that these boundaries fall along a dimensional spectrum[6,7]. The ever-changing diagnostic landscape clearly complicates attempts to model and develop drugs for specific disorders. This may be compounded by failings in the design of the clinical trials for novel anxiolytics. Although it is beyond the scope of our expertise to adjudge the fidelity of clinical trials, other authors have critically analysed whether trials for anxiolytics have been optimally designed to detect a reasonable efficacy of novel treatments for mood and anxiety disorders[8].

The other widely discussed issue that confounds neuropsychiatric drug discovery is the lack of an adequate account of the pathogenic mechanisms underlying neuropsychiatric conditions such as anxiety disorders. Although there has been a growing appreciation of how emotional disorders result from a combination of genetic and environmental risk factors[9], identifying reliable biochemical biomarkers or genetic variants that can be used to diagnose anxiety disorders and help predict treatment outcomes remains a major challenge[10].

Beyond these issues, the key challenge of this field ultimately remains the identification of new medications that are devoid of the limitations in efficacy and tolerability that characterize existing anxiolytics. Drugs that act on the prototypical anxiety-associated GABA (γ-aminobutyric acid)–benzodiazepine system have been a benchmark for anxiolytics since their discovery in the mid-1950s and, as discussed briefly below, efforts have been made to develop new compounds that target this system (for a review, see

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REF. 11). The strong need for new, alternative treatments for anxiety has also fuelled the generation of a vast amount of preclinical data on agents targeting other neurotransmitter systems and led to the advancement of many drugs from the laboratory to the clinic. FIGURE 1 shows the major trends over the past 50 years, involving more than 10,000 experiments on nearly 1,500 novel drugs (for a full list, including the drug, preclinical model, results and references, see Supplementary information S1 (box)). This analysis illustrates the steady increase in preclinical

Table 1 | **The five main anxiety disorders as described in the DSM-IV-TR**

Symptoms	Prevalence	Treatment
Generalized anxiety disorder (GAD)		
The existence of chronic feelings of excessive worry and anxiety are the main symptoms; these are accompanied by somatic symptoms such as elevated blood pressure, increased heart rate, muscle tension, sweating and shaking[125,126]	• GAD is one of the most common anxiety disorders • Approximately 3% of people in the United States will develop GAD during a given year, and 5% will have the disorder at some point in their lives • Approximately 25% of the people who attend anxiety treatment clinics have GAD[125]	Several different types of medications are used to treat GAD, including SSRIs, 5-HT–noradrenaline reuptake inhibitors, benzodiazepines, the 5-HT_{1A} receptor partial agonist buspirone and the calcium channel α2δ subunit ligand pregabalin[127]
Post-traumatic stress disorder (PTSD)		
The essential feature is the development of distinct symptom clusters triggered by a terrifying event, which may include re-experiencing or flashbacks, nightmares and severe anxiety, as well as persistent thoughts about the event[125,126]	• The experience of a traumatic event is common in the general population, but the majority of individuals recover without developing PTSD • The NCS-R, conducted between 2001 and 2003, estimated the lifetime prevalence of PTSD among adult Americans to be nearly 7%[128], and the 12-month prevalence was estimated at 3.5%[129] • Current past-year PTSD prevalence in Europe was also estimated at 3.5%[2]	• Although evidence-based, trauma-focused psychotherapy is the preferred treatment for PTSD, pharmacotherapy is also an important treatment option • First-line pharmacotherapy agents include SSRIs and the selective 5-HT–noradrenaline reuptake inhibitor venlafaxine • Second-line agents include the α_2-adrenergic receptor antagonist mirtazapine, tricyclic antidepressants and monoamine oxidase inhibitors[130]
Panic disorder		
The main feature is the panic attack, which is defined as an abruptly developed feeling of intense anxiety or fear that has been present for a discrete period of time; panic disorder involves a set of cognitive and physical symptoms, such as choking feelings, fear of losing control or dying, depersonalization, accelerated heart rate and trembling or shortness of breath; agoraphobic avoidance can often be an additional condition[125,126]	Lifetime prevalence estimates of panic disorder (with or without agoraphobia) range from 1–3.5%, whereas the 12-month prevalence rates are 0.5–3.1%[2,125]	• The main treatment options for panic attacks are psychotherapy and medications • SSRIs and venlafaxine are generally used as first-line pharmacological agents in panic disorder, followed by tricyclic antidepressants such clomipramine and imipramine • Some benzodiazepines (such as alprazolam, clonazepam, diazepam and lorazepam) are also efficacious in the acute management of panic disorder[131]
Social anxiety disorder (SAD)		
The vast majority of individuals will experience mild anxiety in some social situations (for example, public speaking), but in SAD, public situations cause irrational anxiety, fear, self-consciousness and embarrassment, as well as avoidance and anxious anticipation[125,126]	Lifetime prevalence estimates of SAD as determined by the NCS for the American adult population range from 3–13%, whereas the 12-month prevalence rates as reported in a recent pan-European landmark study are 0.6–7.9%[2,132]; this makes SAD the most common anxiety disorder and the third most common of all psychiatric conditions	• The two most common types of treatment are medications and psychological counselling • Although several types of medications are used to treat SAD, SSRIs and venlafaxine are generally used as first-line treatment • Other medications for SAD include the benzodiazepines bromazepam and clonazepam • Some beta blockers are used to control symptoms for a particular situation, such as giving a speech, but they are not recommended for the general treatment of SAD[133]
Obsessive compulsive disorder (OCD)		
OCD is an anxiety disorder that is characterized by unreasonable thoughts and impulses that lead to stereotyped behaviours with the aim of reducing the distress caused by the obsession[125,126]	Lifetime prevalence estimates of OCD range from 0.5–2%, whereas the 12-month prevalence rates are 0.1–2.3%[2,125]	• OCD treatment can be difficult; treatment with SSRIs is generally used but it is only effective in about half of patients • Management of the remaining patients is challenging, but can include augmentation with antipsychotics, as well as the use of 5-HT–noradrenaline reuptake inhibitors and monoamine oxidase inhibitors • Non-pharmacological interventions such as cognitive behavioural therapy can also be effective[134]

5-HT, 5-hydroxytryptamine (serotonin); DSM-IV-TR, Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision; NCS, National Comorbidity Survey; NCS-R, National Comorbidity Survey Replication; SSRI, selective serotonin reuptake inhibitor.

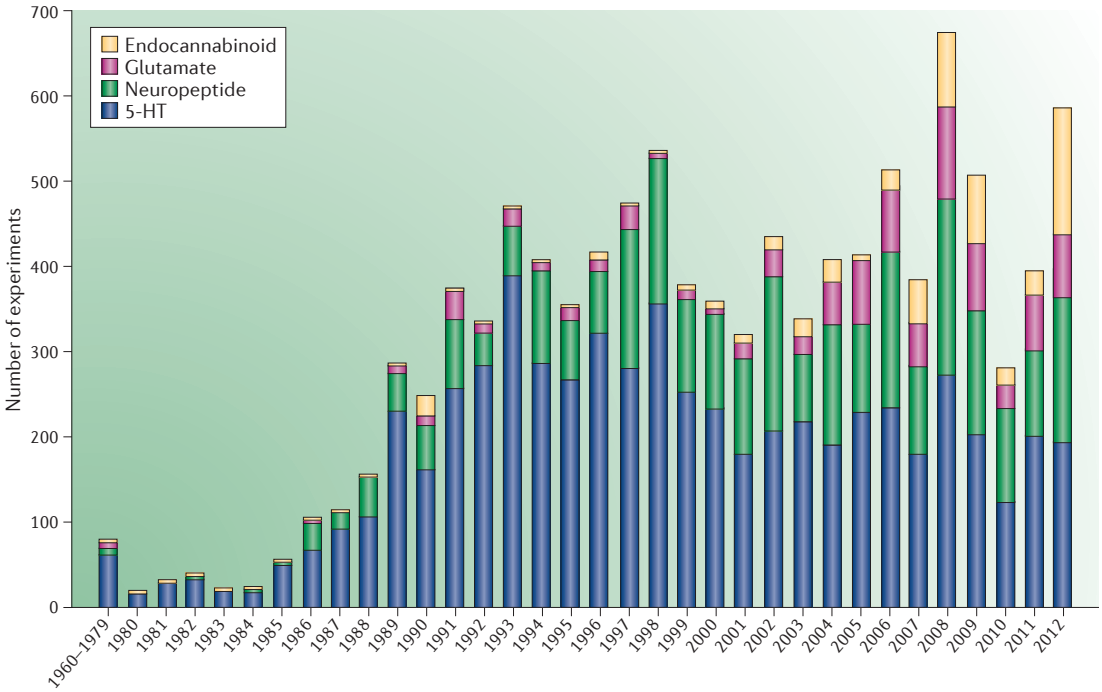


Figure 1 | **Fifty-year trends in preclinical anxiolytic drug discovery.** The values represent the number of experiments investigating the anxiety-related effects of targeting the 5-hydroxytryptamine (5-HT; also known as serotonin), neuropeptide, glutamate and endocannabinoid systems between 1960 and 2012. The graph shows that the volume of research steadily increased from the 1980s onwards, peaking at the end of the 1990s, and has remained relatively constant up to now. More than half of the experiments focused on the 5-HT system, but neuropeptide drugs have also been a major focus of anxiolytic drug discovery, accounting for about one-third of all experiments. Over the past decade, the field has seen a rise in studies focusing on the glutamate and endocannabinoid systems. In this figure, an experiment refers to one drug (single or multiple dosing) that is tested in one assay or model. For more information on each experiment, including the drug, preclinical model, results and references, see Supplementary information S1 (box).

anxiety research from the 1980s onwards, leading to a peak in activity around the end of the 1990s and a robust ongoing effort up to now.

As gauged from the number of preclinical experiments conducted over the past 50 years, four other neurotransmitter systems beyond the GABA–benzodiazepine system stand out as being a principal focus of anxiolytic drug discovery research. Owing to the remarkable success of the selective serotonin reuptake inhibitors (SSRIs) as anti-anxiety treatments, the 5-hydroxytryptamine (5-HT; also known as serotonin) system has received much attention and accounts for more than half of all preclinical studies. Neuropeptides, in particular corticotropin-releasing factor (CRF), cholecystokinin (CCK) and the tachykinins, have also been intensively studied and comprise a further one-third of the studies. In addition, in recent years there has been an increase in preclinical research on the anxiety-related properties of the glutamate and endocannabinoid systems.

Despite this intense preclinical research effort to find new anxiolytics, the field has largely been perceived as a failure. In this Review, we assess the current state of anxiolytic drug discovery at this critical juncture. To provide some context to the preclinical literature, we first introduce the tests and models of anxiety-like behaviours that have been most commonly used to identify and evaluate novel anxiolytic agents. We then turn to the main aim of this Review, which is to analyse a database comprising virtually all published preclinical studies over the past 50 years using animal models to identify novel anxiolytic drugs beyond those that target the GABA–benzodiazepine system. We focus on the most comprehensively studied neurotransmitter systems: the serotonin, neuropeptide, glutamate and endocannabinoid systems. After reviewing this literature, we highlight some of the key issues that may have hampered progress and offer recommendations for how anxiolytic drug discovery could be improved in the future.

Preclinical measures of anxiety

Numerous preclinical tests for anxiety have been developed, and the specifics of these tests have been described in many comprehensive reviews[12–14]. Here, we only briefly introduce the most frequently used tests (FIG. 2; TABLE 2) to illustrate the strengths and weaknesses of current approaches.

One general consideration from the outset is validity. The validity of a test for anxiety in an animal rests on three criteria: face validity (does it measure something analogous to one or more human anxiety symptoms?),

Validity
A feature that is assessed (for a test or model of anxiety) by determining how closely the model or test resembles human anxiety symptoms (known as face validity); by determining whether the model or test reliably responds to clinically efficacious anxiety medications (known as predictive validity); and by determining the degree to which the model or test recruits the same underlying neurobiology as implicated in human anxiety (known as construct validity).

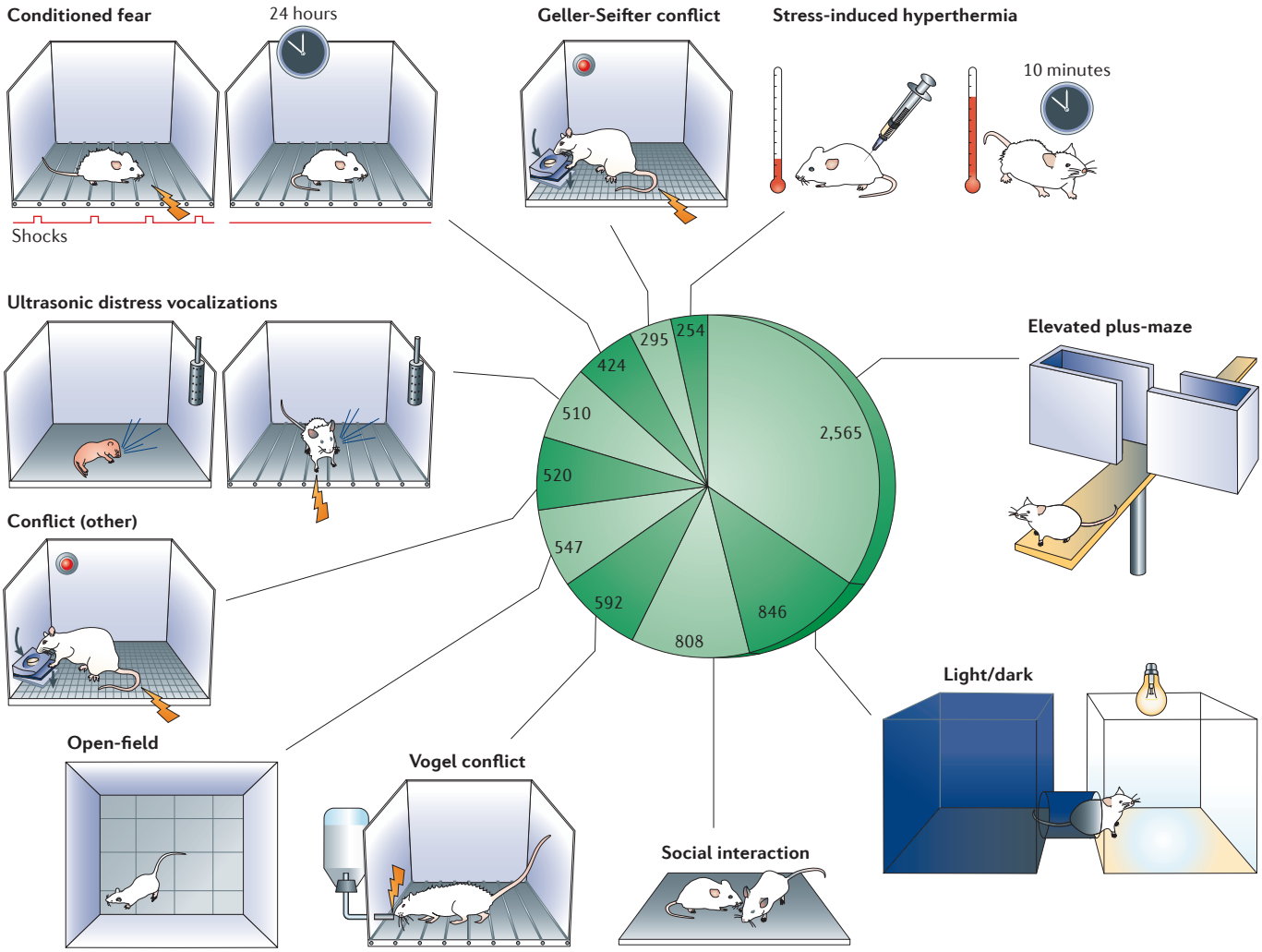


Figure 2 | **The ten most commonly used tests in anxiolytic drug discovery.** The values represent the number of experiments performed with each test between 1960 and 2012. The elevated plus-maze test, the light/dark test and the open-field test have been a mainstay of anxiolytic drug discovery research for many years. They assay anxiety-like behaviour by generating a conflict between a drive to approach novel areas and, simultaneously, to avoid potential threat therein. They have clear intuitive appeal, are inexpensive to construct, and ostensibly quick and easy to run. The term 'conflict-based test' is also often used to describe measures of behaviour suppression by mild electric shock. This group includes the Vogel conflict and Geller-Seifter tests, which measure anxiolytic-like activity as the maintenance of a behavioural response (for example, licking or bar pressing) despite the receipt of a shock. Another set of fear-based tests involves variations on classical Pavlovian fear conditioning. Here, an animal learns to associate a context or specific environmental stimulus (for example, a light or a sound) with electric shock to produce a conditioned fear response that can be quantified in various ways (for example, freezing, escaping, avoidance or startle). Although the elevated plus-maze test, the light/dark test and the open-field test continue to be very popular, conflict-based tests — which were part of many drug discovery programmes in the 1980s and 1990s — are less frequently used today, perhaps because they require animals to be trained over multiple days and are more labour-intensive and time-consuming than the approach-avoidance tests.

Approach-avoidance conflict tests
Tests that generate anxiety-related behaviours in rodents by posing a conflict between a natural drive to explore a novel place and an inherent tendency to avoid new — particularly well-exposed — areas that may be dangerous.

predictive validity (is it reliably sensitive to clinically efficacious anxiolytics?) and construct validity (does it involve some of the same pathophysiological mechanisms found in human anxiety disorders?)[15]. None of the currently available tests or models of anxiety (see below) can be said to unequivocally meet these criteria.

Approach-avoidance conflict tests — a group of tests that have been a mainstay of preclinical anxiety research for many years[16] — assay anxiety-like behaviour in rodents by generating a conflict between a drive to approach novel areas and, simultaneously, to avoid potential threat therein. These simple tests, which include the well-known novel open-field test, the elevated plus-maze test and the light/dark exploration test, were invented in the 1980s to exploit the natural tendency of rats[17] and mice[18,19] to prefer enclosed areas over exposed and/or elevated places. Among the different anxiety disorders, the tests are thought to most closely model GAD and

Table 2 | **The fifteen most commonly used tests in anxiolytic drug discovery by order of importance***

Test	Anxiety disorder	Species	Setting up	Throughput	Anxiolytic pharmacology	Refs
Elevated plus-maze or zero-maze	GAD	Rats, mice, gerbils, guinea pigs	Easy	+++	5-HT_{1A} receptor agonists or antagonists; 5-HT_2 receptor antagonists; 5-HT_3 receptor antagonists; AMPA receptor antagonists; benzodiazepines; CB_1 receptor agonists; CCK_1 and CCK_2 receptor antagonists; CRF_1 and CRF_2 receptor antagonists; FAAH inhibitors; mGluR2 and mGluR3 agonists; mGluR5 antagonists; NMDA receptor antagonists; NK_1 receptor antagonists; ORL1 agonists; SSRIs‡; V_{1A} and V_{1B} receptor antagonists	17,19, 135–137
Light/dark exploration	GAD	Rats, mice, hamsters	Easy	+++	5-HT_{1A} receptor agonists or antagonists; 5-HT_2 receptor antagonists; 5-HT_3 receptor antagonists; benzodiazepines; CCK_1 and CCK_2 receptor antagonists; CRF_1 and CRF_2 receptor antagonists; SSRIs‡	18,138
Social interaction	GAD, SAD	Rats, mice, gerbils	Easy	++	5-HT_{1A} receptor agonists; 5-HT_2 receptor antagonists; 5-HT_3 receptor antagonists; benzodiazepines; CRF_1 and CRF_2 receptor antagonists; NK_1 receptor antagonists; NMDA receptor antagonists; SSRIs‡	139,140
Conflict	GAD	Rats, mice, pigeons, squirrel monkeys, hamsters	Difficult§	+	5-HT_{1A} receptor agonists or antagonists; 5-HT_2 receptor antagonists; 5-HT_3 receptor antagonists; benzodiazepines; CCK_1 and CCK_2 receptor antagonists; CRF_1 and CRF_2 receptor antagonists; mGluR5 antagonists; NMDA receptor antagonists	20,21, 141
Open-field	GAD	Rats, mice, zebrafish	Easy	+++	5-HT_{1A} receptor agonists 5-HT_2 receptor antagonists; 5-HT_3 receptor antagonists; benzodiazepines; SSRIs‡	16
Ultrasonic distress vocalizations	GAD	Rats, mice, guinea pigs	Somewhat difficult‖	+++	5-HT_{1A} receptor agonists; 5-HT_2 receptor antagonists;, benzodiazepines; CRF_1 and CRF_2 receptor antagonists; mGluR5 antagonists; NMDA receptor antagonists; SSRIs; V_{1B} receptor antagonists	142
Conditioned fear	PTSD, specific phobia	Rats, mice	Somewhat difficult‖	++	5-HT_{1A} receptor agonists, 5-HT_2 receptor antagonists; CB_1 receptor agonists; CRF_1 and CRF_2 receptor antagonists; mGluR5 antagonists; NMDA receptor antagonists; NMDA receptor glycine B agonists; SSRIs	38
Stress-induced hyperthermia	GAD	Rats, mice	Easy	+++	5-HT_{1A} receptor agonists; benzodiazepines; MCH_1 receptor antagonists; mGluR2 agonists, antagonists or potentiators; mGluR5 antagonists	143
Four-plate	GAD	Mice, gerbils	Somewhat difficult‖	+++	5-HT_2 receptor agonists; benzodiazepines; CRF_1 receptor antagonists; SSRIs	144
Defensive burying	GAD	Rats, mice	Somewhat difficult‖	+++	5-HT_{1A} receptor agonists; 5-HT_2 receptor antagonists; benzodiazepines; CRF_1 and CRF_2 receptor antagonists; MCH_1 receptor antagonists; mGluR5 antagonists; SSRIs; V_{1B} receptor antagonists	145,146
Fear-potentiated startle	GAD	Rats, mice, monkeys	Difficult§	++	5-HT_{1A} receptor agonists or antagonists; 5-HT_3 receptor antagonists; benzodiazepines; CRF_1 and CRF_2 receptor antagonists; mGluR2 and mGluR3 agonists; mGluR5 antagonists; NK_1 receptor antagonists; NPY1R and NPY2R agonists	147
Holeboard	GAD	Rats, mice	Easy	+++	5-HT_{1A} receptor agonists; benzodiazepines	148
Novelty-suppressed feeding	GAD	Rats, mice	Easy	+++	5-HT_{1A} receptor agonists; benzodiazepines; mGluR5 antagonists; SSRIs‡	149
Elevated T-maze	GAD, panic disorder	Rats, mice	Easy	+++	5-HT_{1A} receptor agonists or antagonists; benzodiazepines; SSRIs‡	150
Mouse Defense Test Battery	GAD, panic disorder, PTSD	Mice	Somewhat difficult‖	++	5-HT_{1A} receptor agonists or antagonists; CRF_1 and CRF_2 receptor antagonists; NK_2 receptor antagonists; SSRIs‡	22,23

+, low (requires several weeks to achieve a dose response); ++, medium (one dose response per week); +++, high (at least one dose response per day); 5-HT, 5-hydroxytryptamine (serotonin); AMPA, α-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid; CB_1, cannabinoid 1; CCK, cholecystokinin; CRF, corticotropin-releasing factor; FAAH, fatty acid amide hydrolase; GAD, generalized anxiety disorder; MCH, melanin-concentrating hormone; mGluR, metabotropic glutamate receptor; NMDA, *N*-methyl-D-aspartate; NK_1, neurokinin 1; NPY1R, neuropeptide Y receptor 1; ORL1, opiate receptor-like 1 (nociceptin/orphanin FQ receptor); PTSD, post-traumatic stress disorder; SAD, social anxiety disorder; SSRI, selective serotonin reuptake inhibitor; V_{1A}, vasopressin V_{1A} receptor; V_{1B}, vasopressin V_{1B} receptor. *This table indicates the relevance of each test for modelling various aspects of anxiety disorders based on face and/or predictive validity, the species that have been used, the difficulty in implementing the procedure, its throughput and the pharmacological classes that have shown anxiolytic-like activity in these tests in at least five studies. ‡Only following repeated treatment. §Requires highly specialized equipment (for example, operant conditioning chambers), software and training. ‖Requires specific equipment (for example, a shocker or a non-commercially available apparatus).

specific phobias, largely based on their perceived face validity and sensitivity to benzodiazepine anxiolytics. These tests have been used in nearly 4,000 drug discovery experiments and continue to be very popular. Indeed, well over half of the rodent-based experiments on anxiety-related drugs have used one or more of these tests; among them, by far the most commonly used ones have been the elevated plus-maze test and the light/dark exploration test.

The term 'conflict-based test' is also often used to describe measures of behaviour suppression by mild electric shock. This group includes the Vogel conflict test[20] and the Geller-Seifter[21] test, which measure anxiolytic-like activity via the maintenance of a behavioural response (for example, licking or bar pressing) despite the receipt of a shock. These putative GAD-related tests were part of many drug discovery programmes in the 1980s and 1990s but have since fallen out of favour, perhaps because they require animals to be trained over multiple days and are more labour-intensive and time-consuming than the approach-avoidance tests.

Some anxiety tests have been designed to tap into the fundamental defensive responses shown by animals in the face of immediate danger. Such defensive or 'fear' behaviours can be conceptually distinguished from the anxiety states produced by less imminent and more ambiguous threats[16], and may be most relevant to anxiety disorders such as panic disorder and PTSD. For example, the 'Mouse Defense Test Battery' (MDTB) was designed to provide multiple measures related to fear and anxiety, based on observations of how wild rodents respond to danger[22]. In this task, mice are placed in an oval runway and tested for their responses (fight, flight, freeze, vocalize or scan) to an approaching anaesthetized rat (a natural predator). Specific behavioural measures in the MDTB are sensitive to specific classes of anxiolytic medication. For example, benzodiazepines that are effective in GAD reduce mouse risk assessment, whereas serotonergic agents that are efficacious in panic disorder and PTSD attenuate fight and flight behaviours[23]. In spite of these promising results, however, the MDTB has not been widely adopted, again probably owing to the training and technical demands involved. As a practical compromise, researchers have incorporated measures derived from the analysis of defensive behaviours, such as risk assessment, into anxiety-related tests such as the elevated plus-maze test; in some cases, this has resulted in improved sensitivity to certain anxiolytic drug classes[24].

Another set of fear-based tests that are relevant to PTSD and specific phobias involve variations on classical Pavlovian fear conditioning. Here, an animal learns to associate a context or a specific environmental stimulus (for example, a light or a sound) with electric shock to produce a conditioned fear response that can be quantified in various ways (for example, freezing, escape, avoidance or startle). Studies of Pavlovian fear conditioning have contributed greatly to our understanding of the basic neural circuitry and molecular mechanisms of memory, but they have not been traditionally considered to be among the 'classical' tests in anxiolytic drug discovery. This may be changing, however, with the recent focus on devising ways to pharmacologically attenuate fearful memories through the process of reconsolidation or extinction (see below)[25] and, more generally, through a growing appreciation of abnormal learning and cognition in anxiety.

Preclinical anxiety models and endophenotypes

Tests or assays for anxiety, in which the animal is placed in an experimental situation to evoke an acute anxiety-like response, can be distinguished from models of anxiety, in which an animal has been manipulated in some way to produce a more lasting or permanent increase in anxiety. The goal of anxiety models is to produce a form of abnormally elevated anxiety that more closely resembles, by definition, the pathological nature of human anxiety disorders. This can be achieved, for instance, by acutely or chronically subjecting animals to stressors before testing[26,27]. Another approach involves identifying genetic populations (inbred and selectively bred strains)[28,29] or engineering mutant mice with innate anxiety-like phenotypes (TABLE 3). This approach has proven to be valuable for screening novel anxiolytics[30–32] and testing the pharmacoselectivity of putative anxiolytics[33]; emerging genetic technologies such as optogenetics[34] will be integral to future basic anxiety research[35,36].

The term endophenotype (an immediate phenotype or biomarker) describes a premorbid or symptomatic behavioural, neural or biological feature of an anxiety disorder that, in principle, is more easily quantified than the disorder as a whole. An example of a neural intermediate phenotype in panic disorder and certain other anxiety disorders is the exaggerated blood-oxygen-level-dependent (BOLD) functional magnetic resonance imaging (fMRI) amygdala response to threatening stimuli[37]. In rodents, specific behavioural measures can also be viewed as endophenotypes of anxiety symptoms; for example, risk assessment and flight in the MDTB task may relate to threat avoidance and hypervigilance in GAD and panic disorder, respectively[22].

There is growing interest in identifying anxiety endophenotypes that are comparable across rodents and humans with a view to foster translation (TABLE 4). A good example that has grown in popularity is the extinction of fear memories. Extinction is an extension of the aforementioned conditioned fear paradigms and is typically assessed by measuring the decrease in a fear-related behaviour (for example, freezing or a startle response) following repeated presentation of an environmental cue or context that is associated with an aversive event (for example, electric shock). Given that extinction has a close therapeutic analogue in the form of exposure therapy, preclinical studies have applied extinction to test for drugs that function as adjuncts to strengthen extinction and reduce intrusive fear memories in PTSD and specific phobias[38,39]. There has been encouraging progress in the development of anxiolytics (for example, D-cycloserine) based on preclinical findings that have used extinction as a paradigm[40].

Below, we assess the preclinical evidence that has accrued — using these and other preclinical approaches — on the neurotransmitter systems that have been the main targets of anxiolytic drug discovery.

Pavlovian fear conditioning
A learning process by which neutral environmental stimuli, by virtue of association with a stressful event, evoke anxiety reactions. Fear extinction involves the learned inhibition of these reactions. Abnormalities in fear conditioning and extinction are thought to underlie anxiety disorders, notably specific phobias and post-traumatic stress disorder.

Neural circuitry
A network of interconnected regions of the brain that mediate anxiety, including cortical structures (for example, the prefrontal cortex), limbic structures (for example, the amygdala, lateral septum and hippocampus) and the midbrain (for example, the dorsal raphe).

Anxiety models
Models that generate lasting or permanently heightened anxiety; for example, by subjecting animals to chronic stress or by identifying or engineering 'high-anxiety' rodent strains. By contrast, simple tests or assays only transiently evoke an anxiety-like behaviour.

Intermediate phenotype
A specific behavioural or neural feature of an anxiety disorder that might be more easily modelled in rodents than the whole constellation of symptoms found in an anxiety disorder.

Table 3 | **Genetic mouse and rat* models of anxiety**

Model	Description	Tests	Refs
Single-gene engineered models			
3xTg-AD‡	Transgenic	Conditioned fear stress test, light/dark test, open-field test	151
5-HT_{1A} receptor	Knockout	Conditioned fear stress test, elevated plus-maze test, elevated zero-maze test, light/dark test, novelty-suppressed feeding, open-field test, stress-induced hyperthermia	152–163
5-HT_{1A} and 5-HT_{1B} receptor	Knockout	Elevated plus-maze test, novelty-suppressed feeding, open-field test	164
5-HT_{2C} receptor	Knockout	Elevated plus-maze test	165
5-HT_3 receptor	Knockout	Conditioned fear stress test, defensive withdrawal test	166,167
5-HT transporter	Knockout	Conditioned fear stress test, elevated plus-maze test, emergence test, light/dark test, novelty-suppressed feeding, open-field test, successive alleys, shock-escape paradigm	168–175
CaMKIIα	Transgenic	Elevated zero-maze test, light/dark test, open-field test, social interaction test	176
Adenosine A_{2A} receptor	Knockout	Elevated plus-maze test, light/dark test	177
Adrenergic $α_{2A}$ receptor	Knockout	Elevated plus-maze test, light/dark test, marble burying test, open-field test	178,179
Angiotensin II receptor type 2	Knockout	Elevated plus-maze test, light/dark test	180,181
Apolipoprotein E	Knockout	Elevated plus-maze test	182
APP	Transgenic	Conditioned fear stress test, light/dark test, open-field test	151
CB_1 receptor	Knockout	Conditioned fear stress test, elevated plus-maze test, light/dark test, open-field test, social interaction test	107,183–192
FAAH	Knockout	Elevated plus-maze test	105
COMT	Knockout	Light/dark test	193
CCK; OLETF, CCK_1 receptor	Knockout*	Elevated plus-maze test, light/dark test, open-field test	194,195
CCK; CCK_2 receptor	Knockout	Elevated plus-maze test	196–198
CCK; CCK_2 receptor	Transgenic	Conditioned fear stress test, open-field test, social interaction test	199
CRF	Transgenic	Conditioned fear stress test, elevated plus-maze test, light/dark test, open-field test	200–204
CRF-binding protein	Knockout	Elevated plus-maze test, open-field test, defensive withdrawal test	205,206
CRF_1 receptor	Knockout	Light/dark test	207
CRF_2 receptor	Knockout	Elevated plus-maze test, light/dark test, open-field test, Vogel conflict test	208–210
Desert hedgehog	Knockout	Vogel conflict test	211
Dopamine D4 receptor	Knockout	Open-field test	212
Oestrogen receptor-α	Knockout	Light/dark test	213
FMR1	Knockout	Mirror chamber, social interaction test	214
FYN tyrosine kinase	Knockout	Elevated plus-maze test, light/dark test, open-field test	215
$GABA_A$ $α_1$ subunit receptor	Knockout	Conditioned fear stress test	216
$GABA_A$ $α_2$ subunit receptor	Knockout	Conditioned emotional response	217
$GABA_A$ $β_3$ subunit receptor	Knockout	Elevated plus-maze test, marble burying	218,219
$GABA_A$ $γ_2$ subunit receptor	Knockout	Conditioned fear stress test, elevated plus-maze test, free exploration test, light/dark test, novelty-suppressed feeding	220–222
$GABA_A$ $γ_2$ subunit receptor	Knockdown	Elevated plus-maze test, forced novelty exploration	223
$GABA_{B1}$ receptor	Knockout	Elevated zero-maze test, light/dark test, staircase test	224–226
$GABA_{B2}$ receptor	Knockout	Light/dark test	224
GABA GAD65	Knockout	Conditioned fear stress test, elevated plus-maze test, light/dark test, open-field test	227–231
GAT1	Knockout	Elevated plus-maze test	232
GALR1	Knockout	Elevated plus-maze test	233
Glucocorticoid	Transgenic	Elevated plus-maze test, light/dark test	234
DAO	Knockout	Elevated plus-maze test, novel object test, open-field test	235
NMDA receptor subunit NR2B	Knock-in	Elevated plus-maze test	236
mGluR4	Knockout	Elevated zero-maze test, open-field test	237
mGluR5	Knockout	Elevated plus-maze test	238
mGluR8	Knockout	Acoustic startle, elevated plus-maze test, elevated zero-maze test, open-field test	239–243

Table 3 (cont.) | **Genetic mouse and rat* models of anxiety**

Model	Description	Tests	Refs
HDC	Knockout	Elevated plus-maze test, light/dark test, open-field test	244
Interferon-γ	Knockout	Elevated plus-maze test	245
Interleukin-6	Knockout	Elevated plus-maze test	246
MAS oncogene	Knockout	Elevated plus-maze test	247
Midkine	Knockout	Elevated plus-maze test	248
NCAM	Knockout	Elevated plus-maze test, light/dark test	249
Nicotinic AChR α4 subunit	Knockout	Elevated plus-maze test	250
Nociceptin	Transgenic	Acoustic startle, light/dark test	251
NOS	Knockout	Elevated plus-maze test, open-field test	252
Nociceptin	Knockout	Elevated plus-maze test, light/dark test, open-field test	253
Nociceptin receptor	Knockout	Elevated plus-maze test, elevated T-maze test, light/dark test	254
NPY	Knockout	Acoustic startle, elevated plus-maze test, open-field test	255–257
NPY	Transgenic	Elevated plus-maze test	258
NPY1 receptor	Knockout	Light/dark test	259
Preproenkephalin	Knockout	Elevated plus-maze test	260
Puromycin-sensitive aminopeptidase	Knockout	Elevated plus-maze test	261
SF1	Knockout	Elevated plus-maze test, light/dark test, marble burying test, open-field test	262
Single-minded homolog 2	Transgenic	Elevated plus-maze test	263
TRH receptor 2	Knockout	Novelty-suppressed feeding	264
Activin βE	Transgenic	Elevated plus-maze test, open-field test	265
NTRK3	Transgenic	Elevated plus-maze test, elevated zero-maze test, Mouse Defense Test Battery	266
Tumour necrosis factor	Transgenic	Light/dark test	267
TSC-DN	Transgenic	Elevated plus-maze test, open-field test	268
Vasopressin V_{1A} receptor	Transgenic	Light/dark test	269
Selective breeding			
BALB/c	Inbred	Conditioned fear stress test, free exploration test, light/dark test, elevated plus-maze test, open-field test	55, 270–272
BTBR T+tf/J	Inbred	Elevated plus-maze test, social interaction test	273
Fawn-hooded	Inbred*	Social interaction test	274
LAB/HAB	Outbred*	Elevated plus-maze test, light/dark test	275–277
MR/Har and MNRA/Har	Outbred*	Acoustic startle, conflict test, open-field test, ultrasonic distress vocalizations	278–280
RHA/Verh and RLA/Verh	Inbred*	Elevated plus-maze test, light/dark test, open-field test	281–283
Wistar-Kyoto	Outbred*	Open-field test	284,285

5-HT, 5-hydroxytryptamine (serotonin); AChR, acetylcholine receptor; APP, amyloid precursor protein; CB_1, cannabinoid 1; CCK, cholecystokinin; CaMKIIα; calcium/calmodulin-dependent protein kinase IIα; COMT, catechol-*O*-methyltransferase; CRF, corticotropin-releasing factor; DAO, D-amino-acid oxidase; FAAH, fatty acid amide hydrolase; FMR1, fragile X mental retardation 1; GABA, γ-aminobutyric acid; GAD65, 65 kDa glutamate decarboxylase; GAT1, GABA transporter 1; GALR1, galanin receptor 1; HAB, high anxiety behaviour; HDC, histidine decarboxylase; LAB, low anxiety behaviour; mGluR, metabotropic glutamate receptor; MNRA/Har, Maudsley non-reactive; MR/Har, Maudsley reactive; NCAM, neural cell adhesion molecule; NOS, nitric oxide synthase; NMDA, *N*-methyl-D-aspartate; NPY, neuropeptide Y; NTRK3, neurotrophic tyrosine kinase receptor type 3; OLETF, Otsuka Long-Evans Tokushima Fatty; RHA/Verh, Roman high avoidance; RLA/Verh, Roman low avoidance; SF1, steroidogenic factor 1; TRH, thyrotropin releasing hormone; TSC-DN, tuberous sclerosis dominant negative. *The column tests indicate the procedures in which these animals displayed increased anxiety-like behaviours. ‡3xTg-AD: transgenic mice expressing human mutant amyloid-β precursor protein (APP^{Ind} and $APP^{Sw,Ind}$) and tau.

GABA–benzodiazepine system

Benzodiazepines such as chlordiazepoxide and diazepam have been reference anxiolytics for over 50 years. These drugs exert their effects by allosterically activating specific $GABA_A$ receptor subtypes to promote inhibitory neurotransmission in the brain. Benzodiazepines are efficacious in the acute treatment of GAD, SAD and panic disorder but have limited to no efficacy in other anxiety conditions[41,42]. In addition, the long-term use of benzodiazepines is hampered by the occurrence of troublesome side effects, including sedation, memory disturbances, tolerance and dependence liability[43] (TABLE 1).

The inherent therapeutic limitations of benzodiazepine anxiolytics led to the search for compounds that

Table 4 | **Translatable measures of anxiety endophenotypes**

Measure	Example of relevant anxiety disorder	Refs
Impaired fear extinction	Post-traumatic stress disorder	25
Elevated startle response	Generalized anxiety disorder	286
Fear generalization	Post-traumatic stress disorder	25
Increased BOLD amygdala response to threat	Panic disorder	37

BOLD, blood-oxygen-level-dependent.

were chemically unrelated to the benzodiazepines, with more specific therapeutic actions and without their concomitant unwanted effects. As a result, novel compounds were developed to preferentially bind to specific $GABA_A$ receptor subtypes, to combine preferential affinity and differential intrinsic activity at these receptors or to display low efficacies at each $GABA_A$ receptor subtype[44]. A comprehensive programme of preclinical research provided very encouraging results and led to clinical studies of partial agonists of $GABA_A$ receptors or agonists of $GABA_A$ receptor α2 or α3 subunits for GAD[44]. However, none of these drugs has reached the market.

The development of some compounds, such as the benzodiazepine receptor partial agonist bretazenil (a benzodiazepine derivative)[45,46] and the $GABA_A$ receptor α2 and α3 subunit agonist SL651498 (REF. 47), was discontinued owing to unexpected sedative and/or amnestic effects. Ocinaplon[48], which combines preferential affinity and differential intrinsic activity at $GABA_A$ receptors, failed clinically owing to toxicity, as did the $GABA_A$ receptor α2 and α3 subunit agonist TPA023 (REF. 49), despite exhibiting anxioselective activity in GAD. The mitochondrial benzodiazepine receptor agonist XBD-173 (REF. 50) also failed in a Phase II trial for GAD, although this may have been attributable to the choice of outcome measure (CCK-induced panic) and because the trial was not controlled for the presence of a genetic polymorphism moderating the binding of the drug[51]. Nonetheless, these disappointments have been a major reason why pharmaceutical companies seem to have abandoned the development of drugs targeting the GABA–benzodiazepine system for anxiety; to our knowledge there are no drugs targeting this system currently under development.

5-HT

The serotonin (5-HT) system has long been implicated in the mediation of anxiety[52]. For example, genetic variation in the human 5-HT transporter and in the $5\text{-}HT_{1A}$ receptor influences anxiety traits[53,54], and knockout mice lacking the genes encoding the 5-HT transporter and the $5\text{-}HT_{1A}$ receptor show increased anxiety-related behaviour[30,55,56]. 5-HT is also a primary target of existing anxiolytic medications. Indeed, the $5\text{-}HT_{1A}$ receptor partial agonist buspirone was the first pharmacotherapeutic alternative to benzodiazepines for the treatment of GAD. It was first described by Goldberg *et al.*[57] and later shown to have anxiolytic efficacy in controlled clinical studies[58] before being launched in 1985 by Kwizda Pharma. Buspirone and other partial agonists of the $5\text{-}HT_{1A}$ receptor may exert anxiolytic activity via the activation of $5\text{-}HT_{1A}$ heteroreceptors in forebrain areas[59–61]. However, drugs targeting the $5\text{-}HT_{1A}$ receptor have failed to demonstrate efficacy in other anxiety disorders, such as panic disorder or OCD[62], and their utility is further limited by extensive first-pass hepatic metabolism[63].

The serendipitous observation that antidepressants such as tricyclic antidepressants or monoamine oxidase inhibitors have anxiolytic properties[64] stimulated research on the anxiolytic properties of newer-generation, better-tolerated antidepressants such as SSRIs[65,66]. SSRIs are thought to exert their therapeutic effects by increasing extracellular 5-HT levels[67]. This class has proven to have efficacy across a range of anxiety disorders, and fluoxetine was the first SSRI to be approved for GAD in 1999 (REFS 41,42). Today, SSRIs are a first-line treatment for many anxiety disorders and are some of the most commonly prescribed medications in the field of psychiatry. However, many patients do not respond to SSRIs, and adverse effects such as sexual dysfunction and a delayed onset of action — sometimes associated with a transient period of increased anxiety — have reduced the acceptability of SSRIs in clinical practice[68].

A vast amount of preclinical pharmacological data has been accumulated on the effects of 5-HT-interacting drugs in anxiety-related procedures (Supplementary information S1 (box)). FIGURE 1 shows that the number of experiments focusing on 5-HT was the highest during the 1990s and, despite a decrease since the early 2000s, 5-HT remains the primary focus of drug testing in preclinical anxiety research. Not surprisingly, given their clinical success, studies on the anxiety-modulating actions of 5-HT-targeting drugs predominantly examined $5\text{-}HT_{1A}$ receptor agonists and SSRIs, typified by buspirone and fluoxetine, respectively. The former (buspirone) has been, by far, the most studied anxiolytic outside the benzodiazepine class. Anxiolytic-like properties of buspirone and other $5\text{-}HT_{1A}$ receptor agonists have been reported in about two-thirds of experiments. However, there are also reports that $5\text{-}HT_{1A}$ receptor agonists induce pro-anxiety effects, and several studies did not reveal any modification of anxiety-like behaviours by these drugs (FIG. 3).

The effects of SSRIs are also inconsistent. Anxiolytic-like actions were observed in approximately 40% of the experiments conducted, whereas 20% reported anxiogenic-like effects and the remainder failed to detect any behavioural changes. $5\text{-}HT_2$ and $5\text{-}HT_3$ receptors have also been proposed as potential targets for anxiolytics but, again, compounds with high affinity and selectivity at these receptors produced equivocal results in preclinical experiments (FIG. 3).

What might account for these inconsistencies? Variability in experimental conditions across laboratories has often been cited as a potential influence on rodent anxiety-like behaviour[69]. In the case of $5\text{-}HT_{1A}$ receptor agonists, increasing lighting levels in the elevated plus-maze test can switch an anxiogenic-like effect to anxiolytic-like activity[70], and manipulating shock associations in a conditioned suppression task can transform

Anxiety traits
Persistent anxiety characteristics that manifest across a variety of situations and are considered to be an enduring feature of an individual.

an inactive drug profile into an anxiolytic-like profile[71]. Findings such as these raise the possibility that certain key procedural factors, notably those affecting stress, determine the magnitude and direction of the anxiety-related effects of drugs acting on the 5-HT system. Although it remains to be thoroughly investigated, this attractive hypothesis is in line with the known, complex, stress-modulating role of the 5-HT system[72] and could have important implications for the design and choice of the animal model used in studies of 5-HT-targeting anxiolytics.

Overall, despite the intense focus on 5-HT receptor ligands, only the 5-HT_{1A} receptor agonist tandospirone has made it to the market, and only in Japan and China. Agomelatine is an agonist of melatonin MT_1 and MT_2 receptors and an antagonist of the 5-HT_{2C} receptor that has been developed and launched in Europe as an antidepressant; it has also demonstrated efficacy in a Phase II trial in GAD[73], but the exact contribution of 5-HT_{2C} receptor antagonism to these anxiolytic effects is unclear. Some other drugs that either selectively or non-selectively target 5-HT receptor subtypes or modulate 5-HT reuptake are in active clinical development for anxiety disorders (TABLE 5). However, the anxiolytic effects of these drugs in preclinical settings have not been reported in the published literature.

Neuropeptides

The field of neuropeptide research has seen considerable progress in the past two decades, with the identification of new centrally expressed peptides and the elucidation of their functions using genetic manipulations and newly developed specific receptor ligands[74–76]. Almost 20 different peptide systems have been suggested to have a role in the modulation of anxiety (FIG. 4). This line of research was driven by the finding that these neurotransmitters and neuromodulators, as well as their receptors, are found in areas of the brain that are implicated in the control of anxiety. Further support emerged from studies showing that the central infusion or genetic manipulation of neuropeptides modified anxiety-related behaviours[77,78]. A detailed review of the vast preclinical literature in this area is beyond the scope of this article (for a full summary of experiments, see Supplementary information S1 (box)). Below, we consider three of the most intensively studied neuropeptides — CCK, CRF and tachykinins — and we also mention some other promising neuropeptides such as neuropeptide Y (NPY).

CCK was the first peptide to be discovered in the central nervous system (CNS)[79], where it is abundantly distributed and binds to two receptor subtypes, the CCK_1 receptor and the CCK_2 receptor, with the latter having a much broader distribution pattern[80]. Initial research

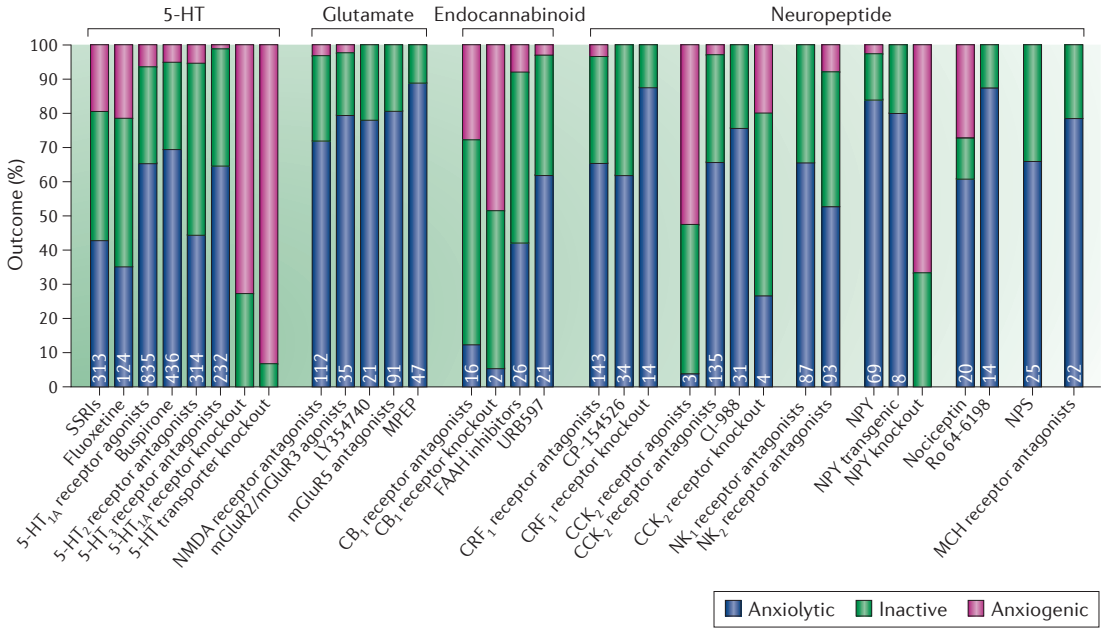


Figure 3 | **Anxiety-related effects of drugs targeting the 5-HT, neuropeptide, glutamate and endocannabinoid systems.** Findings from experiments conducted between 1960 and 2012 are shown as the percentage of experiments that showed anxiolytic-like, anxiogenic-like and inactive effects. The number of experiments reporting anxiolytic-like effects is shown on the graph. This figure shows that although compounds modulating the 5-hydroxytryptamine (5-HT), corticotropin-releasing factor (CRF), cholecystokinin (CCK), endocannabinoid and tachykinin systems have shown variable effects, compounds acting at several glutamatergic receptors (that is, metabotropic glutamate receptor 2 (mGluR2) and mGluR5), compounds targeting neuropeptide Y (NPY) and compounds that block melanin-concentrating hormone (MCH) receptors have all produced relatively consistent anxiolytic-like effects. CB_1, cannabinoid 1; FAAH, fatty acid amide hydrolase; MPEP, 2-methyl-6-(phenylethynyl)pyridine; NK_1, neurokinin 1; NMDA, *N*-methyl-D-aspartate; NPS, neuropeptide S; SSRI, selective serotonin reuptake inhibitor.

Table 5 | **Compounds in clinical development for anxiety disorders**

Drug	Companies	Properties	Disorder	Phase
Vortioxetine (LU-AA-21004)	Lundbeck/Takeda	5-HT_3 receptor antagonist, 5-HT_{1A} receptor agonist and 5-HT enhancer	GAD	Pre-registration
Agomelatine (S 90098)*	Servier	Melatonin 1 and melatonin 2 receptor agonist, 5-HT_{2C} receptor antagonist	GAD	III
Pregabalin‡	Pfizer	Calcium channel α2δ subunit ligand	SAD	III
Vilazodone (EMD 68843)	Merck KGaA	5-HT_{1A} receptor agonist and SSRI	GAD	III
ADX-71149	Addex/Johnson & Johnson	Positive allosteric modulator of mGluR2	NA	II
Androstadienol (PH-94B)	Pherin	Vomeropherin	GAD, SAD	II
AVN-101	Avineuro Pharmaceuticals	5-HT_6 receptor antagonist	NA	II
AVN-397	Avineuro Pharmaceuticals	5-HT_6 receptor antagonist	GAD	II
Bitopertin (R-1678)	Roche	Glycine transporter 1 inhibitor	OCD	II
Guanfacine (SPD-503)	Shire	Unknown	GAD, SAD	II
Orvepitant	GlaxoSmithKline	NK_1 receptor antagonist	PTSD	II
Pivagabine (CXB-722)	CeNeRx BioPharma	Hypothalamic–pituitary–adrenal axis modulator	NA	II
TGFK-08AA	Fabre-Kramer Pharmaceutical	5-HT_{1A} receptor partial agonist	GAD	II
Verucerfont (GSK561679)	GlaxoSmithKline	CRF_1 receptor antagonist	PTSD	II
YKP-3089	Sunkyoung Group Holdings	Undisclosed	NA	II
BNC-210	Bionomics	$GABA_A$ receptor modulator	GAD	I
JNJ-19385899	Johnson & Johnson	OPRL1 agonist	NA	I
RGH-618	Gedeon Richter	mGluR1 and mGluR5 antagonist	NA	I
SPD-554	Shire	α_2-adrenergic receptor agonist	NA	I
SRX-246	Azevan Pharmaceuticals	Vasopressin V_{1A} receptor antagonist	PTSD	I
TriRima (CX-157)	CeNeRx BioPharma	MAO inhibitor	NA	I

5-HT, 5-hydroxytryptamine (serotonin); CRF, corticotropin-releasing factor; GABA, γ-aminobutyric acid; GAD, generalized anxiety disorder, NA, information not available; NK_1, neurokinin 1; MAO, monoamine oxidase; mGluR, metabotropic glutamate receptor; OPRL1, opiate receptor-like 1 (nociceptin/orphanin FQ receptor); OCD, obsessive compulsive disorder; PTSD, post-traumatic stress disorder; SAD, social anxiety disorder. *Agomelatine has been launched as an antidepressant in Europe. ‡Pregabalin has been launched for the treatment of GAD in Europe.

focused mainly on CCK and the development of selective CCK_2 receptor antagonists as potential anxiolytics; this generated much interest in the late 1980s through to the 1990s. These compounds produced anxiolytic-like effects in less than two-thirds of the experiments; the remainder of experiments failed to detect any behavioural changes, and some even showed pro-anxiety effects (FIG. 3). The results of CCK_2 receptor deletion in animal models of anxiety are similarly discrepant, with both anxiolytic- or anxiogenic-like effects being reported, and about half of studies have shown no clear change in anxiety-like behaviour (FIG. 3). This questioned the idea that CCK represents a valid target for anti-anxiety medications. Clinical trials undertaken with CCK_2 receptor antagonists in anxiety disorders, including GAD and panic disorder, have also been unsuccessful[77,81] and no CCK-based drugs have yet been approved.

CRF is the major physiological regulator of the stress response[82] and has been one of the most studied neuropeptides in anxiety (FIG. 4). CRF binds to at least two receptors: the CRF_1 receptor and the CRF_2 receptor. Most preclinical studies have focused on the CRF_1 receptor because it is

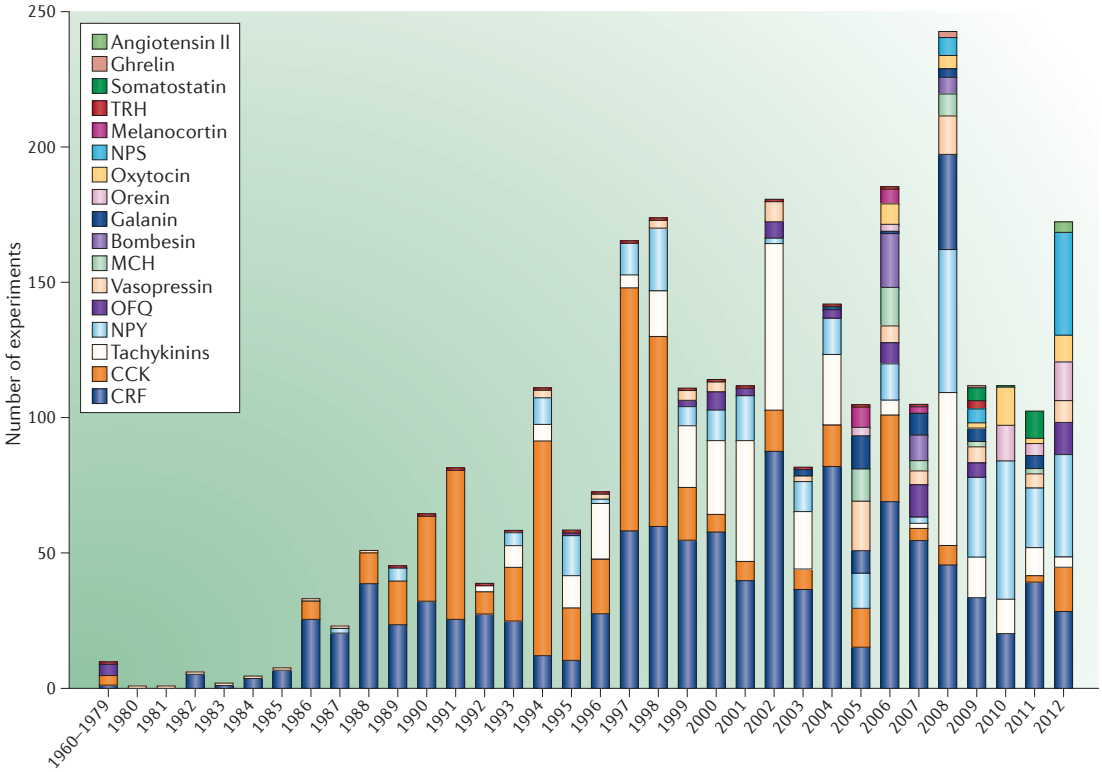


Figure 4 | **Experiments in animal models that investigated the effects of drugs modulating neuropeptide systems in models of anxiety disorders from 1960 to 2012.** Seventeen different peptide systems have been suggested to have a role in the modulation of anxiety behaviours. This graph shows that, among them, corticotropin-releasing factor (CRF), the tachykinins and cholecystokinin (CCK) have been a major focus of anxiolytic drug discovery, accounting for about one-third of all experiments. MCH, melanin-concentrating hormone; NPS, neuropeptide S; NPY, neuropeptide Y; OFQ, orphanin FQ/nociceptin; TRH, thyrotropin-releasing hormone.

expressed at high density in corticotropic cells in regions of the brain that mediate anxiety[83]. Anxiolytic-like effects of CRF_1 receptor antagonists have been reported in the majority of preclinical experiments (one-third of these experiments failed to detect effects), which is consistent with the anxiolytic-like phenotype of *Crfr1*-null mutant mice (FIG. 3). Echoing the literature data on 5-HT, stress might have a strong influence on the effects of these drugs. CRF_1 receptor antagonists most reliably produce anxiolytic-like effects under conditions of elevated stress (for example, in tests involving predator or shock exposure) or in animals displaying excessive CRF–CRF_1 receptor signalling (for example, CRF-overexpressing mice)[78,81]. As in the case of drugs that target 5-HT, the choice of experimental models is therefore critical for the accurate assessment of the anxiolytic potential of targeting CRF. This issue could also extend to clinical studies. Controlled trials with CRF_1 receptor antagonists in anxiety disorders such as GAD and SAD have yielded negative results, but these studies were carried out in heterogeneous patient groups[81], raising the question of whether effects would be more readily detected in patient subpopulations with the highest levels of anxiety.

The tachykinins substance P (also known as neurokinin 1), neurokinin A (NKA; also known as tachykinin precursor 1) and neurokinin B (NKB; also known as tachykinin 3) are widely distributed in the CNS[84]. Substance P and NKA, along with their respective receptors tachykinin receptor 1 (TACR1; also known as the NK_1 receptor) and TACR2 (also known as the NK_2 receptor), are especially well expressed in structures of the brain that are implicated in anxiety, including the amygdala and septum[85]. Several non-peptide antagonists at NK_1 and NK_2 receptors produced anxiolytic-like effects in a little more than half of the experiments (FIG. 3; Supplementary information S1 (box)). Variability in the outcomes of these studies seems to be highest when certain behavioural assays are utilized, in particular the elevated plus-maze test and social interaction tests. NK_2 receptor antagonists seem to have more reliable anxiolytic effects in tests involving strong or explicit stressors, such as in the MDTB. However, late-stage clinical trials with NK_2 receptor blockers have shown either negative or inconclusive results in GAD, SAD and PTSD[81]. Thus, selective blockade of tachykinin receptors may be insufficient to achieve therapeutic efficacy[81,86]. Differences in tachykinin receptor physiology between rodents and humans have also been suggested to account for at least some of the failure to translate preclinical data on this target to the clinic[81].

Other neuropeptides that have been studied for their anxiolytic potential include NPY[87], nociceptin[88], galanin[75,89], melanin-concentrating hormone (MCH)[90,91] and

neuropeptide S (NPS)[92] (FIG. 4; Supplementary information S1 (box)). These peptides and their receptors are densely expressed in various regions of the brain that mediate anxiety. Preclinical experiments have investigated the administration of nociceptin, galanin, NPS or non-peptide ligands of their receptors either directly into the brain or — in the case of putatively brain-penetrant compounds — systemically; however, these experiments have not produced consistent effects on anxiety-related behaviours. Perhaps more promising are the results from the administration of MCH receptor antagonists, which have demonstrated anxiolytic-like effects in about three-quarters of preclinical experiments conducted to date (FIG. 3). The literature data on NPY is also encouraging[93]. Based on around 100 pharmacological and gene mutant experiments, many of which have been conducted in recent years (FIG. 4), the preclinical evidence supports the potent anxiolytic actions of NPY (BOX 1). However, although there are some promising lead compounds, there are no drugs targeting NPY, or any other neuropeptide, currently undergoing clinical evaluation for anxiety disorders (TABLE 4).

Glutamate

Multiple lines of evidence strongly implicate glutamate — the major excitatory neurotransmitter system in the brain — in anxiety disorders. There are abnormal levels of glutamate and various glutamate receptor classes in the brains of patients with anxiety disorders, and glutamate levels are altered in rodents by stressors[94]. However, delineating the contribution of the glutamate system to anxiety is a formidable task, given the large number of signalling receptors involved in glutamate neurotransmission. The glutamate system has nonetheless emerged as an increasingly active area of preclinical research within the past decade, with around 100 experiments conducted in 2012 alone (FIG. 1).

Metabotropic glutamate receptors (mGluRs), particularly mGluR1, mGluR2, mGlu3 and mGluR5, have been well studied preclinically and shown to have a role in anxiety behaviour. Orthosteric agonists, negative allosteric modulators or antagonists at mGluR1 (for example, JNJ16259685 and LY456236), at mGluR2 and mGluR3 (for example, LY354740) or at mGluR5 (for example, 2-methyl-6-(phenylethynyl)pyridine (MPEP)) have shown anti-anxiety effects across various rodent assays[94]. Although there have been some negative results, around 80% of studies have been positive, with MPEP being particularly notable for its robust anxiolytic-like activity (FIG. 3; Supplementary information S1 (box)). MPEP was in preclinical development by Merz Pharmaceuticals but the drug was discontinued (for as yet undisclosed reasons) before entering clinical trials. Drugs acting at other mGluRs, including mGluR7 agonists (AMN082), have not been studied in as much depth and their effects still need to be clarified[94]. Clinically, some mGluR compounds, such as the mGluR2 and mGluR3 orthosteric agonist LY354740 (or its pro-drug LY544344), have produced encouraging preliminary results in GAD[95] (but not in panic disorder)[96], which have been somewhat tempered in some cases by pro-convulsant activity in animals[95]. Clinical trials are currently underway for the mGluR2 positive allosteric modulator ADX-71149 and for the mGluR1 and mGluR5 antagonist RGH-618 in anxiety disorders (TABLE 5).

The NMDA (*N*-methyl-D-aspartate) receptor antagonist ketamine was recently found to exert rapid antidepressant effects in treatment-resistant major depression[97]. This has generated considerable interest in NMDA and AMPA (α-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid) receptors as targets for depression and is likely to provide insights into the anxiety-related effects of these compounds, for example, based on the effects observed in patients with comorbid depression and anxiety who receive ketamine[97]. In addition, the preclinical literature on the anxiolytic-like effects of NMDA and AMPA receptor antagonists has substantially grown in recent years. For example, the non-selective NMDA receptor channel blocker MK-801 has shown anti-anxiety effects across several assays, and NMDA receptor blockers have shown anxiolytic effects in around three-quarters of studies (FIG. 3; Supplementary information S1 (box)). Because indiscriminate blockade of NMDA receptors is unlikely to be a well-tolerated option for an anxiolytic, compounds that target specific NMDA receptor subunits (for example, the NMDA receptor subunit NR2B antagonist ifenprodil) have been studied but they do not produce comparably robust effects (Supplementary information S1 (box)). Similarly, the anxiety-related preclinical effects of AMPA receptor antagonists such as NBQX (2,3-dihydroxy-6-nitro-7-sulfamoyl-benzo[f] quinoxaline-2,3-dione) have overall proven to be inconsistent (Supplementary information S1 (box)).

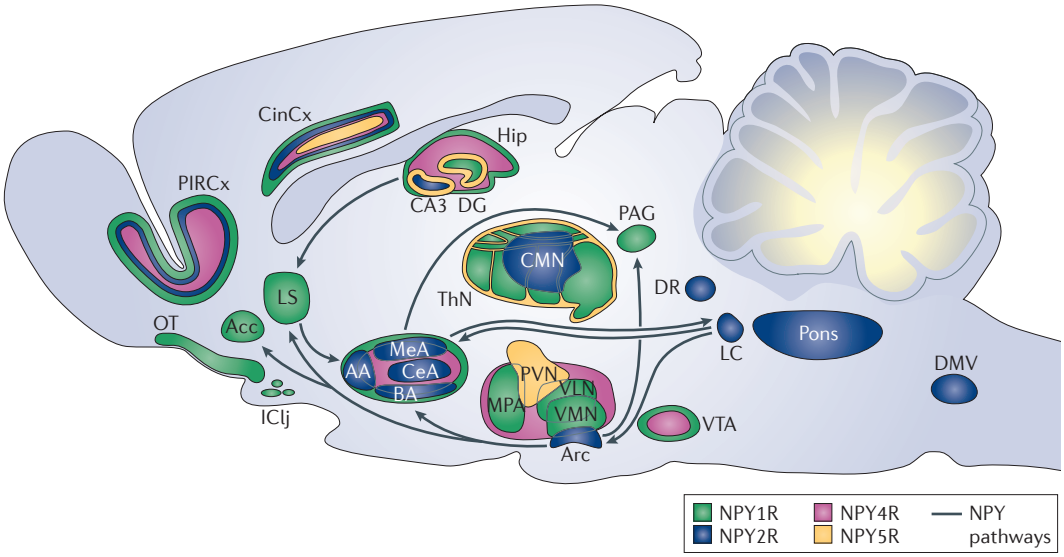
Out of the other potential glutamate-acting targets for anxiety, D-cycloserine — which potentiates NMDA receptor signalling via the glycine co-agonist site — has, as already noted, shown efficacy as a therapeutic adjunct in various anxiety disorders[98,99]. Another glycine-acting drug, bitopertin (RG1678), which inhibits glycine reuptake by glycine transporter 1, is currently being investigated for efficacy in OCD (TABLE 5), but the class of glycine transporter 1 inhibitors has produced mixed preclinical data. Last, pregabalin, riluzole and topiramate are three drugs that exert glutamatergic effects as part of a complex pharmacological profile; pregabalin is approved (in Europe) for GAD, whereas all three are undergoing proof-of-concept studies for PTSD and SAD, with the caveat that the precise contribution of glutamate to their anxiolytic actions remains unclear.

Endocannabinoids

Endocannabinoids represent another system that has attracted attention in recent years as a potential target for novel anxiolytics (FIG. 1). The endocannabinoids anandamide (also known as *N*-arachidonoylethanolamide) and 2-arachidonoylglycerol, and their principal CNS receptor (the cannabinoid 1 (CB_1) receptor), are densely expressed in the brain, particularly in regions mediating anxiety[100]. Further implicating this system as a relevant translational target, there is growing evidence that abnormalities in the CB_1 receptor and other endocannabinoid systems are implicated in anxiety disorders such as PTSD[101,102]. The effects of CB_1 receptor agonists, inverse agonists and

Box 1 | **Neuropeptide Y: an attractive system for the discovery of new anxiolytics**

Neuropeptide Y (NPY) appears to act as an endogenous anxiolytic based on the numerous findings demonstrating that the central application of NPY produces consistent anxiolytic-like actions — effects that correspond well with the low level of anxiety observed in NPY-overexpressing transgenic mice. NPY and at least four of its receptors (NPY receptor 1 (NPY1R), NPY2R, NPY4R and NPY5R) are found in the brain, with significant levels in regions that are believed to be implicated in anxiety, such as the amygdala and the hippocampus (see the figure). NPY pathways originating in the arcuate nucleus of the hypothalamus (Arc) project to the lateral septum (LS), amygdala and periacqueductal grey matter (PAG). Major NPY-containing neurons in the amygdala also innervate the PAG and locus coeruleus (LC) — regions that have been shown to have a crucial role in emotional processes. However, there are no NPY-based compounds currently in development. The major challenge associated with targeting the NPY system is obtaining non-peptide brain-penetrant ligands, and it is not clear at present which NPYR should be targeted, as peptide ligands of NPY1R, NPY2R and NPY5R have been shown to produce anxiolytic-like effects. In principle, the simultaneous targeting of all three NPYRs would represent the optimal approach.



AA, anterior amygdaloid area; Acc, nucleus accumbens; BA, basolateral amygdala; CeA, central amygdala; CA3, hippocampal field CA3; CinCx, cingulate cortex; CMN, centromedial thalamic nucleus; DG, dentate gyrus; DMV, dorsal motor nucleus of the vagus and the trigeminal ganglion; DR, dorsal raphe; Hip, hippocampus; ICIj, island of Calleja; MeA, median amygdala; MPA, medial preoptic area; OT, olfactory tubercle; PIRCx, piriform cortex; PVN, paraventricular nucleus of the hypothalamus; ThN, thalamic nucleus; VLN, ventral lateral nucleus; VMN, ventromedial nucleus; VTA, ventral tegmental area.

antagonists on anxiety-related behaviours have been intensively studied across a range of preclinical assays and models, with mixed results. There are examples of CB_1 receptor ligands and gene mutations producing either anxiolytic-[103] or anxiogenic-like[104,105] effects in rodents[106] (FIG. 3).

Part of the complexity of the anxiety-related effects associated with manipulating CB_1 receptors is very likely to stem from the ubiquitous expression of CB_1 receptors in different anxiety-mediating regions and circuits of the brain, some of which may have opposing roles in anxiety (for example, cortical regions versus the amygdala, and GABAergic circuits versus glutamatergic circuits)[107]. In addition, the enthusiasm for developing agents that target the CB_1 receptor was tempered by the withdrawal of the CB_1 receptor antagonist rimonabant (also known as SR141716) from the market as an anti-obesity medication owing to depression, suicidal ideation and anxiety symptoms in the patient populations receiving the drug[108].

An alternative approach for pharmacologically modulating endocannabinoids is to target their post-release reuptake and degradation. Endocannabinoids are thought to be primarily released 'on demand' as a function of physiological requirements. Therefore, pharmacologically inhibiting their reuptake or degradation could augment functionally relevant recruitment of endocannabinoids and produce more selective effects on anxiety than CB_1 receptor agonists. Although this is an attractive hypothesis, preclinical studies have not shown robust anxiety-related effects of, for example, compounds that augment anandamide via inhibition of the catabolic enzyme fatty acid amide hydrolase (FIG. 3; Supplementary information S1 (box)).

More promising are the recent findings that both anandamide transporter blockers (such as AM404) and fatty acid amide hydrolase inhibitors (such as AM3506 and JNJ-5003) promoted the extinction of rodent fear[101] and prevented stress-induced anxiety-like behaviour[109]. These preliminary observations suggest that this class of compounds may be preferentially active under conditions of high stress and abnormal endocannabinoid tone[110]. The anxiolytic potential of fatty acid amide hydrolase inhibitors is currently being investigated in early-phase

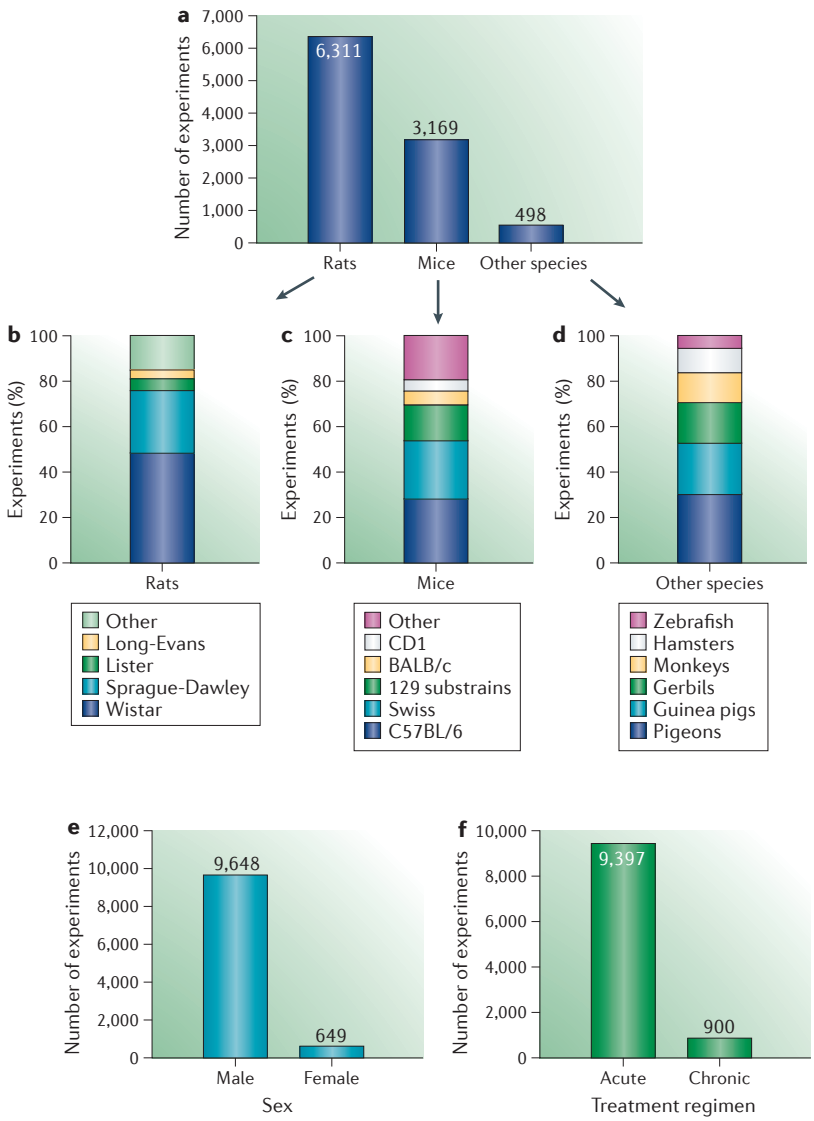


Figure 5 | **Fifty-year trends in the species, strain, sex and chronicity of drug treatment in anxiolytic drug discovery studies.** The values represent the absolute numbers and percentages of experiments performed with different species (part **a**), strains (parts **b**, **c**, **d**) and sexes (part **e**), regardless of whether these involved acute or chronic treatment (part **f**), between 1960 and 2012. Rats represented the species of choice for anxiety tests, but mice have been extensively used as well. In addition, the majority of studies have used male subjects (part **e**) rather than females, and tested the effects of drugs following acute treatment (part **f**) rather than chronic treatment.

clinical trials, and it remains to be confirmed whether this or other approaches to targeting endocannabinoids[111] will prove to be an effective translational strategy.

Lessons learned and future perspectives

Taking stock of half a century of intensive research, where does the effort to find effective medications for anxiety disorders now stand? Clearly, there are promising targets in the various neurotransmitter systems discussed above, and there is reason to be optimistic that one or more of these will yield a novel, safe and clinically efficacious anxiolytic. Considering the huge amount of data that has amassed, however, the drug discovery efforts in this field can be, and often have been, viewed as a failure.

However, this conclusion is not unique to the anxiety field; in fact, it has been levelled at most of the drug discovery efforts in psychiatry[112]. It is worth reiterating the point that finding medications for psychiatric illnesses is made all the more daunting by fluid diagnostic end points that are based almost entirely on behavioural symptomatology rather than on a deep mechanistic understanding of the underlying biology. Indeed, this and various other issues have been offered as explanations for why the search for new anxiolytics has stalled. Some of the issues were reinforced by our systematic analysis of the literature, and below we expand upon three issues that came to the fore.

Current tests have limited predictive and postdictive validity. An oft-cited explanation for the poor translational track record of preclinical anxiety studies is the lack of validity of the available rodent tests and models. On the one hand, the fact that the field has found the need to continually devise new procedures (well over 100 by recent counts)[13] to assess rodent anxiety-like behaviour reflects innovation, but on the other hand this indicates the dissatisfaction with the tools available. Still, as our analysis illustrates, the vast majority of studies have relied on a limited subset of tests. Many of these tests are excellent for demonstrating the effects of benzodiazepine anxiolytics but much less reliable in their sensitivity to drugs acting on the 5-HT system, including the SSRIs. This is concerning in view of the fact that several SSRIs (including escitalopram, paroxetine, fluvoxamine and sertraline) are approved for various anxiety disorders and are now the most successful drugs in this class. This means that, with the exception of the benzodiazepines, many preclinical anxiety tests lack not only predictive validity (the ability to predict new drugs) but also postdictive validity (sensitivity to existing drugs).

Some authors have contested that the available tests have skewed the anxiety field towards detecting new 'benzodiazepine-like' anxiolytics[13,113]. This argument has been levelled most forcefully at the approach-avoidance conflict tests (such as the elevated plus-maze test), which have been, by far, the most frequently used tests and have therefore shouldered most of the blame. These tests have clear intuitive appeal, are inexpensive to construct and ostensibly quick and easy to run, but they also produce the most inconsistent findings. This may be due to inadequate optimization: the elevated plus-maze test, in particular, is known to be highly sensitive to laboratory conditions[14]. However, our examination of the literature does not reveal any systematic differences in results across models, or any obvious experimental variables (including strain, species, dose or route of administration), that predict the effects of any class of drugs. To give just one example, buspirone has been found to exhibit both anxiolytic- and anxiogenic-like properties after either acute or repeated treatment across a large dose range, and there is no indication of more reliable results being obtained in any particular species, assay or model.

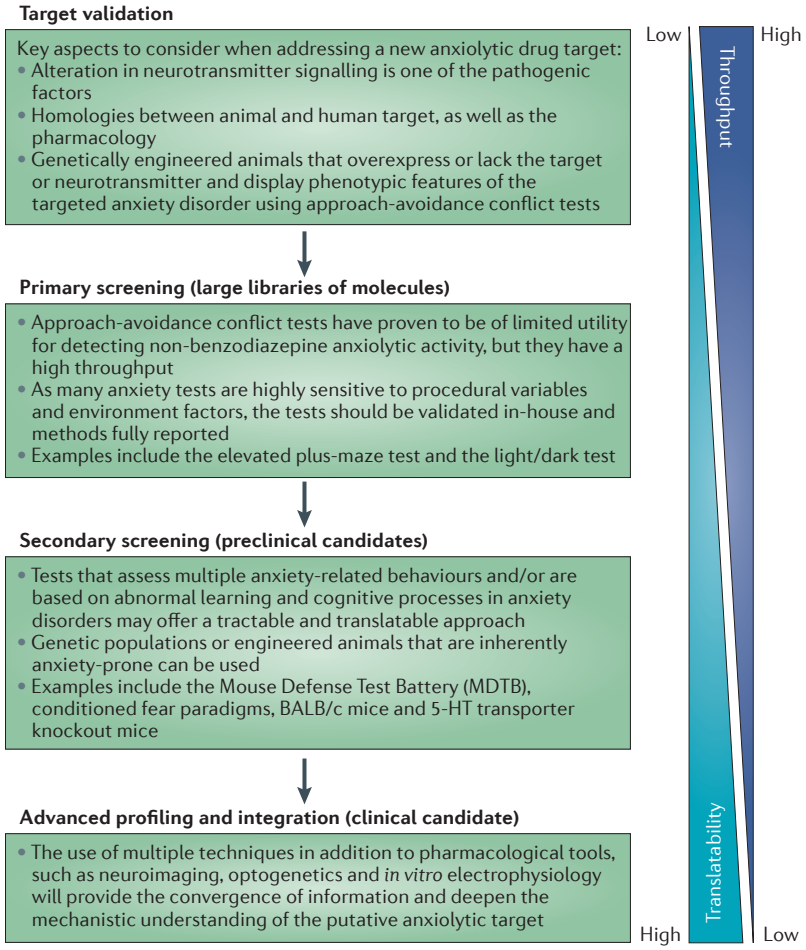


Figure 6 | **Recommendations for improving anxiolytic drug discovery.** The figure details simple and actionable, rather than idealized, suggestions and points to keep in mind. Although the early stages of the anxiolytic discovery process require high-throughput tests, these have generally limited predictive validity. Later-stage profiling using behavioural models with increased translatability potential could confirm or reject the initial findings, thereby increasing the probability of having selected the drug candidate with the highest anxiolytic potential. 5-HT, 5-hydroxytryptamine.

This does not preclude the possibility that, with careful scrutiny of the methods used across studies, ostensibly contradictory findings could be reconciled and attributed to key procedural variables (for an example, see REF. 114); however, at present the field does not have a clear grasp of what these variables may be.

The literature is biased towards acute treatments in 'normal' male rodents. FIGURE 5 illustrates the main characteristics of the animal models used in preclinical anxiety studies. The majority of studies have used rodents, mainly rats and somewhat less frequently mice, with only a small fraction of tests conducted in other species, ranging from zebrafish to monkeys. Anxiety is a highly adaptive response in many situations and, to the extent that they are understood, neural mechanisms appear to be fairly well conserved across species. However, differences between animals and humans cannot be ignored in any type of translational research. In fact, even among different strains of rats and mice, there is profound variation in anxiety-related phenotypes. This underscores the importance of careful model selection and provides the opportunity to make use of strains that are innately anxious[29,55]. Disease-susceptible animal models are commonplace in many non-psychiatry drug discovery programmes (for example, diabetes and cancer) but, despite their conceptual appeal, only a minority of anxiety studies use such models.

Another potentially important statistic is that although anxiety disorders are diagnosed in twice as many women as men[115], there has been a greater than 10:1 bias in favour of using male over female animals in anxiolytic drug discovery[116]. The basic neurobiology of anxiety may be similar between males and females, but there is a significant degree of sexual differentiation in the formation and function of anxiety circuits, as well as a significant influence of steroid hormones on anxiety behaviour[117]. Females also metabolize and respond differently to certain drugs[118]. As such, the generalizability of literature data to both sexes may be limited if these data are predominantly derived from male animals.

Finally, regardless of the species, strain or sex, most studies have relied on acute drug administration in testing for anti-anxiety effects. There may be good practical reasons for this, given that it is more difficult to deliver drugs repeatedly without stressing animals and confounding an experiment. Certain anxiolytics can reduce anxiety symptoms in patients following a single administered dose, but many effective interventions involve long-term treatment to deal with these chronic conditions. The possibility that preclinical results from acute treatments could be misleading is exemplified by the profile of SSRIs, which can transiently exacerbate anxiety symptoms yet produce anxiolytic activity with chronic dosing.

The focus has been on single targets in poorly defined neurobiological systems. A guiding principle of anxiolytic drug discovery over the past 50 years has been that identifying compounds that affect specific molecular targets would lead to more effective treatments with fewer side effects. The reductionist approach has considerable appeal but has not yielded significant successes. Indeed, current anxiolytics — the benzodiazepines and the SSRIs — are relatively non-selective. Benzodiazepines do not discriminate among $GABA_A$ receptor subtypes, whereas SSRIs globally enhance 5-HT transmission. This raises the question of whether the concept of designing maximally selective ligands to act on individual molecular targets is the best — or at least the only — paradigm for anxiolytic drug discovery.

Polypharmacology has gained traction in other areas of drug discovery, including other CNS disorders[119,120]. It is based on the idea that superior efficacy can be achieved by designing new chemical entities that simultaneously act on multiple pathogenic targets. The design of a desired multi-target drug remains a complex and exceedingly difficult task for medicinal chemists. However, new approaches are emerging for improving the design of ligands against profiles of multiple drug targets[121,122].

Anxiolytic drug discovery, whether it is focused on a single target or on multiple targets, will be greatly facilitated by concerted efforts to elucidate the underlying neurobiology of anxiety. A better understanding of anxiety at this level would provide the foundation for a rational, mechanism-based approach for designing anxiolytics. Fear extinction has already been mentioned as an exemplar of a measure that is behaviourally underpinned by an excellent understanding of the underlying neural systems and circuits. The neural circuitry subserving behaviour in the classic anxiety tests has, by contrast, not been well defined. This may be changing, however, with the application of powerful new techniques, such as optogenetics[35,123,124], and could be further bolstered by the incorporation of advances in the imaging of the living brain of rodents. In parallel, evolving technologies for studying the neuropathophysiology of anxiety in humans, from diffusion tensor imaging and fMRI to genome sequencing, will serve to inform and direct the preclinical research. An optimal strategy will integrate findings from humans and animals in an effort to synergize convergent, cross-translational support for the clinical potential of an anxiolytic target. Other simple and actionable — rather than idealized — suggestions for how preclinical anxiety can be improved are detailed in FIG. 6.

Concluding remarks

Anxiolytic disorders are serious medical problems that are commonplace and becoming more prevalent in many parts of the world. The growing burden of anxiety disorders demands better treatments but, although the field has promising leads, the efforts to identify new anxiolytics seem to have reached an impasse. Here, we have offered a comprehensive analysis of the published preclinical research conducted to date with the aim of providing an objective analysis of the major trends, biases and limitations within the field in order to help direct a more effective translational approach in the future. We are optimistic that a new generation of preclinical studies that are built around circuit-informed, pathogenic rodent models and strong, bi-directional translational links to clinical research can move us out of the age of anxiety and into the age of discovery.

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Competing interests statement
The authors declare no competing financial interests.

SUPPLEMENTARY INFORMATION
See online article: S1 (box)
ALL LINKS ARE ACTIVE IN THE ONLINE PDF

Supplementary information S1 | **Effects of pharmacological agents and phenotypes of genetically-modified animals in tests for anxiety-related behaviors from 1960 to 2012.**

The table for each neurotransmitter system shows the following information: (1) Name of the molecule; (2) Mechanism of action of the molecule; (3) Animal model of anxiety used; (4) Species, strain, sex (Males were used if no information is given), age and/ weight of animals; (5) Dose-range or active dose-range; (6) Route of administration and pretreatment time/schedule; (7) Effect observed; (8) Brief comment of the drug effect or procedure used; (9) Reference. + denotes anxiolytic-like effect, - denotes anxiogenic-like effect, o denotes inactive, (+) denotes potentiation of an anxiolytic-like effect, (-) denotes potentiation of an anxiogenic-like effect, (o) denotes antagonism of an effect, ? denotes effect not clearly characterized. b.i.d.=twice a day, FR=fixed ratio, HLU=high light unfamiliar, ig=intra gastric, im=intramuscular, ip=intraperitoneal, icv=intracerebroventricular, iv=intravenous, LLF=low light familiar, o.d.=once a day, PAG=periaqueductal gray, po=per oral, sc=subcutaneous, VI=variable interval.

Supplementary information S1 | Dataset

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Somatostatin 909
Angiotensin 911
Ghrelin 912

5-HT

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(-)-Alprenolol	Non selective antagonist	Conflict test	Pigeons	0.63-10	im, 5	o	FR30	Colpaert et al., 1992	J. Pharmacol. Exp. Ther. 268:248-254
(-)-Alprenolol	Non selective antagonist	Conflict test	White Carneau pigeons (500-600g)	10	im, 60	o		Schreiber et al., 1995	J. Psychopharmacol. 7:173-180
(-)-Alprenolol	Non selective antagonist	Elevated plus-maze	PVG rats (180-260g)	0.1	ip, 30	+	10-min exposure	Njung'e et al., 1993	Pharmacol. Biochem. Behav. 51:211-215
(-)-Alprenolol	Non selective antagonist	Light/dark test	Swiss mice (20-30g)	5	ip, 30	o		Fernández-Guasti and López-Rubalcava, 1990	Psychopharmacology 101:354-358
(-)-Alprenolol	Non selective antagonist	Light/dark test	Swiss-Webster mice (20-30g)	5	ip, 30	o		López-Rubalcava et al., 1992	Pharmacol. Biochem. Behav. 50:375-382
(-)-Alprenolol	Non selective antagonist	Light/dark test	Hamsters (100-150g)	5	20	o		Fernández-Guasti and López-Rubalcava, 1995	Pharmacol. Biochem. Behav. 43:433-440
(-)-Alprenolol	Non selective antagonist	Light/dark test	Hamsters (100-150g)	2	30	o		Fernández-Guasti and López-Rubalcava, 1995	Pharmacol. Biochem. Behav. 43:433-440
(-)-Alprenolol	Non selective antagonist	Shock-probe burying test	Wistar rats (300-350g)	5	ip, 30	o		Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
(-)-Alprenolol	Non selective antagonist	Shock-probe burying test	Swiss-Webster mice (20-35g)	5	ip, 30	o		Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
(-)-Alprenolol	Non selective antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=37	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Eur. J. Pharmacol. 264:259-264

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(-)-Alprenolol	Non selective antagonist	Conflict test	White Carneau pigeons (500-600g)	10	im, 5	o		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
(-)-Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	10	po, 60	+		Olivier et al., 1998	Eur. J. Pharmacol. 342:177-182
(-)-Mianserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (250-320g)	1	sc, 30	o		Kennett, 1992	Psychopharmacology 107:379-384
(-)-Penbutolol	Mixed 5-$HT_{1A/1B}$ antagonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	8	sc, 45	o	Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
(-)-Penbutolol+EEDQ (0,31 mg/kg)	Mixed 5-$HT_{1A/1B}$ antagonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)		sc, 15	(+)	(1) No antagonism of the effects of EEDQ, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
(-)-Pindolol	Non selective antagonist	Geller-Seifter conflict test	Rats	6	sc, 30	o		Kennett et al., 1994	Psychopharmacology 114:90-96
(-)-Pindolol	Non selective antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	6	sc, 30	o	VI30/FR5, electric shocks of 0.75 mA	Kennett et al., 1994	Psychopharmacology 114:90-96
(-)-Pindolol	Non selective antagonist	Vogel conflict test	Wistar rats (180-220g)	2-8	ip, 60	+	0.5 mA	Przegalinski et al., 1994	Psychopharmacology 93:502-506
(-)-Pindolol	Non selective antagonist	Vogel conflict test	Wistar rats (230-270g)	0.3-3 µg	dorsal hippocampus, 10	+	0.5 mA	Przegalinski et al., 1995	Pharmacol. Biochem. Behav. 47:873-878
(-)-Pindolol	Non selective antagonist	Elevated plus-maze	Rats PVG (200-280g)	1	ip, 30	-	10-min exposure	Critchley and Handley, 1987	Neuropharmacology 34:1211-1217

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(-)-Pindolol	Non selective antagonist	Elevated plus-maze	Rats PVG (200-280g)	0.10-0.25	ip, 30	+	10-min exposure	Critchley and Handley, 1987	Neuropharmacology 34:1211-1217
(-)-Pindolol	Non selective antagonist	Elevated plus-maze	PVG rats (180-260g)	0.1-1	ip, 30	+	10-min exposure	Njung'e et al., 1993	Psychopharmacology 101:354-358
(-)-Pindolol	Non selective antagonist	Light/dark test	Swiss mice (20-30g)	2	ip, 30	o		Fernández-Guasti and López-Rubalcava, 1990	Pharmacol. Biochem. Behav. 50:375-382
(-)-Pindolol	Non selective antagonist	Light/dark test	Swiss-Webster mice (20-30g)	3.1	ip, 30	o		López-Rubalcava et al., 1992	Pharmacol. Biochem. Behav. 43:433-440
(-)-Pindolol	Non selective antagonist	Light/dark test	Hamsters (100-150g)	2	20	o		Fernández-Guasti and López-Rubalcava, 1995	J. Psychopharmacol. 7:173-180
(-)-Pindolol	Non selective antagonist	Light/dark test	Hamsters (100-150g)	2	30	o		Fernández-Guasti and López-Rubalcava, 1995	J. Psychopharmacol. 7:173-180
(-)-Pindolol	Non selective antagonist	Light/dark test	Lundbeck mice strain (30-35g)	4-40 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Biochem. Behav. 46:67-72
(-)-Pindolol	Non selective antagonist	Open-field	Sprague-Dawley rats (200-250g)	10	ip, 60	+	Locomotion increased	Lucki et al., 1989	Psychopharmacology 93:502-506
(-)-Pindolol	Non selective antagonist	Social interaction	Sprague-Dawley rats (250-320g)	1-6	sc, 30	o	Locomotion increased	Kennett, 1992	Psychopharmacology 107:61-68
(-)-Pindolol	Non selective antagonist	Social interaction	Rats			+	LLF	Critchley et al., 1987	Psychopharmacology 107:379-384
(-)-Pindolol	Non selective antagonist	Agonistic behavior	BSVS mice (25-35g)	1-20	sc, 30	+		Bell and Hobson, 1993	J. Pharmacol. Exp. Ther. 249:155-164
(-)-Pindolol	Non selective antagonist	Marble burying	Female MF1 mice (23-35g)	5-10	ip, 30	o		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(-)-Pindolol	Non selective antagonist	Shock-probe burying test	Wistar rats (300-350g)	3.1	ip, 30	o		Fernández-Guasti et al., 1992	Pharmacol. Toxicol. 77:71-78
(-)-Pindolol	Non selective antagonist	Shock-probe burying test	Swiss-Webster mice (20-35g)	3.1	ip, 30	+		Fernández-Guasti et al., 1992	Pharmacol. Toxicol. 77:71-78
(-)-Pindolol	Non selective antagonist	Shock-probe burying test	Wistar rats (250-350g)	1.55 and 6.2	ip, 30	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1994	Eur. J. Pharmacol. 261:285-294
(-)-Pindolol	Non selective antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (11 day-old)	0.1-3	sc, 30	o		Albinsson et al., 1994	Eur. J. Pharmacol. 218:91-100
(-)-Pindolol	Non selective antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=5.9	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Eur. J. Pharmacol. 218:15-25
(-)-Pindolol	Non selective antagonist	Stress-induced analgesia	ddY mice (18-20g)	1-3	ip, 30	o		Tokuyama et al., 1993	Br. J. Pharmacol. 115:775-780
(-)-Pindolol	Non selective antagonist	DPAG stimulation	Rats			o		Jenck et al., 1989	Neuropharmacology 33:227-234
(-)-Pindolol	Non selective antagonist	Elevated plus-maze	Swiss-Webster (8-9-week-old)	0.1-1.6	ip, 30	+		Cao and Rodgers, 1997	Pharmacol. Biochem. Behav. 58:583-591
(-)-Pindolol	Non selective antagonist	Free-exploration test	BALB/c mice (8-week-old)	1-10	ip, 30	o		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
(-)-Pindolol	Non selective antagonist	Vogel conflict test	ICR mice (25-30g)	10	ip, 30	o	Electric shock of 0.5 mA/2 s	Liao et al., 2003	Eur. J. Pharmacol. 464:141-146
(-)-Pindolol	Non selective antagonist	Inhibitory avoidance in the	Wistar rats (230-250g)	1-15	ip, 90	+	Probably non-specific effects	Sela et al., 2010	Life Sci. 87:445-450

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		elevated T-maze							
(-)-Pindolol	Non selective antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1	ip, 90	+	Probably non-specific effects	Sela et al., 2010	Life Sci. 87:445-450
(-)-Pindolol	Non selective antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	5	po, 90	o		Sela et al., 2010	Life Sci. 87:445-450
(-)-Pindolol	Non selective antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	5	po, 90	o		Sela et al., 2010	Life Sci. 87:445-450
(-)-Pindolol+baicalin 10 mg/kg)	5-HT_{1A} antagonist/5-HT_{1B} agonist	Vogel conflict test	ICR mice (25-30g)	10	ip, 30	+	(1) No blockade of the effects of baicalin; (2) Electric shock of 0.5 mA/2 s	Liao et al., 2003	Eur. J. Pharmacol. 464:141-146
(-)-Tertatolol	5-HT_{1A} antagonist	Geller-Seifter conflict test	Wistar AF rats (300-400g)	2-8	ip, 30	o	FR8/FR1	Charrier et al., 1994	Pharmacol. Biochem. Behav. 48:281-289
(-)-Tertatolol	5-HT_{1A} antagonist	Social interaction	Lister Hooded rats (200-300g)	0.0003	dorsal hippocampus	-	HLU	Andrews et al., 1994	Behav. Pharmacol. 4:269-277
(-)-Tertatolol	5-HT_{1A} antagonist	Social interaction	Lister Hooded rats (200-300g)	0.0003	median raphe	o	HLU	Andrews et al., 1994	Behav. Pharmacol. 4:269-277
(-)-Zacopride	5-HT_3 antagonist	Elevated plus-maze	Lister rats (250g)	0.001-1	ip, 30	o	Chonic vehicle treated rats (14 days)	File and Andrews, 1993	Biochem. Soc. Symp. 59:97-106
(-)-Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.000001-10	ip, 45	o	Asymmetric compartments	Barnes et al., 1992	Psychopharmacology 97:489-495
(-)-Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.00001-0.01	ip, 45	o	Asymmetric compartments	Barnes et al., 1992	Behav. Pharmacol. 5:42-51

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(-)-Zacopride	5-HT_3 antagonist	Light/dark test	Female ICR-DUB mice (17-35g)	0.01-1	ip, 60	+	Asymmetric compartments	Young and Johnson, 1991	Behav. Pharmacol. 4:269-277
(-)-Zacopride	5-HT_3 antagonist	Light/dark test	C57BL/6 mice (18-25g)	0.0000003-0.03	po, 30	+	Asymmetric compartments	Eglen et al., 1994	Jpn. J. Pharmacol. 61:237-242
(-)-Zacopride	5-HT_3 antagonist	Light/dark test	Female Tuck T/O mice (22-30g)	0.001-0.01	sc, 30	+	Asymmetric compartments	Bill et al., 1995	Eur. J. Pharmacol. 201:151-155
(-)-Zacopride	5-HT_3 antagonist	Social interaction	Lister rats (250-300g)	0.00001-1	ip, 45	-		Barnes et al., 1992	Br. J. Pharmacol. 105:500-504
(-)-Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.01-1000 µg	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
(+)-Mianserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (250-320g)	2-4	sc, 30	+		Kennett, 1992	Psychopharmacology 107:379-384
(+)-Zacopride	5-HT_3 antagonist	Elevated plus-maze	Lister rats (250g)	0.001-1	ip, 30	o	Chonic vehicle treated rats (14 days)	File and Andrews, 1993	Eur. J. Pharmacol. 237:127-130
(+)-Zacopride	5-HT_3 antagonist	Light/dark test	Female ICR-DUB mice (17-35g)	0.00001-10	ip, 60	+	Asymmetric compartments	Young and Johnson, 1991	Eur. J. Pharmacol. 218:91-100
(+)-Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.000001-10	ip, 45	+	Asymmetric compartments	Barnes et al., 1992	Eur. J. Pharmacol. 218:15-25
(+)-Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.0001-0.1	ip, 45	+	Asymmetric compartments	Barnes et al., 1992	Eur. J. Pharmacol. 201:151-155
(+)-Zacopride	5-HT_3 antagonist	Light/dark test	Mice	0.01	ip	+	Asymmetric compartments	Cheng et al., 1992	Eur. J. Pharmacol. 218:91-100
(+)-Zacopride	5-HT_3 antagonist	Light/dark test	C57BL/6 mice (18-25g)	0.0000003-0.03	po, 30	+	Asymmetric compartments	Eglen et al., 1994	Br. J. Pharmacol. 115:775-780
(+)-Zacopride	5-HT_3 antagonist	Light/dark test	Female Tuck T/O mice (22-30g)	0.001-0.1	sc, 30	+	Asymmetric compartments	Bill et al., 1995	In: 2nd International Symposium on Serotonin, from Cell Biology to Pharmacology and Therapeutics, Houston, 15-18th September :59

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(+)-Zacopride	5-HT_3 antagonist	Social interaction	Lister rats (250-300g)	0.00001-1	ip, 45	+		Barnes et al., 1992	Drug Dev. Res. 26:21-48
(+)-Zacopride	5-HT_3 antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	1	ip, 45	+	0.25 mA	Nevins and Anthony, 1994	Neuropharmacology 33:227-234
(+)-Zacopride	5-HT_3 antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	0.01-1	ip, 45	+	0.5 mA	Nevins and Anthony, 1994	Neuropharmacology 33:227-234
(+)-Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.1-1 µg	ip, 40	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
(+/-)-Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	1	po, 60	+		Olivier et al., 1998	Eur. J. Pharmacol. 342:177-182
(±)-Pindolol	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Rat pups (3-day-old)			o	Distress vocalizations were produced by isolation	Carden et al., 1997	Soc. Neurosci. Abstr. 23:520
(±)-Pindolol	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Rat pups (10-day-old)			o	Distress vocalizations were produced by isolation	Carden et al., 1997	Soc. Neurosci. Abstr. 23:520
(±)-Pindolol	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Rat pups (14-day-old)			o	Distress vocalizations were produced by isolation	Carden et al., 1997	Soc. Neurosci. Abstr. 23:520
(±)-Pindolol	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Rats	3-30	sc, 30	+		Joordens et al., 1997	Soc. Neurosci. Abstr. 23:2150
(±)-Pindolol	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	10-30	sc, 30	+		Joordens et al., 1998	Psychopharmacology 139:383-390
(±)-Pindolol	5-HT_{1A} antagonist	Ultrasonic distress vocalizati	Wistar rats (3-day-old)	0.3-3	ip, 0	o		Joyce and Carden, 1999	Dev. Psychobiol. 34:109-117

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		ons							
(±)-Pindolol	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	10-day-old Wistar rats	0.3-3	ip, 0	o		Joyce and Carden, 1999	Dev. Psychobiol. 34:109-117
(±)-Pindolol	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (14-day-old)	1	ip, 0	o		Joyce and Carden, 1999	Dev. Psychobiol. 34:109-117
(R)-RS-56812	5-HT_3 antagonist	Vogel conflict test	Rats	0.003-1	ip	o		Fontana et al., 1993	Behav. Pharmacol. 4:375-387
(R)-RS-56812	5-HT_3 antagonist	Light/dark test	Mice	0.0000003-30	ip	o		Fontana et al., 1993	Behav. Pharmacol. 4:375-387
(S)-RS-56812	5-HT_3 antagonist	Vogel conflict test	Rats	0.003-1	ip	o		Fontana et al., 1993	Behav. Pharmacol. 4:375-387
(S)-RS-56812	5-HT_3 antagonist	Light/dark test	Mice	0.0000003-30	ip	+		Fontana et al., 1993	Behav. Pharmacol. 4:375-387
(S)-UH-301	5-HT_{1A} antagonist	Geller-Seifter conflict test	Wistar rats	0.3-30	sc, 30	o		Moreau et al., 1992	Brain Res. Bull. 29:901-904
(S)-UH-301	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats	1	ip, 30	+		Moreau et al., 1992	Brain Res. Bull. 29:901-904
(S)-UH-301	5-HT_{1A} antagonist	Light/dark test	Swiss mice (10-week-old)	1	ip, 30	+		Moreau et al., 1992	Brain Res. Bull. 29:901-904
(S)-UH-301	5-HT_{1A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3-3	sc, 15	+		Griebel et al., 1999	Psychopharmacology 144:121-130
(S)-UH-301	5-HT_{1A} antagonist	Light/dark test	Wistar rats (280-320g)	0.3 µg/0.3 ml	dorsal raphe, 3	+		Koprowska et al., 2002	Acta Neurobiol. Exp. 62:63-74
1192U90	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau pigeons	0.1 and 1	im, 15	+	1.5 to 5.5 mA, 250 msec	Rigdon et al., 1996	

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
1192U90	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Ovariectomized female Long-Evans CD	12.5	po, 60	+	multi VI 2-minute (food) FR1 (food+shock)	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
1192U90	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Cork gnawing	Ovariectomized female Long-Evans CD	1.56-12.5	po, 60	+		Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
1-NP	Agonist	Geller-Seifter conflict test	Rats	0.5-1	sc, 30	+		Kennett et al., 1994	Psychopharmacology 114:90-96
1-NP	Agonist	Geller-Seifter conflict test	CFY rats (400-600g)	0.5-1	sc, 30	+	VI30/FR5, electric shocks of 0.75 mA	Kennett et al., 1994	Pharmacol. Biochem. Behav. 48:281-289
1-NP	Agonist	Social interaction	Sprague-Dawley rats (250-320g)	0.2-1	sc, 30	+		Kennett, 1992	Eur. J. Pharmacol. 155:129-137
1-NP	Agonist	Elevated plus-maze	Long Evans hooded rats (300-350g)	0.16-1.25	ip, 15	o		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
1-NP	Agonist	mCPP discrimination	Long Evans hooded rats (300-350g)	0.16-1.25	ip, 15	o		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
1-NP	Agonist	PTZ drug discrimination	Long Evans hooded rats (300-350g)	0.16-1.25	ip, 15	o		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
1-PP	Azapirone's metabolite	Geller-Seifter conflict test	Sprague-Dawley rats (420-480g)	5-80	po, 30	o		Young et al., 1987	J. Psychopharmacol. 8:227-237
1-PP	Azapirone's metabolite	Geller-Seifter conflict test	Wistar AF rats (300-400g)	0.5-4	ip, 30	o	FR8/FR1	Charrier et al., 1994	Psychopharmacology 107:379-384
1-PP	Azapirone's metabolite	Geller-Seifter conflict	Wistar rats (250-300g)	1-8	ip, 30	o	Modified test and FR1/FR8	Hascoët et al., 1994	Psychopharmacology 114:90-96

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
1-PP	Azapirone's metabolite	Vogel conflict test	Sprague-Dawley rats (240-300g)	1-3	sc, 30	+	Modified Vogel test	Gower and Tricklebank, 1988	Eur. J. Pharmacol. 143:361-371
1-PP	Azapirone's metabolite	Vogel conflict test	Wistar rats	5-10	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
1-PP	Azapirone's metabolite	Vogel conflict test	Sprague-Dawley rats (211-347g)	25	po, 30	+	Modified Vogel test	Amano et al., 1993	Jpn. J. Pharmacol. 61:311-317
1-PP	Azapirone's metabolite	Vogel conflict test	Sprague-Dawley rats (211-347g)	5-25	po, for 7 days	o	Modified Vogel test	Amano et al., 1993	Jpn. J. Pharmacol. 61:311-317
1-PP	Azapirone's metabolite	Conflict test	White Carneau Pigeons	0.01-3	im, 5	o		Barrett et al., 1986	J. Pharmacol. Exp. Ther. 238:1009-1013
1-PP	Azapirone's metabolite	Elevated plus-maze	Sprague-Dawley rats (250-350g)	8-2048 nmol	sc, 10	-		Söderpalm et al., 1989	Pharmacol. Biochem. Behav. 32:259-265
1-PP	Azapirone's metabolite	Social interaction	Wistar rats	1.25	ip, 15	o		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
1-PP	Azapirone's metabolite	Ultrasonic distress vocalizations	Wistar rats	3-10	ip, 15	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
1-PP	Azapirone's metabolite	Ultrasonic distress vocalizations	Wistar rats	ED50=3.2	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
1-PP	Azapirone's metabolite	Ultrasonic distress vocalizations	Wistar rats	ED50=6	po, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
1-PP	Azapirone's metabolite	Passive-avoidance test	Wistar rats (220-240g)	1.25-10	ip, 30	o		Sanger and Joly, 1990	Behav. Pharmacol. 1:153-160
1-PP	Azapirone's metabolite	Fear-potentiated startle	Sprague-Dawley rats (300-400g)	0.5-40	sc, 0	o		Kehne et al., 1988	J. Pharm. Pharmacol. 40:494-500

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		reflex							
1-PP	Azapirone's metabolite	Elevated plus-maze	Swiss-Webster mice (31-42g)	0.5-13.5	ip, 30	+		Cao and Rodgers, 1997	Neuropharmacology 36:1089-1097
1-PP	Azapirone's metabolite	Four-plate test	Swiss mice (20-24g)	0.06-0.5	ip, 45	o	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
1-PP	Azapirone's metabolite	Light/dark test	Swiss mice (20-24g)	0.06-0.5	ip, 45	o		Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
2-DMPI	MAO A inhibitor	Elevated plus-maze	Swiss mice (25-30g)	300 µmol	sc, 2h	o		Villarinho et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 39:31-39
2-Me-5-HT	Non selective agonist	Light/dark test	Mice (25-35g)	0.0000001-0.0001	dorsal raphe	-	Asymmetric compartments	Costall et al., 1988	Psychopharmacology 94:8-13
2-Me-5-HT	Non selective agonist	Light/dark test	BKW mice (25-30g)	0.0000001-0.0001	dorsal raphe or amygdala	-	Asymmetric compartments	Costall et al., 1989	Behav. Pharmacol. 1:235-240
2-Me-5-HT	Non selective agonist	Light/dark test	BKW mice (25-30g)	0.0000001-0.0001	median raphe	o	Asymmetric compartments	Costall et al., 1989	Behav. Pharmacol. 1:235-240
2-Me-5-HT	Non selective agonist	Social interaction	Lister rats (210-280g)	0.001-0.1	amygdala, 5	-	LLF	Higgins et al., 1991	Psychopharmacology 104:545-551
2-Me-5-HT	Non selective agonist	Social interaction	Lister rats (210-280g)	0.001-0.0025	dorsal raphe, 5	o	HLU and LLF	Higgins et al., 1991	Psychopharmacology 104:545-551
2-Me-5-HT	Non selective agonist	Elevated plus-maze	Swiss mice (4-week-old)	1	ip, 45	o		Bourin et al., 2001	Behav. Brain Res. 124:87-95
5,6-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Rats	100 µg	icv, 2	+		Stein et al., 1975	Pharmacol. Biochem. Behav. 12:875-882
5,6-DHT	5-HT neurotoxin	Stress-induced defecation	Wistar rats (200g)	30 g	icv, 13 days	-	Open-field and Shuttle box	Kameyama et al., 1980	Pharmacol. Biochem. Behav. 12:875-882
5,6-DHT	5-HT neurotoxin	Elevated plus-maze	Wistar mice (25-30g)	25 µg/mouse	icv, 48 h	o		Bhattacharya and Acharya, 1993	Indian J. Exp. Biol. 31:902-907

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5,7-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Wistar rats (195-205g)	3 µg	dorsal raphe, 21 days	o	CRF	Thiébot et al., 1982	Neuroscience 7:2287-2294
5,7-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Wistar rats	1 µg	dorsal raphe, 15 days	o	CRF/FR7	Thiébot et al., 1984	Pharmacol. Biochem. Behav. 19:225-229
5,7-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Sprague-Dawley rats (250-300g)	2 µg	ventromedian tegmentum, 12 days	+		Tye et al., 1977	Psychopharmacology 82:355-359
5,7-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Sprague-Dawley rats (250-300g)	1 µg	dorsal raphe, 15 days	+	CRF/FR7	Thiébot et al., 1983	Nature 268:741-743
5,7-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Wistar rats	2 µg	substantia nigra, 15 days	+	CRF/FR7	Thiébot et al., 1983	Nature 268:741-743
5,7-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Rats	150µg	icv	+		Schreiber et al., 1993	Eur. J. Pharmacol. 284:249-255
5,7-DHT	5-HT neurotoxin	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	150µg	icv, 4-10 days	+		Cervo and Samanin, 1995	Eur. J. Pharmacol. 249:341-351
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Sprague-Dawley rats (180-200g)	100 µg	icv, 15-16 days	-	Modified Vogel test	Shimizu et al., 1992	Jpn. J. Pharmacol. 58:283-289
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Wistar rats (180-200g)	50 µg	dorsal raphe, 7 days	o	Modified Vogel test	Takao et al., 1992	Pharmacol. Biochem. Behav. 43:503-508
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Wistar rats	1 µg	dorsal raphe, 15 days	+		Thiébot et al., 1983	Pharmacol. Biochem. Behav. 19:225-229
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Wistar rats	2 µg	Substantia nigra, 15 days	+		Thiébot et al., 1983	Pharmacol. Biochem. Behav. 19:225-229

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Sprague-Dawley rats (250-350g)	450 µg	icv, 14 days	+	Modified Vogel test	Söderpalm and Engel, 1991	Psychopharmacology 101:187-189
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Sprague-Dawley rats (250-350g)	225 µg	icv, 14 days	+	Modified Vogel test	Söderpalm and Engel, 1992	Br. J. Pharmacol. 96:829-836
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats (280-300g)	250 µg	icv, 14 days	+		Briley et al., 1990	J. Affect. Disord. 1:115-122
5,7-DHT	5-HT neurotoxin	Light/dark test	CD-COBS rats (200-300g)	150 µg	icv, 8 days	o	Transitions only	Carli et al., 1989	Scand. J. Psychol. (Suppl 1):90-96
5,7-DHT	5-HT neurotoxin	Open-field	CFHB rats (270-300g)	5 µg	Fornix, 16-20 days	-		Williams et al., 1990	Brain Res. Bull. 37:169-175
5,7-DHT	5-HT neurotoxin	Holeboard	Sprague-Dawley rats (200-250g)	3-100 µg	icv, hippocampus or median raphe,12 days	o		Geyer et al., 1980	Pharmacol. Biochem. Behav. 38:807-812
5,7-DHT	5-HT neurotoxin	Social interaction	Rats (200-250g)	4 µg	dorsal and median raphe, 15 days	o		File et al.,1979	Pharmacol. Biochem. Behav. 38:807-812
5,7-DHT	5-HT neurotoxin	Social interaction	Wistar rats (250-350g)	150 µg/10 µl	icv, 7 days	o	HLU	Picazo et al., 1995	Eur. J. Pharmacol. 249:341-351
5,7-DHT	5-HT neurotoxin	Stress-induced freezing	Rats (15 day-old)	25 µg	icv, 15 days	+		Hård et al., 1982	J. Pharmacol. Exp. Ther. 265:572-579
5,7-DHT	5-HT neurotoxin	Ultrasonic distress vocalizations	Rats	150µg	icv	+		Schreiber et al., 1993	Life Sci. 49:139-153
5,7-DHT	5-HT neurotoxin	Ultrasonic distress vocalizations	Wistar rats (220-250g)	150 µg	icv, 3, 9 and 21 days	+		Schreiber and De Vry, 1993	Life Sci. 51:315-326
5,7-DHT	5-HT neurotoxin	Shock-probe burying	Wistar rats (250-300g)	10 µg	icv, 5 days	o	Copulated males	Saldívar et al., 1991	Behav. Brain Res. 40:37-44

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
5,7-DHT	5-HT neurotoxin	Shock-probe burying test	Wistar rats (250-300g)	10 µg	icv, 5 days	+	Non copulated males	Saldívar et al., 1991	Behav. Brain Res. 40:37-44
5,7-DHT	5-HT neurotoxin	Stress-induced hyperthermia	Swiss mice (25-30g)	200 µg	icv, 9 days	o		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230
5,7-DHT	5-HT neurotoxin	Conditioned place aversion	Long-Evans rats (280-300g)	100 µg	icv, 8 days	o		Rocha et al., 1993	Neuroscience 56:687-693
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Sprague-Dawley rats (225-250g)	200 µg	icv, 5 days	o	Shock of 0.5 mA	Ardayfio et al., 1996	Soc. Neurosci. Abstr. 22:1584
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats	10 µg/0.5 µl	median raphe, 5 days	o		Voits et al., 1998	Soc. Neurosci. Abstr. 24:1103
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats	10 µg/0.5 µl	median raphe, 14 days	o		Voits et al., 1998	Soc. Neurosci. Abstr. 24:1103
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats	10 µg/0.5 µl	median raphe, 21 days	o		Voits et al., 1998	Soc. Neurosci. Abstr. 24:1103
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats (220-250g)	4 µg/1 µl/side	amygdala	+		Wiklund et al., 1998	Soc. Neurosci. Abstr. 24:1923
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Sprague-Dawley rats (220-250g)	4 µg/1 µl/side	amygdala	+		Wiklund et al., 1998	Soc. Neurosci. Abstr. 24:1923
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Wistar rats (180-200g)	250 µg/10 µl	icv, 2 weeks before	+	Shock of 0.4 mA	Nazar et al., 1999	J. Neural Transm. 106:355-368
5,7-DHT	5-HT neurotoxin	Open-field	Wistar rats (180-200g)	250 µg/10 µl	icv, 1 week before	o		Nazar et al., 1999	J. Neural Transm. 106:355-368
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Wistar rats (200g)	8 µg/1 µl	median raphe, 7 days	o		Andrade and Graeff, 2001	Pharmacol. Biochem. Behav. 70:1-14
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Wistar rats (200g)	8 µg/1 µl	median raphe, 7	+	Animals had restraint stress	Andrade and Graeff,	Pharmacol. Biochem. Behav. 70:1-14

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					days		prior to testing	2001	
5,7-DHT	5-HT neurotoxin	Light/dark test	Wistar rats (200g)	8 µg/1 µl	median raphe, 7 days	o		Andrade and Graeff, 2001	Pharmacol. Biochem. Behav. 70:1-14
5,7-DHT	5-HT neurotoxin	Light/dark test	Wistar rats (200g)	8 µg/1 µl	median raphe, 7 days	+	Animals had restraint stress prior to testing	Andrade and Graeff, 2001	Pharmacol. Biochem. Behav. 70:1-14
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Wistar rats (200g)	8 µg/1 µl	median raphe, 7 days	+		Andrade and Graeff, 2001	Pharmacol. Biochem. Behav. 70:1-14
5,7-DHT	5-HT neurotoxin	Light/dark test	Wistar rats (200g)	8 µg/1 µl	median raphe, 7 days	+		Andrade and Graeff, 2001	Pharmacol. Biochem. Behav. 70:1-14
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats (220-250g)	4 µg/µl/side	7 days, amygdala	o		Sommer et al., 2001	Neuropsychopharmacology 24:430-440
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats (220-250g)	4 µg/µl/side	7 days, amygdala	o	Animals had restraint stress prior to testing	Sommer et al., 2001	Neuropsychopharmacology 24:430-440
5,7-DHT	5-HT neurotoxin	Vogel conflict test	Sprague-Dawley rats (220-250g)	4 µg/µl/side	7 days, amygdala	o		Sommer et al., 2001	Neuropsychopharmacology 24:430-440
5,7-DHT	5-HT neurotoxin	Inhibitory avoidance in the elevated T-maze	Wistar rats	8 µg/0.5 µl	dorsal raphe, 14 days	+		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S153
5,7-DHT	5-HT neurotoxin	Escape behavior in the elevated T-maze	Wistar rats	8 µg/0.5 µl	dorsal raphe, 14 days	-		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S153
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Sprague-Dawley rats (155-185g)	10 µg/0,5 µl	dorsal raphe, 7 days	o		Rex et al., 2003	Pharmacol. Biochem. Behav. 74:587-593

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5,7-DHT	5-HT neurotoxin	IC-stimulation	Wistar rats (250-300g)	8 µg/0.8 µl	central nucleus of amygdala, 7 days	+	Aversive theshold was decreased	Macedo et al., 2002	Brain Res. Bull. 59:189-195
5,7-DHT	5-HT neurotoxin	IC-stimulation	Wistar rats (250-300g)	8 µg/0.8 µl	basolateral amygdala, 7 days	-	Aversive theshold was increased	Macedo et al., 2002	Brain Res. Bull. 59:189-195
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Wistar rats (240-250g)	8 µg/1 µl	median raphe, 7 days	o		Netto et al., 2002	Prog. Neuropsychopharmacol. Biol. Psychiatry 26:1135-1141
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Wistar rats (240-250g)	8 µg/1 µl	median raphe, 7 days	o	Rats were subjected to 2 h immobilization stress 24 h prior testing	Netto et al., 2002	Prog. Neuropsychopharmacol. Biol. Psychiatry 26:1135-1141
5,7-DHT	5-HT neurotoxin	Elevated plus-maze	Wistar rats (240-250g)	8 µg/1 µl	median raphe, 7 days	-	Rats were subjected to seven 2 h immobilization stress sessions (the last 24 h prior testing)	Netto et al., 2002	Prog. Neuropsychopharmacol. Biol. Psychiatry 26:1135-1141
5,7-DHT	5-HT neurotoxin	Stress-induced freezing	Lister hooded rats (300g)	150 µg/10 µl	icv, 10 days	o	The drug did not produce freezing	Temel et al., 2003	Neurosci. Lett. 338:139-142
5,7-DHT	5-HT neurotoxin	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	8 µg/1 µl	median raphe, 14 days	+	The drug impaired inhibitory avoidance	Andrade et al., 2004	Behav. Brain Res. 153:55-60
5,7-DHT	5-HT neurotoxin	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	8 µg/1 µl	median raphe, 14 days	o		Andrade et al., 2004	Behav. Brain Res. 153:55-60

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5,7-DHT	5-HT neurotoxin	Novelty-elicited head-bob behavior	New Zealand rabbits (1.6-1.8 kg)	760 µg/20 µl	icv, 25-30 days prior to testing	+		Aloyo et al., 2007	Behav. Pharmacol. 18:651-659
5,7-DHT+CRF (250 pmol/µl)	5-HT neurotoxin	Stress-induced freezing	Lister hooded rats (300g)	150 µg/10 µl	icv, 10 days	(-)	The drug did not modify freezing produced by CRF	Temel et al., 2003	Neurosci. Lett. 338:139-142
5,7-DHT+Zolpidem (0,1 mg)	5-HT neurotoxin	Open-field	Wistar rats (180-200g)	250 µg/10 µl	icv, 1 week before	o	No interaction	Nazar et al., 1999	J. Neural Transm. 106:355-368
5-CT	Non selective agonist	Vogel conflict test	Lister rats (200-250g)	0.0001-0.001	dorsal raphe, 5	+		Higgins et al., 1987	Br. J. Pharmacol. 90:658P
5-CT	Non selective agonist	Vogel conflict test	Lister rats (210-270g)	0.00002-0.0005	dorsal raphe, 5	+		Higgins et al., 1988	Neuropharmacology 27:993-1001
5-CT	Non selective agonist	Elevated plus-maze	Leeds-coloured guinea pigs (360-440g)	0.1	ip, 30	o		Rex et al., 1993	J. Psychopharmacol. 7:338-345
5-CT	Non selective agonist	Open-field	Lister rats (200-250g)	1-10 nmol	dorsal PAG, 0	-		Beckett et al., 1992	Psychopharmacology 108:110-114
5-CT	Non selective agonist	Social interaction	Lister rats (200-250g)	0.00002	dorsal raphe, 5	+	HLU	Higgins et al., 1987	Br. J. Pharmacol. 90:658P
5-CT	Non selective agonist	Social interaction	Lister rats (210-270g)	0.00002-0.0001	dorsal raphe, 5	+		Higgins et al., 1988	Neuropharmacology 27:993-1001
5-CT	Non selective agonist	Elevated plus-maze	Female guinea-pigs (400-500g)	0.1	ip, 40	o		Rex et al., 1996	Pharmacol. Biochem. Behav. 54:107-111
5-CT	Non selective agonist	Distress vocalizations	Guinea pig pups (5 day-old)	ED50<0.3	ip	+		Molewijk et al., 1996	Psychopharmacology 128:31-38
5-CT	Non selective agonist	Acoustic startle reflex	Sprague-Dawley rats (310-360g)	10 mM/0.5 µl	bed nucleus of the stria terminalis, 2	+		Levita et al., 2004	Neuroscience 128:583-596
5-HT	Endogenous ligand	Geller-Seifter conflict test	Rats	1-10 µg	icv, 10-20	-		Wise et al., 1972	Science 177:180-183

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-HT	Endogenous ligand	Geller-Seifter conflict test	Rats	20 µg	icv, 0	-		Stein et al., 1973	In: The Benzodiazepines, pp. 299-326
5-HT	Endogenous ligand	Geller-Seifter conflict test	Rats (382-446g)	1-5 µg	amygdala, 0	-	VI20	Hodges et al., 1987	Psychopharmacology 92:491-504
5-HT	Endogenous ligand	Geller-Seifter conflict test	Rats	1-10 µg	icv, > 20	+		Wise et al., 1972	Science 177:180-183
5-HT	Endogenous ligand	Geller-Seifter conflict test	Wistar rats (195-205g)	10-100 nmol	dorsal raphe	+	CRF	Thiébot et al., 1982	Neuroscience 7:2287-2294
5-HT	Endogenous ligand	Light/dark test	Mice (25-35g)	10 ng	dorsal raphe	-	Asymmetric compartments	Costall et al., 1988	J. Pharm. Pharmacol. 40:494-500
5-HT	Endogenous ligand	Light/dark test	Swiss mice (10-week-old)	2.5-5 µg	icv, 30	-		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
5-HT	Endogenous ligand	Open-field	Rats (180-220g)	10 µg	nucleus accumbens, 5	-		Plaznik et al., 1991	Pharmacol. Biochem. Behav. 39:43-48
5-HT	Endogenous ligand	Social interaction	Lister rats (210-280g)	100-10000 ng	amygdala, 5	-	LLF	Higgins et al., 1991	Psychopharmacology 104:545-551
5-HT	Endogenous ligand	Social interaction	Lister rats (210-280g)	20-100 ng	dorsal raphe, 5	+	HLU	Higgins et al., 1991	Psychopharmacology 104:545-551
5-HT	Endogenous ligand	Fear-potentiated startle reflex	Sprague-Dawley rats (320-400g)	1-15.625 µg	icv	+		Geyer et al., 1975	Pharmacol. Biochem. Behav. 3:687-691
5-HT	Endogenous ligand	Fear-potentiated startle reflex	Rats (300-400g)	200 µg	icv, 8 days	+		Davis et al., 1980	Science 209:521-523
5-HT	Endogenous	Fear-	Rats (300-400g)	200 µg	IT	-		Davis et al.,	Science 209:521-523

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	ligand	potentiated startle reflex						1980	
5-HT	Endogenous ligand	Conditioned emotional response	Rats	10 nmol	dorsal raphe	+		Thiébot et al., 1984	Psychopharmacology 82:355-359
5-HT	Endogenous ligand	Ultrasonic distress vocalizations	Wistar rats (220-250g)	0.01	hippocampus, 5	o		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
5-HT	Endogenous ligand	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=3.8	dorsal raphe, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
5-HT	Endogenous ligand	Stress-induced defecation	Wistar rats (200g)	0.5-5 g	icv	+	Open-field and Shuttle box	Kameyama et al., 1980	Pharmacol. Biochem. Behav. 12:875-882
5-HT	Endogenous ligand	DPAG stimulation	Wistar rats (250-300g)	5-20 nmol	dorsal PAG, 10	+		Schütz et al., 1985	Psychopharmacology 85:340-345
5-HT	Endogenous ligand	DPAG stimulation	Rats	5-20 nmol	dorsal PAG, 10	+		Graeff et al., 1986	Behav. Brain Res. 22:173-180
5-HT	Endogenous ligand	Elevated zero-maze	Rats		dorsal raphe	-		Short et al., 1998	Soc. Neurosci. Abstr. 24:1193
5-HT	Endogenous ligand	Social interaction	Rats		dorsal raphe	-		Short et al., 1998	Soc. Neurosci. Abstr. 24:1193
5-HT	Endogenous ligand	DPAG stimulation	Female Wistar rats (199-237g)	20 nmol/0.25 µl	dorsal PAG, 10	+	Basal aversive theshold inducing escape was increased	Jacob et al., 2002	Pharmacol. Biochem. Behav. 72:761-766
5-HT	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	20 nmol/0.2 µl	dorsal PAG, 10	-		Yamashita et al., 2011	Neuropharmacology 60:216-222

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-HT	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	20 nmol/0.2 µl	dorsal PAG, 10	-		Yamashita et al., 2011	Neuropharmacology 60:216-222
5-HT	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-300g)	8 µg/0.5 µl	dorsal PAG, 10	o		Roncon et al., 2012	J. Psychopharmacology 26:525-531
5-HT	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (230-300g)	8 µg/0.5 µl	dorsal PAG, 10	+		Roncon et al., 2012	J. Psychopharmacology 26:525-531
5-HT	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.25-5 nmol/0.5 µl	ventrolateral PAG, 10	+		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
5-HT	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1.25-20 nmol/0.5 µl	ventrolateral PAG, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
5-HT	Endogenous ligand	DPAG stimulation	Wistar rats (270-300g)	20 nmol/0.2 µl	dorsal PAG, 10	+		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
5-HT	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (290-310g)	16 nmol/0.2 µl	basolateral amygdala, 10	o		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
5-HT	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (290-310g)	16 nmol/0.2 µl	basolateral amygdala, 10	-		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-HT+bicuculline (5 pmol/0.2 µl)	Endogenous ligand	DPAG stimulation	Wistar rats (270-300g)	20 nmol/0.2 µl	dorsal PAG, 10	(o)		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
5-HT+flumazenil	Endogenous ligand	Elevated zero-maze	Rats		dorsal raphe	-	No antagonism	Short et al., 1998	Soc. Neurosci. Abstr. 24:1193
5-HT+imipramine (15 mg/kg, 21-24 days)	Endogenous ligand	DPAG stimulation	Female Wistar rats (199-237g)	20 nmol/0.25 µl	dorsal PAG, 10	(+)	Basal aversive theshold inducing escape was increased further by imipramine	Jacob et al., 2002	Pharmacol. Biochem. Behav. 72:761-766
5-HT+ketanserin (10 nmol/0.2 µl)	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.25-5 nmol/0.5 µl	ventrolateral PAG, 10	(o)		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
5-HT+ketanserin (10 nmol/0.2 µl)	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	5 nmol/0.5 µl	ventrolateral PAG, 10	o	No interaction	de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
5-HT+naloxone	Endogenous ligand	Elevated zero-maze	Rats		dorsal raphe	-	No antagonism	Short et al., 1998	Soc. Neurosci. Abstr. 24:1193
5-HT+naloxone	Endogenous ligand	Social interaction	Rats		dorsal raphe	-	No antagonism	Short et al., 1998	Soc. Neurosci. Abstr. 24:1193
5-HT+naloxone (0.2 µg/0.5 µl in DPAG)	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-300g)	8 µg/0.5 µl	dorsal PAG, 10	o	No interaction	Roncon et al., 2012	J. Psychopharmacology 26:525-531
5-HT+naloxone (0.2 µg/0.5 µl in DPAG)	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (230-300g)	8 µg/0.5 µl	dorsal PAG, 10	(o)		Roncon et al., 2012	J. Psychopharmacology 26:525-531
5-HT+pMPPI	Endogenous ligand	Elevated zero-maze	Rats		dorsal raphe	(o)	Antagonism of the anxiogenic-like effects	Short et al., 1998	Soc. Neurosci. Abstr. 24:1193

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-HT+SB 242084 (0.01 nmol/0.2 µl)	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (290-310g)	16 nmol/0.2 µl	basolateral amygdala, 10	o	No interaction	Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
5-HT+SB 242084 (0.01 nmol/0.2 µl)	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (290-310g)	16 nmol/0.2 µl	basolateral amygdala, 10	(o)		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
5-HT+SB 242084 (10 nmol/0.2 µl)	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	20 nmol/0.2 µl	dorsal PAG, 10	o	No interaction	Yamashita et al., 2011	Neuropharmacology 60:216-222
5-HT+SB 242084 (10 nmol/0.2 µl)	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	20 nmol/0.2 µl	dorsal PAG, 10	(o)	SB 242084 blocked the effects of 5-HT	Yamashita et al., 2011	Neuropharmacology 60:216-222
5-HTP	5-HT precursor	Geller-Seifter conflict test	Sprague-Dawley rats	15	ip, 120	-		Geller and Blum, 1970	Eur. J. Pharmacol. 9:319-324
5-HTP	5-HT precursor	Vogel conflict test	Sprague-Dawley rats (200g)	18	ip, 30	-	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
5-HTP	5-HT precursor	Vogel conflict test	Sprague-Dawley rats (250-350g)	50	ip	o	Modified Vogel test; 0.16 mA, 2 s	Söderpalm et al., 1995	J. Neural Transm. Gen. Sect. 100:175-189
5-HTP	5-HT precursor	Vogel conflict test	Sprague-Dawley rats (180-250g)	50	ip, 30	+	Modified Vogel test	Hjorth et al., 1987	Psychopharmacology 92:96-99
5-HTP	5-HT precursor	Vogel conflict test	Sprague-Dawley rats (180-250g)	100-400	ip, 30	-	Modified Vogel test	Hjorth et al., 1987	Psychopharmacology 92:96-99
5-HTP	5-HT precursor	Conflict test	White Carneau Pigeons (6-month-old)	50	im	-	FR50	Aprison and Ferster, 1961	J. Neurochem. 6:350-357

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-HTP	5-HT precursor	Elevated plus-maze	Sprague-Dawley rats (250-350g)	28-448 µmol	ip, 30	-		Söderpalm et al., 1989	Pharmacol. Biochem. Behav. 32:259-265
5-HTP	5-HT precursor	Elevated plus-maze	Wistar rats (150-200g)	40	30	-	In combination with tranylcypromine	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
5-HTP	5-HT precursor	Light/dark test	Wistar rats (150-200g)	40	30	-	In combination with tranylcypromine and asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
5-HTP	5-HT precursor	Light/dark test	Mice	25-100	ip	-	Asymmetric compartments	Cheng et al., 1992	In: 2nd International Symposium on Serotonin, from Cell Biology to Pharmacology and Therapeutics, Houston, 15-18th September :59
5-HTP	5-HT precursor	Light/dark test	Mice	25-50	ip, 40	-		Costall et Naylor, 1993	Eur. J. Pharmacol. 234:91-99
5-HTP	5-HT precursor	Light/dark test	BKW mice (30-36g)	12.5-50	ip, 40	-	Asymmetric compartments	Cheng et al., 1994	Eur. J. Pharmacol. 255:39-49
5-HTP	5-HT precursor	Light/dark test	BKW mice (30-36g)	25-50	ip, 40	-		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
5-HTP	5-HT precursor	Light/dark test	Lundbeck mice strain (30-35g)	0.72-2.9 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
5-HTP	5-HT precursor	Holeboard	Wistar rats (150-200g)	40	30	-	In combination with tranylcypromine	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
5-HTP	5-HT precursor	Social interaction	Lister hooded rats (250-300g)	25	ip, 40	-		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
5-HTP	5-HT precursor	Fear-potentiated startle reflex	Listar rats (375-415g)	25	ip, 60	-		Glenn and Green, 1989	Behav. Pharmacol. 1:91-94
5-HTP	5-HT precursor	Shock-probe	Wistar rats (250-280g)	2.5-160	sc, 60	o		Meert and Colpaert,	Psychopharmacology 88:445-450

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		burying test						1986	
5-HTP	5-HT precursor	Marble burying	Female MF1 mice	5-50	ip, 30	+	Locomotion reduced	Njung'e and Handley, 1991	Pharmacol. Biochem. Behav. 38:63-67
5-HTP	5-HT precursor	Stress-induced defecation	Rats	30	ip, 60	+	Open-field and Shuttle box	Kameyama et al., 1980	Pharmacol. Biochem. Behav. 12:875-882
5-HTP	5-HT precursor	Fear-potentiated startle reflex	Sprague-Dawley rats (320-350g)	100	ip, 40	-		Svensson and Ahlenius, 1983	Psychopharmacology 79:104-107
5-HTP	5-HT precursor	Fear-potentiated startle reflex	Sprague-Dawley rats (320-350g)	25-50	ip, 10	-		Svensson, 1985	Psychopharmacology 85:469-475
5-HTP	5-HT precursor	Fear-potentiated startle reflex	Sprague-Dawley rats (310-380g)	125	ip, 60	o		Walters et al., 1979	Psychopharmacology 62:103-109
5-HTP	5-HT precursor	DPAG stimulation	Rats (250g)	75-150	ip, 30 to 120	+		Kiser et al., 1978	Pharmacol. Biochem. Behav. 9:27-31
5-HTP	5-HT precursor	Conditioned fear	Sprague-Dawley rats (250-300g)	20	sc, 30	+	Inescapable footshock of 2.5 mA	Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
5-HTP	5-HT precursor	Light/dark test	Swiss mice (20-25g)	25-50	ip, 60	-	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
5-HTP	5-HT precursor	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	230-450 µmol/kg	sc, 15	+	Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
5-HTP	5-HT precursor	Open-field	Swiss mice (20-25g)	50-250	ip, 60	o		Wong and Ong, 2001	Pharmacology 62:151-156

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-HTP	5-HT precursor	Novelty-suppressed feeding	Sprague-Dawley rats (225-250g)	30	30	-		Bechtholt et al., 2007	Psychopharmacology 190:531-540
5-HTP+(-)-penbutolol (8 mg/kg)	5-HT precursor	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	230-450 µmol/kg	sc, 15	(o)	(1) Antagonism of the effects of 5-HTP, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
5-HTP+benserazide (25 mg/kg)	5-HT precursor	Conditioned fear	Rats	20		+	(1) Rats received a subchonic pretreatment with lithium; (2) potentiation	Muraki et al., 1998	Soc. Neurosci. Abstr. 24:1192
5-HTP+benserazide (25 mg/kg)	5-HT precursor	Conditioned fear	Rats	20		o		Muraki et al., 1998	Soc. Neurosci. Abstr. 24:1192
5-HTP+PCPA (150 mg/kg)	5-HT precursor	Novelty-suppressed feeding	Sprague-Dawley rats (225-250g)	30	30	-	No interaction	Bechtholt et al., 2007	Psychopharmacology 190:531-540
5-HTP+PCPA (360 mg/kg)	5-HT precursor	Open-field	Swiss mice (20-25g)	250	ip, 60	+	The combination yielded anxiolytic-like activity	Wong and Ong, 2001	Pharmacology 62:151-156
5-HTP+ritanserin (5 mg/kg)	5-HT precursor	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	230-450 µmol/kg	sc, 15	(o)	(1) Antagonism of the effects of 5-HTP, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
5-MeODMT	Non-selective agonist	Geller-Seifter conflict test	Female Alderley Park rats (241-315g)	1-3	ip, 12	o		Shephard et al., 1982	Pharmacol. Biochem. Behav. 16:741-744
5-MeODMT	Non-selective agonist	Elevated plus-maze	PVG rats (200-280g)	0.5-2.5	ip, 15	-	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-MeODMT	Non-selective agonist	Elevated plus-maze	Rats	2.5	ip	o	24 h after 2 h of forced restraint	Guimarães et al., 1993	Behav. Brain Res. 58:133-139
5-MeODMT	Non-selective agonist	Social interaction	Rats			-	LLF	Critchley et al., 1987	Psychopharmacology 93:502-506
5-MeODMT	Non-selective agonist	Social interaction	DAP mice (20-30g)	10	ip, 30	-	Isolated mice	Olivier et al., 1989	Psychopharmacology 97:154-156
5-MeODMT	Non-selective agonist	Marble burying	Female MF1 mice (23-35g)	0.25-5	ip, 20	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
5-MeODMT	Non-selective agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-350g)	0.12-8	ip, 0	-		Davis et al., 1980	Psychopharmacology 70:123-130
5-MeODMT	Non-selective agonist	Fear-potentiated startle reflex	CD rats (9-13-week-old)	4	ip, 5	-		Nanry and Tilson, 1989	Psychopharmacology 97:507-513
5-MeODMT	Non-selective agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=3.5	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
5-MeODMT	Non-selective agonist	DPAG stimulation	Wistar rats (250-350g)	0.5-2 nmol	dorsal PAG, 10	+		Schütz et al., 1985	Psychopharmacology 85:340-345
5-MeODMT	Non-selective agonist	DPAG stimulation	Rats	1-2 nmol	dorsal PAG, 10	+		Graeff et al., 1986	Behav. Brain Res. 22:173-180
5-MeODMT	Non-selective agonist	DPAG stimulation	Rats	2 nmol	dorsal PAG, 10	+		Graeff et al., 1993	Behav. Brain Res. 58:123-131
5-MeODMT	Non-selective agonist	Elevated plus-maze	Wistar rats (200-250g)	20 nM/0.5 µl	dorsal hippocampus, 24h	o		Netto and Guimarães, 1996	Behav. Brain Res. 77:215-218
5-MeODMT	Non-selective agonist	Elevated plus-maze	Wistar rats (200-250g)	20 nM/0.5 µl	dorsal hippocampus, 24h	+	24h after a 2h restraint period	Netto and Guimarães, 1996	Behav. Brain Res. 77:215-218

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
5-MeODMT	Non-selective agonist	Isolation-induced aggression	CDY mice (18-22g)	ED50=1.71	ip, 20	+		Chamberlain, 1996	Soc. Neurosci. Abstr. 22:1584
5-MeODMT	Non-selective agonist	Elevated plus-maze	Wistar mice (25-30g)	2	ip, 30	o		Bhattacharya and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
5-MeODMT	Non-selective agonist	Elevated plus-maze	Prairie vole (*Microtus ochrogaster*)	1	sc, from GD12 to GD21, and PN0 to PN20	-		Martin et al., 2012	Physiol. Behav. 105:529-535
5-MeODMT	Non-selective agonist	Open-field	Prairie vole (*Microtus ochrogaster*)	1	sc, from GD12 to GD21, and PN0 to PN20	-		Martin et al., 2012	Physiol. Behav. 105:529-535
5-methoxy-6-methyl-2-aminoindan	5-HT reuptake inhibitor	Vogel conflict test	Maudsley rats	0.0625-8		o		Lewis et al., 1995	Soc. Neurosci. Abstr. 21:1131
709W92	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (7-12-day-old)	0.1-10	ip	+		Salter et al., 1995	Neuropharmacology 34:217-227
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats (382-446g)	0.00125-0.005	amygdala, 0	-	VI20	Hodges et al., 1987	Psychopharmacology 92:491-504
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats	0.001		-	FR8	Hascoët et al., 1992	J. Psychopharmacol. 6:129
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats	0.25	ip, 25	o		Deacon and Gardner, 1986	Br. J. Pharmacol. 88:330P
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.1-3	ip	o	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats	0.015-0.03	sc	o	Modified Geller-Seifter test	Thiébot et al., 1990	Psychopharmacology 101:S57
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats (250-350g)	0.007-0.125	sc, 60	o	Modified Geller-Seifter test	Thiébot et al., 1991	Psychopharmacology 103:415-424
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats (180-200g)	0.05-1	ip, 30	o	VI30	Sanger, 1992	J. Pharmacol. Exp. Ther. 261:513-517
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar AF rats (300-400g)	0.06-0.25	ip, 60	o	FR8/FR1	Charrier et al., 1994	Pharmacol. Biochem. Behav. 48:281-289
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats	0.03-0.1	ip	+		Amrick and Bennett, 1986	Soc. Neurosi. Abstr. 12:907
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats (382-446g)	0.25	ip, 15	+	VI20	Hodges et al., 1987	Psychopharmacology 92:491-504
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats	0.1-0.3	ip, 15	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats		ip	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats		dorsal raphe	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats		hippocampus	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats		Lateral septum	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats (220-250g)	0.1	ip, 15	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats (220-250g)	0.003	dorsal raphe	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats (220-250g)	0.01	hippocampus	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Rats	0.5		+	FR8	Hascoët et al., 1992	J. Psychopharmacol. 6:129
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-250g)	0.25	sc, 15	+	VI30/FR3	Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats (250-300g)	0.015-0.25	ip, 30	+	FR1/FR8 and modified test	Hascoët et al., 1994	J. Psychopharmacol. 8:227-237
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	0.125	sc, 30	+		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (200-240g)	1 µg	right hippocampal CA1 area	-		Belcheva et al., 1994	Brain Res. 640:223-228
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (200-240g)	1 µg	left and right hippocampal CA1 area	-		Belcheva et al., 1994	Brain Res. 640:223-228

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Sprague-Dawley rats (170-210g)	0.03-0.15	sc, 15	o		Moser et al., 1988	Br. J. Pharmacol. 93 (Suppl.):3P
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Sprague-Dawley rats	0.05-0.15	sc	o		Hibert and Moser, 1990	Drugs Fut. 15:159-170
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	0.005-0.15	sc, 30	o		Moser et al., 1990	Br. J. Pharmacol. 99:343-349
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Rats			o		Seymour et al., 1995	Soc. Neurosci. Abstr. 21:2106
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Sprague-Dawley rats (190-210g)	0.062-0.25	ip, 10	+	Modified Vogel test	Engel et al., 1984	Eur. J. Pharmacol. 105:365-368
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Lister rats (200-250g)	0.001	dorsal raphe, 5	+		Higgins et al., 1987	Br. J. Pharmacol. 90:658P
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	CD-COBS rats (200-300g)	0.5-2	ip, 60	+	Stressed rats	Carli and Samanin, 1988	Psychopharmacology 94:84-91
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Lister rats (210-270g)	0.000004-0.0005	dorsal raphe, 5	+	Modified Vogel test	Higgins et al., 1988	Neuropharmacology 27:993-1001
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Rats		hippocampus	+		Plaznik et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 190
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (180-220g)	0.025-0.1	ip, 15	+		Stefanski et al., 1992	Neuropharmacology 31:1251-1258
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Rats	0.025-0.05		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats	0.5	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict	Lister rats (200-280g)	0.00002-0.005	dorsal raphe, 5	+		Higgins et al., 1992	Psychopharmacology 106:261-267

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (200-250g)	0.25	ip, 30	+	Modified Vogel test	Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (180-220g)	0.0005-0.001	hippocampus, 5	+		Stefanski et al., 1993	Neuropharmacology 32:977-985
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (180-220g)	0.001-0.0025	nucleus accumbens, 5	+		Stefanski et al., 1993	Neuropharmacology 32:977-985
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (230-270g)	0.3-3µg	hippocampus,10	+		Przegalinski et al., 1994	Neuropharmacology 33:1109-1115
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Squirrel monkeys (800-1050g)	0.001-0.3	im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau Pigeons (480-528g)	0.03-3	im, 0	+	FR30	Witkin et al., 1987	J. Pharmacol. Exp. Ther. 243:970-977
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau Pigeons	0.1-3	im, 0	+	FR30	Mansbach et al., 1988	J. Pharmacol. Exp. Ther. 246:114-120
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau Pigeons	0.3-3	im, 15	+	FR30	Ahlers et al., 1992	J. Pharmacol. Exp. Ther. 260:474-481
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau Pigeons	0.03-1	im,0	+	FR30	Barrett, 1992	Drug Dev. Res. 26:299-317
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Pigeons	0.005-0.81	im, 5	+	FR30	Colpaert et al., 1992	Drug Dev. Res. 26:21-48
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (450-600g)	0.4-1	im, 15	+	FR30 and 2-5 mA	Foreman et al., 1993	J. Pharmacol. Exp. Ther. 267:58-71
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Pigeons	0.03-3		+		Barrett et al., 1994	Psychopharmacology 116:73-78
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Pigeons			+		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Rats			+		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau Pigeons (500-650g)	0.02-0.31	im, 5	+	FR30:FR30	Kleven and Koek, 1996	J. Pharmacol. Exp. Ther. 276:388-397
8-OH-DPAT	5-HT_{1A} full agonist	Timeout from avoidance procedure	Holtzman specific-pathogen free rats (80-120 day-old)	0.1-1	ip, 15	+	VI15	Galizio et al., 1990	Pharmacol. Biochem. Behav. 37:235-238
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned emotional response	Pigeons			o		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned emotional response	Rats			o		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned emotional response	Wistar rats (400-500g)	0.1-1	ip, 30	+	Weak effect	Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Rats (250-280g)	0.01-0.03		-	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	PVG rats (200-280g)	0.015-1	ip, 15	-	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Lister rats (250-350g)	0.25	ip, 10	-		Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	PVG rats (200-260g)	0.05-0.1	ip, 10	-	10-min exposure	Critchley et al., 1988	Br. J. Pharmacol. 94 (Suppl.):389P
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.0125-0.1	sc, 15	-		Moser et al., 1988	Br. J. Pharmacol. 93 (Suppl.):3P
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.2	sc, 15	-	Decreased total open arm entries	Moser, 1989	In: Behavioural Pharmacology of 5-HT, pp. 371-375
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (150-200g)	0.25	30	-		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.1-1	sc, 30	-	Locomotion decreased	Klint, 1991	Behav. Pharmacol. 2:481-489
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	PVG rats (180-260g)	0.05-0.2	ip, 10	-	10-min exposure	Critchley et al., 1992	Psychopharmacology 106:484-490
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (345-405g)	1	ip, 30	-		Kostowski et al., 1992	Pharmacol. Toxicol. 71:24-30
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (180-220g)	0.2	ip, 10	-	170 lux and 10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	PVG rats (180-260g)	0.1	ip, 10	-	10-min exposure	Njung'e et al., 1993	J. Psychopharmacol. 7:173-180
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	0.1-0.2	sc, 10	-		Treit et al., 1993	Behav. Brain Res. 54:23-34
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (150-230g)	0.1-0.2	ip, 10	-	10-min exposure	McBlane and Handley, 1994	Psychopharmacology 116:173-182
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (150-230g)	0.1-0.2	ip, 10	-	10-min exposure and 24 or 48 h water deprivation	McBlane and Handley, 1994	Psychopharmacology 116:173-182
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Rats	0.0625-0.25		o		File et al., 1987	Br. J. Pharmacol. 90:265P
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.025-0.2	sc, 30	o		Moser et al., 1990	Br. J. Pharmacol. 99:343-349
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (180-200g)	0.2	ip, 10	o	211 lux and 10-min exposure	McBlane et al., 1992	Br. J. Pharmacol. 107:446P
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	BALB/cByJ (8-week-old)		ip, 30	o		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (200-240g)	1 g	left hippocampal CA1 area	o		Belcheva et al., 1994	Brain Res. 640:223-228
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (200-240g)	1 g	right hippocampal CA1 area	o		Belcheva et al., 1994	Brain Res. 640:223-228

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (200-240g)	1 g	left and right hippocampal CA1 areas	o		Belcheva et al., 1994	Brain Res. 640:223-228
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Rats	0.01-2.5	sc	o		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (150-230g)	0.1-0.2	ip, 10	o	10-min exposure and restraint 1 or 24 h before testing	McBlane and Handley, 1994	Psychopharmacology 116:173-182
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (300-330g)	2-8 nmol	amygdala, 10	o		Zangrossi and Graeff, 1994	Braz. J. Med. Biol. Res. 27:2453-2456
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (225-250g)	0.1-0.2	ip, 10	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (180-220g)	0.001-0.00025	hippocampus, 10	+		Kostowski et al., 1989	Psychiatr. Pol. 23:117-124
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	50-400 nmol	sc, 10	+		Söderpalm et al., 1989	Pharmacol. Biochem. Behav. 32:259-265
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	CD rats (160-200g)	0.003	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	CD rats (160-200g)	0.0001-0.1	sc, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	DBA/2 mice (6-8-week-old)	1	ip, 15	+		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Mice	1		+		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (150-220g)	1	ip, 30	+	225 lux above the central area	Griebel, 1993	In: Thesis, Université Louis Pasteur, Strasbourg, France
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Rats	3 nmol	hippocampus	+	24 h after 2 h of forced restraint	Guimarães et al., 1993	Behav. Brain Res. 58:133-139
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (180-220g)	0.2	ip, 10	+	785 lux and 10-min exposure	Handley and McBlane, 1993	J. Pharmac. Toxicol. Meth. 29:129-138

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats	0.01	sc	+		Millan and Brocco, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 153
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Leeds-coloured guinea pigs (360-440g)	0.3	sc, 30	+		Rex et al., 1993	J. Psychopharmacol. 7:338-345
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Leeds-coloured guinea-pigs (360-440g)	0.3	sc, 30	+		Rex et al., 1994	Neuropharmacology 33:559-565
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (250-300g)	8 nmol	inferior colliculus, 20	+		Melo and Brandão, 1995	Behav. Pharmacol. 6:413-417
8-OH-DPAT	5-HT_{1A} full agonist	Elevated Zero-maze	Sprague-Dawley rats	0.01	sc, 30	+		Grewal et al., 1993	In: British Association for Psychopharmacology, A19
8-OH-DPAT	5-HT_{1A} full agonist	Elevated Zero-maze	Sprague-Dawley rats (285-430g)	0.01	sc, 30	+	40-60 lux	Shepherd et al., 1994	Psychopharmacology 116:56-64
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Wistar rats (150-200g)	0.25	30	-	Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	C57BL/6J mice (18-20g)	0.1-0.3	sc, 15	o	Asymmetric compartments	Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Lundbeck mice strain (30-35g)	0.015-0.95µmol/kg	sc, 30	o	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	CD-COBS rats (200-300g)	0.125-2	ip, 60	+	Stressed rats	Carli and Samanin, 1988	Psychopharmacology 94:84-91
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Female T/O mice (22-30g)	0.1	sc, 30	+	Asymmetric compartments	Bill et al., 1989	Br. J. Pharmacol. 98 (Suppl.):679P
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Swiss mice (10-week-old)	0.75	ip, 30	+		Misslin et al., 1990	Neuroreport 1:267-270
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Female ICR-DUB mice (17-35g)	0.0005-3.16	ip, 30	+	Asymmetric compartments	Young and Johnson, 1991	Pharmacol. Biochem. Behav. 40:739-743
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	BKW mice (30-35g)	0.5	ip, 45	+	Asymmetric compartments	Barnes et al., 1992	Eur. J. Pharmacol. 218:15-25

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Mice	0.125		+	Asymmetric compartments	Fernández-Guasti and López-Rubalcava, 1992	In: The Role of Serotonin in Psychiatric Disorders, p. 49
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Swiss-Webster mice (20-30g)	0.125	ip, 30	+	Transitions only	López-Rubalcava et al., 1992	Pharmacol. Biochem. Behav. 43:433-440
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Mice	0.5	ip, 40	+		Costall and Naylor, 1993	Int. Clin. Psychopharmacol. 8 Suppl 2:11-18
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	MED=0.05	sc, 30	+		Bill and Fletcher, 1994	Br. J. Pharmacol. 111:151P
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	BKW mice (30-36g)	0.25-0.5	ip, 40	+	Asymmetric compartments	Cheng et al., 1994	Eur. J. Pharmacol. 255:39-49
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Hamsters (100-150g)	0.25	20	+		Fernández-Guasti and López-Rubalcava, 1995	Pharmacol. Biochem. Behav. 50:375-382
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	ddY mice (4 week-old)	0.1-0.3	ip, 30	+	Modified test	Shimada et al., 1995	Gen. Pharmacol. 26:205-210
8-OH-DPAT	5-HT_{1A} full agonist	Holeboard	Wistar rats (150-200g)	0.25	30	-		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Rats			-	LLF	Critchley et al., 1987	Psychopharmacology 93:502-506
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister Hooded rats (200-300g)	0.00005-0.00002	dorsal hippocampus	-	HLU	Andrews et al., 1994	Eur. J. Pharmacol. 264:259-264
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	DAP mice 22-30g)	0.05-6.25	sc, 30	o	Isolated mice	Olivier et al., 1989	Psychopharmacology 97:154-156
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (200-280g)	0.00002-0.001	dorsal raphe, 5	o	LLF	Higgins et al., 1992	Psychopharmacology 106:261-267
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Rats		hippocampus	o		Picazo and Fernández-Guasti, 1993	Physiol. Behav. 54:295-299

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (200-300g)	0.00005-0.0001	hippocampus, 3	o	LLF	Hogg et al., 1994	Neuropharmacology 33:343-348
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Wistar rats (250-350g)	0.125-0.5	ip, 20	o	HLU and 5,7-DHT	Picazo et al., 1995	Brain Res. Bull. 37:169-175
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (200-250g)	0.001	dorsal raphe, 5	+	HLU	Higgins et al., 1987	Br. J. Pharmacol. 90:658P
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (210-270g)	0.00004-0.005	dorsal raphe, 5	+		Higgins et al., 1988	Neuropharmacology 27:993-1001
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Wistar rats (225-250g)	0.125-0.25	ip, 10	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (200-280g)	0.00002-0.001	dorsal raphe, 5	+	HLU	Higgins et al., 1992	Psychopharmacology 106:261-267
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Rats		dorsal raphe	+		Picazo and Fernández-Guasti, 1993	Physiol. Behav. 54:295-299
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Rats		ip	+		Picazo and Fernández-Guasti, 1993	Physiol. Behav. 54:295-299
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister Hooded rats (200-300g)	0.00002	median raphe	+	HLU	Andrews et al., 1994	Eur. J. Pharmacol. 264:259-264
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (200-300g)	0.00005	dorsal raphe, 3	+	HLU	Hogg et al., 1994	Neuropharmacology 33:343-348
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Wistar rats (250-350g)	0.25-0.5	ip, 20	+	HLU	Picazo et al., 1995	Brain Res. Bull. 37:169-175
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Wistar rats (250-350g)	0.1 µg/µl	dorsal raphe, 0	+	HLU	Picazo et al., 1995	Brain Res. Bull. 37:169-175
8-OH-DPAT	5-HT_{1A} full agonist	Social behavior	BSVS mice (25-35g)	0.025-1.25	sc, 30	+		Bell and Hobson, 1994	Neurosci. Biobehav. Rev. 18:325-338
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Lister rats (200-250g)	3-25 nmol	dorsal PAG, 0	-		Beckett et al., 1992	Psychopharmacology 108:110-114
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Sprague-Dawley rats (280-320g)	0.025-0.4	sc	-		Ahlenius et al., 1991	Eur. J. Pharmacol. 200:259-266

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Rats (180-220g)	50-20 µg	nucleus accumbens, 5	-		Plaznik et al., 1991	Pharmacol. Biochem. Behav. 39:43-48
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	CD-COBS rats (200-300g)	0.125-0.5	sc, 60	o	Non stressed rats	Carli et al., 1989	Neuropharmacology 28:471-476
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Wistar rats (180-220g)	0.0001-0.005	nucleus accumbens, 5	o		Stefanski et al., 1993	Neuropharmacology 32:977-985
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	CD-COBS rats (200-300g)	0.125-0.5	sc, 60	+	Stressed rats	Carli et al., 1989	Neuropharmacology 28:471-476
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Sprague-Dawley rats (200-250g)	2.5-5	ip, 0	+	Locomotion increased	Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Rats		hippocampus	+		Plaznik et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 190
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Wistar rats (180-220g)	0.025-0.1	ip, 15	+	65 dB noise	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Rats	0.025-0.05		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	CD-COBS rats (200-250g)	0.005	hippocampus	+		Carli et al., 1993	Eur. J. Pharmacol. 234:215-221
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Wistar rats (180-220g)	0.0001-0.001	hippocampus, 5	+		Stefanski et al., 1993	Neuropharmacology 32:977-985
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Wistar rats (180-220g)	0.0005	hippocampus, 5	+	+5,7-DHT	Stefanski et al., 1993	Neuropharmacology 32:977-985
8-OH-DPAT	5-HT_{1A} full agonist	Free-exploration test	BALB/c mice (10-week-old)	0.016-1	ip, 20	o		Griebel et al., 1993	Behav. Pharmacol. 4:637-644
8-OH-DPAT	5-HT_{1A} full agonist	Defense test battery	Female and male Long-Evans rats (98-111-day-old)	0.01-1	sc, 30	+		Blanchard et al., 1992	Psychopharmacology 106:531-539
8-OH-DPAT	5-HT_{1A} full agonist	Mouse defense test	Swiss-Webster mice (60-75-day-old)	0.5-1	sc, 5	+		Griebel et al., 1995	Pharmacol. Biochem. Behav. 51:235-244

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		battery							
8-OH-DPAT	5-HT_{1A} full agonist	Defensive rage behavior	Cats	50 pmol-3 nmol	PAG	+		Shaikh et al., 1995	Soc. Neurosci. Abstr. 21:1181
8-OH-DPAT	5-HT_{1A} full agonist	Staircase test	Rats	0.05-0.5	ip	+		Boaventura et al., 1986	Neurosci. Lett. 26 (Suppl.):S278
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	Sprague-Dawley rats (270-320g)	0.032-0.125	sc, 10	+		Fletcher and Davies, 1990	Psychopharmacology 102:301-308
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	Rats	0.03		+		Rex et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 147
8-OH-DPAT	5-HT_{1A} full agonist	Marble burying	Female MF1 mice (23-35g)	0.3-10	ip, 10	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
8-OH-DPAT	5-HT_{1A} full agonist	Mirrored chamber	BALB/cByJ (8-week-old)		ip, 30	+		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats	0.5	ip, 15	o	+5,7-DHT	Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (280-350g)	0.125-0.75	ip, 15	+		Fernández-Guasti and Hong, 1989	In: Behavioural Pharmacology of 5-HT, pp. 377-382
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Rats			+		Meert, 1989	In: Serotonin, from Cell Biology to Pharmacology and Therapeutics
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats	0.5	ip, 15	+		Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying	Ovariectomized female rats		ip	+		Picazo and Fernández-Guasti,	Physiol. Behav. 54:295-299

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test						1993	
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Ovariectomized female rats		ip	+		Picazo and Fernández-Guasti, 1993	Physiol. Behav. 54:295-299
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Sprague-Dawley rats (250-350g)	0.05-0.2	sc, 10	+		Treit et al., 1993	Behav. Brain Res. 54:23-34
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (250-350g)	0.25	ip, 30	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1994	Behav. Pharmacol. 5:42-51
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (3-week-old)	0.25-0.5	ip, 15	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (7-week-old)	0.5	ip, 15	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (11-week-old)	0.5	ip, 15	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (21-week-old)	0.5	ip, 15	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	0.25-0.5	15	-		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=6.1	po, 120	o	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50>30	po, 210	o	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	RatsWistar (10 day-old)	0.0075-0.03	sc, 10	+		Hård and Engel, 1988	Neuropharmacology 27:981-986
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.1-0.2	30	+	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.1-0.2	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats	0.1-1	ip, 15	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11-day-old)	0.03-0.3	sc, 30	+		Winslow and Insel, 1991	Prog. Neuropsychopharmacol. Biol. Psychiatry 15:745-757
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats		ip	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats		dorsal raphe	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats		hippocampus	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats		Lateral septum	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=0.003	iv, 5	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=0.02	sc, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=0.12	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats	5	po, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Adult rats	MED=0.03	sc	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.053	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.047	ip, 15	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.00068	icv, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.00002	dorsal raphe, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0003	median raphe, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0066	hippocampus, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0009	amygdala, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	0.001	dorsal raphe	+	with PCPA	Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (11 day-old)	0.03-1	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Rats	ED50=15.8	po, 30	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (250-300g)	ED50=0.0008/rat	iv	+	2 mA, 2 s electric shock	Jolas et al., 1995	J. Pharmacol. Exp. Ther. 272:920-929
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (250-300g)	ED50=0.0018/rat	dorsal hippocampus (unilateral)	+	2 mA, 2 s electric shock	Jolas et al., 1995	J. Pharmacol. Exp. Ther. 272:920-929
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (250-300g)	ED50=0.0025/rat	dorsal hippocampus (bilateral)	+	2 mA, 2 s electric shock	Jolas et al., 1995	J. Pharmacol. Exp. Ther. 272:920-929

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (250-300g)	ED50=0.0042/rat	striatum (bilateral)	+	2 mA, 2 s electric shock	Jolas et al., 1995	J. Pharmacol. Exp. Ther. 272:920-929
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (250-300g)	0.026	icv	+	2 mA, 2 s electric shock	Jolas et al., 1995	J. Pharmacol. Exp. Ther. 272:920-929
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (180-280g)	0.03-0.3	sc, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (60-70-day-old)	0.01-0.5	sc, 10 or 120	+	2 mA, 1 s electric shock	Naito et al., 1995	Eur. J. Pharmacol. 272:261-268
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (60-70-day-old)	0.01-0.5	sc, 10 or 120	+	Left neocortical lesion; 2 mA, 1 s electric shock	Naito et al., 1995	Eur. J. Pharmacol. 272:261-268
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (60-70-day-old)	0.01-0.5	sc, 10 or 120	+	Right neocortical lesion; 2 mA, 1 s electric shock	Naito et al., 1995	Eur. J. Pharmacol. 272:261-268
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (60-70-day-old)	0.01-0.5	sc, 10 or 120	+	Bilateral neocortical lesion; 2 mA, 1 s electric shock	Naito et al., 1995	Eur. J. Pharmacol. 272:261-268
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (320-350g)	0.25-2	ip, 10	-		Svensson and Ahlenius, 1983	Psychopharmacology 79:104-107
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (320-350g)	0.5-0.8	ip, 10	-		Svensson, 1985	Psychopharmacology 85:469-475
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Rats	0.63-10	ip, 0	-		Davis et al., 1986	Psychopharmacol. Bull. 22:837-843

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Rats	0.1	IT, 30	-		Davis et al., 1986	Psychopharmacol. Bull. 22:837-843
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	CD rats (9-13-week-old)	1-4	sc, 5	-		Nanry and Tilson, 1989	Psychopharmacology 97:507-513
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (200-250g)	0.5-8	ip, 5	-		Hijzen et al., 1991	Pharmacol. Biochem. Behav. 38:769-773
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Rats	0.05-0.1	icv, 30	o		Davis et al., 1986	Psychopharmacol. Bull. 22:837-843
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	2.5-10	ip, 0	o		Davis et al., 1988	Psychopharmacology 94:14-20
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Rats	0.12-0.25	ip	o		Davis, 1993	Braz. J. Med. Biol. Res. 26:235-260
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Sprague-Dawley rats	0.125-0.5	ip, 10	+		Mansbach and Geyer, 1988	Eur. J. Pharmacol. 156:375-383
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned fear	Holtzman rats (90-100 day-old)	0.01	dorsal raphe, 10	+	FR1/FR2, 0.8 mA shocks	Maier et al., 1995	Behav. Neurosci. 109:404-412
8-OH-DPAT	5-HT_{1A} full agonist	Agonistic behavior	NMRI mice	1-3	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced hyperthermia	NMRI mice		sc	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced hyperther	Swiss mice (25-30g)	2.5-10	sc, 30	+		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		mia							
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced hyperthermia	Mice	0.3	sc	+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61
8-OH-DPAT	5-HT_{1A} full agonist	Passive-avoidance test	Wistar rats (220-240g)	0.125-0.5	ip, 30	+		Sanger and Joly, 1989	Behav. Pharmacol. 1:153-160
8-OH-DPAT	5-HT_{1A} full agonist	Passive-avoidance test	Sprague-Dawley rats (200-250g)	0.01-1	sc, 30	+		Klint, 1991	Behav. Pharmacol. 2:481-489
8-OH-DPAT	5-HT_{1A} full agonist	Passive-avoidance test	Sprague-Dawley rats (200g)	0.1-1	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced colonic motor alterations	Wistar rats (250-300g)	0.05-0.1	ip, 30	+		Gué et al., 1993	Eur. J. Pharmacol. 233:193-199
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced depletion of gastric mucus	Sprague-Dawley rats (190-210g)	10-20	po, 30	o	Cold stress	Glavin et al., 1995	Dig. Dis. Sci. 40:2317-2320
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced depletion of gastric mucus	Sprague-Dawley rats (190-210g)	5-20	ip, for 10 days (o.d.)	o	Cold stress	Glavin et al., 1995	Dig. Dis. Sci. 40:2317-2320
8-OH-DPAT	5-HT_{1A} full agonist	Hot-plate	Wistar rats (200-250g)	0.1-1	ip, 30	+		Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
8-OH-DPAT	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats	0.032-1	ip, 35	-		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
8-OH-DPAT	5-HT_{1A} full agonist	DPAG stimulation	Rats	8-16 nmol	dorsal PAG, 10	+		Graeff et al., 1993	Behav. Brain Res. 58:123-131

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT$_{1A}$ full agonist	DPAG stimulation	Wistar rats (200-250g)	4-16 nmol	dorsal PAG, 10	+		Nogueira and Graeff, 1995	Pharmacol. Biochem. Behav. 52:1-6
8-OH-DPAT	5-HT$_{1A}$ full agonist	IC-stimulation	Wistar rats (250-300g)	3-6 nmol	inferior colliculus, 15	+		Melo and Brandão, 1995	Behav. Pharmacol. 6:413-417
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	0.2	ip, 15	+	Scrambled shocks of 2 mA (2 s)	Remy et al., 1996	Psychopharmacology 125:89-91
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	0.1 µg	dorsal raphe nucleus, 0	+	Scrambled shocks of 2 mA (2 s)	Remy et al., 1996	Psychopharmacology 125:89-91
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister hooded rats (200-300g)	50-200 ng	dorsal raphe nucleus, 3	o		File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister hooded rats (200-300g)	100-200 ng	dorsal raphe nucleus, 3	+	Rats already exposed to the maze	File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister hooded rats (200-300g)	100 ng	Ventral hippocampus	o		File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister hooded rats (200-300g)	100 ng	Ventral hippocampus	o	Rats already exposed to the maze	File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated T-maze	Rats	8 ng	dorsal raphe nucleus, 0	+	Effect on inhibitory avoidance	Graeff et al., 1996	Pharmacol. Biochem. Behav. 53:171-177
8-OH-DPAT	5-HT$_{1A}$ full agonist	Social competition	Rats	0.025-0.0375	sc, 15	+	Effects on subordinate position in social hierarchy	Woodall et al., 1996	Pharmacol. Biochem. Behav. 54:169-173
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Wistar rats (16-day-old)	0.25	sc, for 8 days (o.d.)	o		Gonzalez et al., 1996	Brain Res. 732:145-153
8-OH-DPAT	5-HT$_{1A}$ full agonist	Holeboard	Female and male wistar rats (16-day-old)	0.25	sc, for 8 days (o.d.)	o		Gonzalez et al., 1996	Brain Res. 732:145-153
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister rats (200-300g)	200 ng	median raphe	+		File et al., 1996	J. Neurosci. 16:4810-4815

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					nucleus, 3				
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister rats (200-300g)	200 ng	median raphe nucleus, 3	+	Rats already exposed to the maze	File et al., 1996	J. Neurosci. 16:4810-4815
8-OH-DPAT	5-HT$_{1A}$ full agonist	Social interaction	Lister rats (200-300g)	200 ng	median raphe nucleus, 3	+		File et al., 1996	J. Neurosci. 16:4810-4815
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister rats (200-300g)	50-200 ng	dorsal hippocampus, 3	o		File et al., 1996	J. Neurosci. 16:4810-4815
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Lister rats (200-300g)	100 ng	dorsal hippocampus, 3	-	Rats already exposed to the maze	File et al., 1996	J. Neurosci. 16:4810-4815
8-OH-DPAT	5-HT$_{1A}$ full agonist	Social interaction	Lister rats (200-300g)	100 ng	dorsal hippocampus, 3	-		File et al., 1996	J. Neurosci. 16:4810-4815
8-OH-DPAT	5-HT$_{1A}$ full agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	0.5	ip, 20	+	Electric shock of 0.3 mA	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
8-OH-DPAT	5-HT$_{1A}$ full agonist	Light/dark test	Swiss-Webster mice (20-30g)	0.25-0.5	ip, 20	+		López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
8-OH-DPAT	5-HT$_{1A}$ full agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	0.5	ip, 20	+	Electric shock of 0.3 mA+PCPA treatment	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
8-OH-DPAT	5-HT$_{1A}$ full agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	0.5	ip, 20	+	Electric shock of 0.3 mA+5,7-DHT lesion	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
8-OH-DPAT	5-HT$_{1A}$ full agonist	Light/dark test	Swiss-Webster mice (20-30g)	0.5	ip, 20	o	PCPA treatment	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
8-OH-DPAT	5-HT$_{1A}$ full agonist	Light/dark test	Swiss-Webster mice (20-30g)	0.5	ip, 20	o	5,7-DHT lesion	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Lister rats (200-300g)	50-200 ng	amygdala, 3	o		Gonzalez et al., 1996	Brain Res. 732:145-153
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (200-300g)	50 ng	amygdala, 3	-	LLF	Gonzalez et al., 1996	Brain Res. 732:145-153
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	0.01	sc	+		Brocco et al., 1996	Soc. Neurosci. Abstr. 22:236
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Pigeons	MED=0.08	sc	+		Brocco et al., 1996	Soc. Neurosci. Abstr. 22:236
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (150-250g)	3	ip	+	Electric footshock of 0.20-0.25 mA	Lopez and Frazer, 1996	Soc. Neurosci. Abstr. 22:477
8-OH-DPAT	5-HT_{1A} agonist	Social interaction	Swiss mice (20-25g)	0.5-10	sc, 30	+		Beneytez et al., 1998	Eur. J. Pharmacol. 344:127-135
8-OH-DPAT	5-HT_{1A} agonist	Light/dark test	Swiss mice (20-25g)	0.5-10	sc, 30	+		Beneytez et al., 1998	Eur. J. Pharmacol. 344:127-135
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.04	sc, 30	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=16	po, 30	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.5	sc, 120	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50>30	po, 120	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.5	sc, 210	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50>30	po, 210	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
8-OH-DPAT	5-HT_{1A} full agonist	Isolation-induced aggression	CDY mice (18-22g)	ED50=4.02	ip, 20	+		Chamberlain, 1996	Soc. Neurosci. Abstr. 22:1584
8-OH-DPAT	5-HT_{1A} full agonist	Defensive rage behavior	Cats	3 nM	PAG, 5	+	Rage induced by medial hypothalamic stimulation	Shaikh et al., 1996	Soc. Neurosci. Abstr. 22:1775
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Mice	ED50=0.58	sc, 30	+		López-Rodríguez et al., 1996	J. Med. Chem. 39:4439-4450
8-OH-DPAT	5-HT_{1A} full agonist	Distress vocalizations	Guinea pig pups (5 day-old)	ED50<1	sc	+		Molewijk et al., 1996	Psychopharmacology 128:31-38
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Carneau pigeons	0.1-1	im, 10	+	FR30	Mansbach et al., 1996	Psychopharmacology 128:313-319
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned emotional response	Lister hooded rats (208g)	0.01-0.1	sc, 5	o		Stanhope and Dourish, 1996	Psychopharmacology 128:293-303.
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.1-0.3	im, 15	+	FR30/FR30. 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.1-6	im, 15	o	FR30/FR30. 3.2-5.6 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.32	im, 15	+	VI30/FR5, 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.32	im, 15	+	VI30/FR20. 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (220-430g)	ED50=0.03	sc, 30	+	Five shocks of 1.8 mA for 0.3 s, separated by 20 s	Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar rats (200-250g)	0.2-0.5	sc, 30	+	VI30: food; FR10: food+shock	King et al., 1997	Eur. J. Pharmacol. 325:121-128
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Wistar rats (200-250g)	0.005-0.02	sc, 15	o	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
8-OH-DPAT	5-HT_{1A} full agonist	Defensive behavior	Lister hooded rats (200-250g)	3-25 nmol/250 nl	PAG, 10	+	Defense was elicited by intra-PAG dorsolateral hypothalamus	Beckett and Marsden, 1997	J. Psychopharmacol. 11:35-40
8-OH-DPAT	5-HT_{1A} full agonist	Defensive behavior	Lister hooded rats (200-250g)	0.03-0.3	sc, 20	-	Defense was elicited by intra-PAG dorsolateral hypothalamus	Beckett and Marsden, 1997	J. Psychopharmacol. 11:35-40
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Mice	0.03-3	sc	+		Helton et al., 1995	Soc. Neurosci. Abstr. 21:1367
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats (150-200g)	50-200 ng	median raphe, 3	o	Rats were tested in LLF conditions	Andrews et al., 1997	Psychopharmacology 130:228-234
8-OH-DPAT	5-HT_{1A} full agonist	DLH-induced escape	Hooded Lister rats (325-375g)	8.6 nmol	dorsal PAG, 10	+	dorsolateral hypothalamus was injected into the dorsal PAG	Mongeau and Marsden, 1997	Psychopharmacology 131:321-328
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (300 g)	0.01-0.3	sc, 10	+		Collinson and Dawson, 1997	Psychopharmacology 132:35-43
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.1	sc, 30	+		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Female guinea-pigs BFA-outbred (395-445g)	0.3	sc, 40	+		Rex et al., 1997	Neurosci. Lett. 228:79-82

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Canopy stretched attend posture test	TO mice (25-35g)	0.2	sc, 30	+		Grewal et al., 1997	Psychopharmacology 133:29-38
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	BKW mice (30-35g)	0.125-1	ip, 40	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rat pups (3-day-old)	0.1-1		+	Distress vocalizations were produced by isolation	Carden et al., 1997	Soc. Neurosci. Abstr. 23:520
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rat pups (10-day-old)	1		+	Distress vocalizations were produced by isolation	Carden et al., 1997	Soc. Neurosci. Abstr. 23:520
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rat pups (14-day-old)	1		+	Distress vocalizations were produced by isolation	Carden et al., 1997	Soc. Neurosci. Abstr. 23:520
8-OH-DPAT	5-HT_{1A} full agonist	Four-plate test	Swiss mice (20-24g)	1-4	ip, 30	o	Animals received an electric shock of 0.6 mA, 0.5 s	Hascoet et al., 1997	Pharmacol. Biochem. Behav. 58:1131-1138
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Ovariectomized female Wistar rats (250-300g)	0.5-0.75	ip, 20	+	Animals received an electric shock of 0.3 mA	Fernández-Guasti et al., 1997	Pharmacol. Biochem. Behav. 59:45-50
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	7-Day lactacting female Wistar rats (250-300g)	0.125-0.75	ip, 20	o	Animals received an electric shock of 0.3 mA	Fernández-Guasti et al., 1997	Pharmacol. Biochem. Behav. 59:45-50
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced freezing	Ovariectomized female Wistar rats (250-300g)	0.5	ip, 20	+	Freezing was elicited by a 95 dB door bell noise	Fernández-Guasti et al., 1997	Pharmacol. Biochem. Behav. 59:45-50
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced freezing	7-Day lactacting female Wistar rats (250-300g)	0.5	ip, 20	o	Freezing was elicited by a 95 dB door bell noise	Fernández-Guasti et al., 1997	Pharmacol. Biochem. Behav. 59:45-50

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	1	ip, 60	+	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Wistar rats (175-225g)	0.03	ip, 0	+	Latency to eat in the open-field was reduced	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Swiss mice (20-25g)	0.05-0.1	ip, 15	+	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats	100 ng	dorsal hippocampus, 3	o	Rats were selected for high sensitivity to 8-OH-DPAT-induced hypothermia; LLU	Gonzalez et al., 1998	Pharmacol. Biochem. Behav. 59:787-792
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats	100 ng	dorsal hippocampus, 3	-	Rats were selected for low sensitivity to 8-OH-DPAT-induced hypothermia; LLU	Gonzalez et al., 1998	Pharmacol. Biochem. Behav. 59:787-792
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats	50 ng	dorsal hippocampus, 3	o	Rats were selected for high sensitivity to 8-OH-DPAT-induced hypothermia; LLF	Gonzalez et al., 1998	Pharmacol. Biochem. Behav. 59:787-792
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats	50 ng	dorsal hippocampus, 3	-	Rats were selected for high sensitivity to 8-OH-DPAT-induced hypothermia; LLF	Gonzalez et al., 1998	Pharmacol. Biochem. Behav. 59:787-792

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Wistar rats (180-220g)	0.25-1	ip, 20	o		Bilkei-Gorzó et al., 1998	Psychopharmacology 136:291-298
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (285-300g)	0.5	ip, 20	+		Fernández-Guasti and López-Rubalcava, 1998	Pharmacol. Biochem. Behav. 60:27-32
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (4-week-old)	0.05-0.5	sc, 30	-		Nattaporn and Noppamars, 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S140
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (4-week-old)	0.05-0.5	sc, 30	-	Animals were reared isolated	Nattaporn and Noppamars, 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S140
8-OH-DPAT	5-HT_{1A} full agonist	Marble burying	ICR mice (20-30g)	3-10	ip, 30	+		Ichimaru et al., 1998	Jpn. J. Pharmacol. 68:65-70
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	0.3	sc, 10	+		Joordens et al., 1998	Psychopharmacology 139:383-390
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-650g)	0.02-0.2	im, 5	+		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	0.1	sc	+		Böttcher et al., 1998	Soc. Neurosci. Abstr. 24:1108
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=16	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.04	sc, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
8-OH-DPAT	5-HT_{1A} full agonist	Marble burying	Mice	ED50=0.1	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	Female and male C57BL6/Jx129/sv mice	0.1-1		o		Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (3-day-old)	0.1	ip, 0	+		Joyce and Carden, 1999	Dev. Psychobiol. 34:109-117
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	10-day-old Wistar rats	1	ip, 0	+		Joyce and Carden, 1999	Dev. Psychobiol. 34:109-117
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (14-day-old)	1	ip, 0	+		Joyce and Carden, 1999	Dev. Psychobiol. 34:109-117
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (300-350g)	0,5	ip, 15	+	Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	LDS rats	100 ng	dorsal hippocampus, 3	-	(1) Low light unfamiliar condition; (2) LDS have low level of anxiety	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	HDS rats	100 ng	dorsal hippocampus, 3	o	(1) Low light unfamiliar condition; (2) LDS have high level of anxiety	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	LDS rats	100 ng	dorsal hippocampus, 3	o	LDS have low level of anxiety	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	HDS rats	100 ng	dorsal hippocampus, 3	o	LDS have high level of anxiety	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Female and male NCAM-/- deficient mice (12-14-week-old)	0,01	ip, 30	+	NCAM=neural cell adhesion molecule	Stork et al., 1999	J. Neurobiol. 40:343-355

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Female and male NCAM+/+ deficient mice (12-14-week-old)	0,5	ip, 30	+	NCAM=neural cell adhesion molecule	Stork et al., 1999	J. Neurobiol. 40:343-355
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Fisher 344 rats	0.03-0.06	sc, 10	+	Rats were tested during the light phase	Gleason and Leander, 1999	Behav. Pharmacol. 10:758-91
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Fisher 344 rats	0.03-0.125	sc, 10	+	Rats were tested during the dark phase	Gleason and Leander, 1999	Behav. Pharmacol. 10:758-91
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	C57BL/6 mice (10-11-week-old)	1	ip, 30	-		Micheau and Van Marrewijk, 1999	Prog. Neuropsychopharmacol. Biol. Psychiatry 23:1113-1133
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	C57BL/6 mice (10-11-week-old)	1 µg	spetum, 30	-		Micheau and Van Marrewijk, 1999	Prog. Neuropsychopharmacol. Biol. Psychiatry 23:1113-1133
8-OH-DPAT	5-HT_{1A} full agonist	Distress vocalizations	CFW mouse pups (7-day-old)	0,03-10	sc, 15	+		Fish et al., 2000	Psychopharmacology 149:277-85
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats	200 ng	hippocampus, 0	+	High Light Familiar condition	Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats	200-500 ng	hippocampus, 0	o	Low Light Unfamiliar condition	Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Hooded Lister rats	200-500 ng	hippocampus, 0	+	LLF condition	Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981
8-OH-DPAT	5-HT_{1A} full agonist	Acoustic startle reflex	Rats	0,5	sc	-		Meloni and David, 1999	Soc. Neurosci. Abstr. 25:2132
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	1 µg/0.5 µl	dorsal raphe, 10	+	VI-20 schedule	Cervo et al., 2000	Neuropharmacology 39:1037-43

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	1-10 µg/0.5 µl	dorsal hippocampus, 10	o	(1) unpunished responding was decreased at 10 µg; (2) VI-20 s	Cervo et al., 2000	Neuropharmacology 39:1037-43
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Rats (7 to 21-week-old)	0.2-0.5		+	(1) No effect in 3-week old rats; (2) Shock of 0.3 mA	Fernández-Guasti et al., 1996	Salud Mental 19:36-41
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Swiss mice (25-30g)	0.05-0.1	sc, 20	+		Nunes-de-Souza et al., 2000	Psychopharmacology 150:300-10
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced analgesia	Swiss mice (25-30g)	0.05-1	sc, 20	+/-	Biphasic effects	Nunes-de-Souza et al., 2000	Psychopharmacology 150:300-10
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Swiss mice (25-30g)	5.6 nmol/0.4 µl	amygdala, 3	-		Nunes-de-Souza et al., 2000	Psychopharmacology 150:300-10
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced analgesia	Swiss mice (25-30g)	5.6 nmol/0.4 µl	amygdala, 3	o		Nunes-de-Souza et al., 2000	Psychopharmacology 150:300-10
8-OH-DPAT	5-HT_{1A} full agonist	Holeboard	ICR mice (25-30g)	0.3-1	ip, 24 h	+	Holeboard testing was preceded by 60 min restraint	Tsuji et al., 2000	Psychopharmacology 152:157-66
8-OH-DPAT	5-HT_{1A} full agonist	Holeboard	ICR mice (25-30g)	0.3-1	ip, 30	+	All behavioral parameters were reduced (sedation?)	Tsuji et al., 2000	Psychopharmacology 152:157-66
8-OH-DPAT	5-HT_{1A} full agonist	Holeboard	ICR mice (25-30g)	0.1	ip, 30	o	Holeboard testing was preceded by 60 min restraint	Tsuji et al., 2000	Psychopharmacology 152:157-66
8-OH-DPAT	5-HT_{1A} full agonist	Acoustic startle reflex	Female and male Sprague-Dawley rats (305-445g)	0.25	ip	-	Animals were 'normal' or stressed by controllable or uncontrollable electric shocks	Sipos et al., 2000	Pharmacol. Biochem. Behav. 66:403-11

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (200-240g)	0.04	sc, 30	+	0.3 mA/0.5 s shock	Dekeyne et al., 2000	Psychopharmacology 152:55-66
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (240-260g)	0.16	sc, 30	+	HLU conditions	Dekeyne et al., 2000	Psychopharmacology 152:55-66
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (173-287g)	0.55	sc, 30-120	+	Scrambled shock of 1.8 mA/0.3 s	Bartoszyk et al., 1997	Eur. J. Pharmacol. 322:147-153
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Wistar rats (280-320g)	200 ng/0.5 µl	dorsal raphe, 3	+		Romaniuk et al., 2001	Behav. Brain Res. 120:47-57
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Wistar rats (280-320g)	200 ng/0.5 µl	hippocampus, 3	-	The drug was injected bilaterally	Romaniuk et al., 2001	Behav. Brain Res. 120:47-57
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	High DPAT sensitivity rat line (200-225g)	0.06-0.125	sc, 10	+	FI-30s with 0.4 mA electric shocks	Commissaris et al., 2000	Pharmacol. Biochem. Behav. 67:199-205
8-OH-DPAT	5-HT_{1A} full agonist	Conflict test	Low DPAT sensitivity rat line (200-225g)	0.06-0.125	sc, 10	+	FI-30s with 0.4 mA electric shocks	Commissaris et al., 2000	Pharmacol. Biochem. Behav. 67:199-205
8-OH-DPAT	5-HT_{1A} full agonist	Acoustic startle reflex	High DPAT sensitivity rat line (320-390g)	0.125	sc, 10	o		McQueen et al.,2001	Behav. Pharmacol. 12:509-516
8-OH-DPAT	5-HT_{1A} full agonist	Acoustic startle reflex	Low DPAT sensitivity rat line (320-390g)	0.125	sc, 10	-	Startle was increased by drug-treatment	McQueen et al.,2001	Behav. Pharmacol. 12:509-516
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	High DPAT sensitivity rat line (320-390g)	0.125	sc, 10	o		McQueen et al.,2001	Behav. Pharmacol. 12:509-516
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Low DPAT sensitivity rat line (320-390g)	0.125	sc, 10	o		McQueen et al.,2001	Behav. Pharmacol. 12:509-516
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (200-220g)	0.01-0.1	ip, 35	o	Rats were handled prior to testing for 3 consecutive days in the	Kõks et al., 2001	Psychopharmacology 153:365-372

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							experimental room		
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Mice	8 ng	dorsal raphe	+		Coubard and Barone, 2001	Behav. Pharmacol. 12 (Suppl. 1):S24
8-OH-DPAT	5-HT$_{1A}$ full agonist	Social interaction	Gerbils	0.003-0.01		+		Cheeta et al., 2001	Behav. Pharmacol. 12 (Suppl. 1):Suppl. 19
8-OH-DPAT	5-HT$_{1A}$ full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.12	ip	+		De Vry et al., 2001	Behav. Pharmacol. 12 (Suppl. 1):S29
8-OH-DPAT	5-HT$_{1A}$ full agonist	Tonic immobility	Dunkin Hartley guinea-pigs (600-800g)	0.23-0.98	sc, 30	+		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
8-OH-DPAT	5-HT$_{1A}$ full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats	8 nmol/0.2 µl	dorsal raphe, 10	+		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S153
8-OH-DPAT	5-HT$_{1A}$ full agonist	Escape behavior in the elevated T-maze	Wistar rats	8 nmol/0.2 µl	dorsal raphe, 10	-		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S153
8-OH-DPAT	5-HT$_{1A}$ full agonist	Light/dark test	Wistar rats	8 nmol/0.2 µl	dorsal raphe, 10	+		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S153
8-OH-DPAT	5-HT$_{1A}$ full agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.035-0.07	ip, 20	+		Briones-Aranda et al., 2002	Psychopharmacology 162:147-155
8-OH-DPAT	5-HT$_{1A}$ full agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.017	ip, 20	-	Animals had forced swim stress 1 or 24 h prior to testing	Briones-Aranda et al., 2002	Psychopharmacology 162:147-155
8-OH-DPAT	5-HT$_{1A}$ full agonist	DPAG stimulation	Female Wistar rats (199-237g)	8 nmol/0.25 µl	dorsal PAG, 10	+	Basal aversive theshold inducing escape	Jacob et al., 2002	Pharmacol. Biochem. Behav. 72:761-766

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							was increased		
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Wistar rats (280-320g)	0.3 µg/0.3 ml	dorsal raphe, 3	+		Koprowska et al., 2002	Acta Neurobiol. Exp. 62:63-74
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned fear	Wistar rats (220-250g)	1 µg/0.2 µl	median raphe, 15	+	The conditioned stimulus was light	Avanzi et al., 2003	Physiol. Behav. 78:471-477
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned fear	Wistar rats (220-250g)	1 µg/0.2 µl	median raphe, 15	o	The conditioned stimulus was a tone	Avanzi et al., 2003	Physiol. Behav. 78:471-477
8-OH-DPAT	5-HT_{1A} full agonist	Vogel conflict test	ICR mice (25-30g)	0.5	ip, 30	+	Electric shock of 0.5 mA/2 s	Liao et al., 2003	Eur. J. Pharmacol. 464:141-146
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (1-day-old)	1	ip, 5	o		Shayit et al., 2003	Brain Res. 980:100-108
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	FSL rat pups (1-day-old)	1	ip, 5	o		Shayit et al., 2003	Brain Res. 980:100-108
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned fear	Wistar rats (250-280g)	1 µg/0.2 µl	median raphe, 24 h	+		Silva et al., 2004	Behav. Brain Res. 151:93-101
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned fear	Wistar rats (250-280g)	1 µg/0.2 µl	median raphe, 7 days	o		Silva et al., 2004	Behav. Brain Res. 151:93-101
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (250-280g)	1 µg/0.2 µl	median raphe, 24 h	o		Silva et al., 2004	Behav. Brain Res. 151:93-101
8-OH-DPAT	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (250-280g)	1 µg/0.2 µl	median raphe, 7 days	o		Silva et al., 2004	Behav. Brain Res. 151:93-101
8-OH-DPAT	5-HT_{1A} full agonist	Elevated T-maze	Sprague-Dawley rats (250-300g)	0.3	sc, 24 h	+	Rats were subjected to immobilization stress 30 min	Rioja et al., 2004	Ann. N.Y. Acad. Sci. 1018:333-338

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							after drug injection		
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Sprague-Dawley rats (250-300g)	0.3	sc, 24 h	o	Rats were subjected to immobilization stress 30 min after drug injection	Rioja et al., 2004	Ann. N.Y. Acad. Sci. 1018:333-338
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	ICR mice (18-25g)	0.75	ip, 30	o		Peng et al., 2004	Life Sci. 75:2451-2462
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (200g)	0.1-3	ip, 30	+	Electric shocks of 0.6 mA/2 s were applied	De Vry et al., 2004	Eur. Neuropsychopharmacol. 14:487-495
8-OH-DPAT	5-HT_{1A} full agonist	Intra-dlPAG SIN-1-induced escape behavior	Wistar rats (220-240g)	8-16 nmol/0.2 µl	dorsolateral PAG, 20	o		Moreira and Guimarães, 2004	Psychopharmacology 176:362-368
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	0.125-2	ip, 45	o		Clénet et al., 2005	Behav. Brain Res. 158:339-348
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.01	ip, 20	-	Mice were subjected to swim stress prior to testing	Alfredo and Ofir, 2005	Eur. J. Pharmacol. 508:155-158
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Swiss mice	2.5	sc, 30	+		López-Rodríguez et al., 2005	J. Med. Chem. 48:2548-2558
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Swiss mice (24-30g)	2.5	sc, 30	+		Delgado et al., 2005	Eur. J. Pharmacol. 511:9-19
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Swiss mice (24-30g)	1	sc, 30	+		Delgado et al., 2005	Eur. J. Pharmacol. 511:9-19
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Swiss mice (8-week-old)	1	ip, 30	+		Bert et al., 2005	Psychopharmacology 179:846-853
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Swiss mice (8-week-old)	0.5-1	ip, 30	o	Animals were tested in complete darkness	Bert et al., 2005	Psychopharmacology 179:846-853

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-220g)	3-15 nmol/0.2 µl	median raphe nucleus, 10	+	The drug impaired inhibitory avoidance	Dos Santos et al., 2005	Psychopharmacology 179:733-741
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (200-220g)	3-15 nmol/0.2 µl	median raphe nucleus, 10	o		Dos Santos et al., 2005	Psychopharmacology 179:733-741
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	Sprague Dawley rats (250-275g)	0.06	sc, 30	+	Rats were prenatally exposed to ethanol	Hofman et al., 2005	Pharmacol. Biochem. Behav. 82:549-558
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	Female Sprague Dawley rats (200-250g)	0.06	sc, 30	+	Rats were prenatally exposed to ethanol	Hofman et al., 2005	Pharmacol. Biochem. Behav. 82:549-558
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Female Wistar rats (200-250g)	0.5	ip, 20	+	(1) Rats were ovariectomized 3 weeks prior to testing; (2) Electric shocks of 0.3 mA were delivered	Picazo et al., 2006	Eur. J. Pharmacol. 530:88-94
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Female Wistar rats (200-250g)	0.25-0.5	ip, 20	+	(1) Rats were ovariectomized 12 weeks prior to testing; (2) Electric shocks of 0.3 mA were delivered	Picazo et al., 2006	Eur. J. Pharmacol. 530:88-94
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Female Wistar rats (180-200g)	0.05	sc, for 14 days, o.d.	o	Rats were tested either in the metestrus, diestrus, proestrus or estrus phase of the cycle	Fedotova et al., 2004	Acta Physiologica Hungarica 91:175-184

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Ovariectomized female Wistar rats (180-200g)	0.05	sc, for 14 days, o.d.	+	Rats were tested in presence or not of 17b-estradiol (0.5 µg i.m./rat/day)	Fedotova et al., 2004	Acta Physiologica Hungarica 91:175-184
8-OH-DPAT	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	3.2 nmol/0.2 µl	dorsal PAG, 10	+	The drug impaired inhibitory avoidance	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	3.2 nmol/0.2 µl	dorsal PAG, 10	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
8-OH-DPAT	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	0.4 nmol/0.2 µl	dorsal PAG, 10	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	0.4 nmol/0.2 µl	dorsal PAG, 10	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Lister rats (300-375g)	50 ng/0,5 µl	dorsal raphe nucleus, 3	+	HLU conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396
8-OH-DPAT	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	0.4 nmol/0.2 µl	dorsal PAG, 10	o		Zanoveli et al., 2007	Neuropharmacology 52:1188-1195
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	0.4 nmol/0.2 µl	dorsal PAG, 10	o		Zanoveli et al., 2007	Neuropharmacology 52:1188-1195
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.0075	ip, 35	o		Braida et al., 2007	Eur. J. Pharmacol. 555:156-163

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-220g)	3-15 nmol/0.2 µl	dorsal hippocampus, 10	-	The drug facilitated inhibitory avoidance	Dos Santos et al., 2008	Eur. Neuropsychopharmacol. 18:286-294
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (200-220g)	0,6-15 nmol/0.2 µl	dorsal hippocampus, 10	o		Dos Santos et al., 2008	Eur. Neuropsychopharmacol. 18:286-294
8-OH-DPAT	5-HT_{1A} full agonist	TMT-induced innate fear	Sprague-Dawley rats (200g)	0.03-0.5	ip, 25	+	The drug reduced notably freezing, grooming and climbing	Shields and King, 2008	Behav. Neurosci. 122:611-617
8-OH-DPAT	5-HT_{1A} full agonist	Elevated zero-maze	Sprague-Dawley rats (12-week-old)	0.3	ip, 30-45	+	The drug counteracted the anxiogenic-like effects of cocaine abstinence given at day 30 for one week	Santucci and Madeira, 2008	Brain Res. Bull. 76:402-411
8-OH-DPAT	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (220-240g)	8 nmol/0.2 µl	dorsal PAG, 0	+	The drug increased latency to escape	de Bortoli et al., 2008	Psychopharmacology 198:341-349
8-OH-DPAT	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (250-280g)	8 nmol/0.2 µl	dorsal PAG, 10	+	The drug increased latency to escape	Broiz et al., 2008	Pharmacol. Bicohem. Behav. 89:76-84
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned fear	Wistar rats (250-280g)	8 nmol/0.2 µl	dorsal PAG, 10	+	Shocks of 0.6 mA/1 s were applied 24 h prior to testing	Broiz et al., 2008	Pharmacol. Bicohem. Behav. 89:76-84
8-OH-DPAT	5-HT_{1A} full agonist	Elevated open-platform	ICR mice (6-8-week-old)	30	ip, 30	+		Miyata et al., 2007	J. Pharmacol. Sci. 105:272-278

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Wistar rats (90-100-day-old, 421g)	0.125-0.250	ip, 20	o		Thompson et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1013-1021
8-OH-DPAT	5-HT_{1A} full agonist	Marble burying	NMRI mice (20-22g)	0.63-2.5	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced hyperthermia	Wistar rats	0.4	sc, 10	+		Vinkers et al., 2009	Pharmacol. Biochem. Behav. 93:413-418
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced hyperthermia	Wistar rats	0.4	sc cannula, 10	+		Vinkers et al., 2009	Pharmacol. Biochem. Behav. 93:413-418
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	BALB/cAnN Ico mice (7-month-old)	0.05-0.1	ip, 30	o		Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
8-OH-DPAT	5-HT_{1A} full agonist	Emergence test	BALB/cAnN Ico mice (7-month-old)	0.05-0.1	ip, 30	o		Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	C57BL/6JIco mice (7-month-old)	0.05	ip, 30	+	Weak anxiolytic-like effect	Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
8-OH-DPAT	5-HT_{1A} full agonist	Emergence test	C57BL/6JIco mice (7-month-old)	0.05-0.1	ip, 30	o		Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
8-OH-DPAT	5-HT_{1A} full agonist	Mouse defense test battery	CD1 mice (10-12-week-old)	0.5-1 µg/0.1 µl	dorsal PAG, 10	+		Pobbe et al., 2011	Eur. Neuropsychopharmacol. 21:306-315
8-OH-DPAT	5-HT_{1A} full agonist	Rat avoidance test	CD1 mice (10-12-week-old)	1 µg/0.1 µl	dorsal PAG, 10	+		Pobbe et al., 2011	Eur. Neuropsychopharmacol. 21:306-315
8-OH-DPAT	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (180-200g)	0.1	sc, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
8-OH-DPAT	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (180-200g)	0.5-1	sc, 30	o		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced	Wistar rats	0.4	sc, 0	+	Manual administration	Vinkers et al., 2009	Pharmacol. Biochem. Behav. 93:413-418

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		hyperthermia							
8-OH-DPAT	5-HT$_{1A}$ full agonist	Stress-induced hyperthermia	Wistar rats	0.4	sc, 0	+	Cannula administration	Vinkers et al., 2009	Pharmacol. Biochem. Behav. 93:413-418
8-OH-DPAT	5-HT$_{1A}$ agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	0.8-3.2 nmol/0.2 µl	ventromedial hypothalamus, 10	o		da Silva et al., 2011	Behav. Brain Res. 216:692-698
8-OH-DPAT	5-HT$_{1A}$ agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	0.8-3.2 nmol/0.2 µl	ventromedial hypothalamus, 10	o		da Silva et al., 2011	Behav. Brain Res. 216:692-698
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Swiss mice (28-35g)	5.6-10 nmol/0.15 µl	dorsal PAG, 0	o		Gomes and Nunes-De-Souza, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1261-1269
8-OH-DPAT	5-HT$_{1A}$ full agonist	Elevated plus-maze	Swiss mice (28-35g)	5.6-10 nmol/0.15 µl	dorsal PAG, 0	o	Maze-experienced mice were used	Gomes and Nunes-De-Souza, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1261-1269
8-OH-DPAT	5-HT$_{1A}$ full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	0.8-3.2 nmol/0.05 µl	ventrolateral PAG, 10	+		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
8-OH-DPAT	5-HT$_{1A}$ full agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	0.8-3.2 nmol/0.05 µl	ventrolateral PAG, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
8-OH-DPAT	5-HT$_{1A}$ full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.6 nmol/0.05 µl	dorsal tegmental bundle, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1.6 nmol/0.05 µl	dorsal tegmental bundle, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
8-OH-DPAT	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-250g)	0.6 nmol/0.2 µl	median raphe nucleus, 10	+		Vicente et al., 2008	Neurosci. Lett. 445:204-208
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	0.6 nmol/0.2 µl	median raphe nucleus, 10	o		Vicente et al., 2008	Neurosci. Lett. 445:204-208
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	Wistar rats (200-250g)	15 nmol/0.2 µl	median raphe nucleus, 10	+		Vicente et al., 2008	Neurosci. Lett. 445:204-208
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (280-330g, 12-16-week-old)	2-8 nmol/0.3 µl	dorsal PAG, 5	o		Moraes et al., 2008	Behav. Brain Res. 194:181-186
8-OH-DPAT	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	0.6-15 nmol/0.2 µl	lateral septum, 10	+		Viana et al., 2008	Pharmacol. Biochem. Behav. 89:360-366
8-OH-DPAT	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	0.6-15 nmol/0.2 µl	lateral septum, 10	o		Viana et al., 2008	Pharmacol. Biochem. Behav. 89:360-366
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (250-300g)	0.25-0.5	ip, 20	+		Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Adrenalectomized Wistar rats (250-300g)	0.25-0.5	ip, 20	-		Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (250-300g)	0.25-0.5	ip, 20	+	Shocks of 0.3 mA were applied	Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Adrenalectomized Wistar rats (250-300g)	0.25-0.5	ip, 20	-	Shocks of 0.3 mA were applied	Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
8-OH-DPAT	5-HT_{1A} full agonist	Conditioned fear	C57BL/6J (9-11-week-old)	0.3-0.5	sc, 15	+	(1) Shocks of 0.7 mA/2 s were applied; (2) The drug affected both context- and tone-dependent fear conditioning	Youn et al., 2009	Neuropharmacology 5:567-576
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	B6129SF2 mice (6-7-week-old)	0.1	ip, for 28 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	0.1	ip, for 28 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	NOS KO (B6x129-NOS1^{tm1plh}, 6-7-week-old)	0.1	ip, for 28 days	o		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	NOS KO (B6x129-NOS1^{tm1plh}, 6-7-week-old)	0.1	ip, for 28 days	o		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	B6129SF2 mice (6-7-week-old)	0.1	ip, for 28 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	45.963 µg/1 µl	hippocampus unilateral, osmotic pump, 7 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	B6129SF2 mice (6-7-week-old)	45.963 µg/1 µl	hippocampus unilateral, osmotic pump, 7 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	45.963 µg/1 µl	hippocampus, 7 days	o		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	45.963 µg/1 µl	hippocampus, 21 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	B6129SF2 mice (6-7-week-old)	45.963 µg/1 µl	hippocampus, 7 days	o		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	B6129SF2 mice (6-7-week-old)	45.963 µg/1 µl	hippocampus, 21 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Female rats	0.05	sc for 14 days	o	Rats were tested during their estrous cycle	Fedotova and Ordyan, 2010	Bull. Exp. Biol. Med. 150:165-167
8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Female rats	0.05	sc for 14 days	o	Rats were tested during their proestrous cycle	Fedotova and Ordyan, 2010	Bull. Exp. Biol. Med. 150:165-167
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced hyperthermia	Wistar rats (360-550g)	0.3	ip, 0	+	Low exploratory rats were used	Kõiv and Harro, 2010	Behav. Pharmacol. 21:765-768
8-OH-DPAT	5-HT_{1A} full agonist	Stress-induced hyperthermia	Wistar rats (360-550g)	0.3	ip, 0	+	High exploratory rats were used	Kõiv and Harro, 2010	Behav. Pharmacol. 21:765-768
8-OH-DPAT	5-HT_{1A} full agonist	Open-field	CBA/Lac mice (6-week-old)	1	ip, for 14 days	o		Popova et al., 2010	Neuroscience 169:229-235
8-OH-DPAT	5-HT_{1A} full agonist	Light/dark test	CBA/Lac mice (6-week-old)	1	ip, for 14 days	o		Popova et al., 2010	Neuroscience 169:229-235
8-OH-DPAT	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (270-300g)	8 nmol/0.2 µl	dorsal PAG, 10	+		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT	5-HT_{1A} full agonist	Acoustic startle reflex	Brown Norway rats (10-week-old)	1	ip, 30	-		Conti, 2012	Neuropharmacology 62:256-263
8-OH-DPAT	5-HT_{1A} full agonist	Acoustic startle reflex	Wistar-Kyoto rats (10-week-old)	1	ip, 30	-		Conti, 2012	Neuropharmacology 62:256-263
8-OH-DPAT+(±)-Pindolol	5-HT_{1A} full agonist+antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	0.3	sc, 10	+	No antagonism of the effects of 8-OH-DPAT	Joordens et al., 1998	Psychopharmacology 139:383-390
8-OH-DPAT+adrenalectomy	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (300-350g)	0,5	ip, 15	+	Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
8-OH-DPAT+alprazolam (2 mg/kg for 3-6 days)	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (220-240g)	8 nmol/0.2 µl	dorsal PAG, 0	+	(1) The drug increased latency to escape; (2) No synergism	de Bortoli et al., 2008	Psychopharmacology 198:341-349
8-OH-DPAT+alprazolam (4 mg/kg for 14-17 days)	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (220-240g)	8 nmol/0.2 µl	dorsal PAG, 0	(+)	(1) The drug increased latency to escape; (2) Synergistic effects	de Bortoli et al., 2008	Psychopharmacology 198:341-349
8-OH-DPAT+bicuculline (5 pmol/0.2 µl)	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (270-300g)	8 nmol/0.2 µl	dorsal PAG, 10	+	No interaction	de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
8-OH-DPAT+demedulectomy	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (300-350g)	0,5	ip, 15	+	Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
8-OH-DPAT+DU 125,530	5-HT_{1A} full agonist+antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	0.3	sc, 10	(o)	Antagonism of the effects of 8-OH-DPAT	Joordens et al., 1998	Psychopharmacology 139:383-390
8-OH-DPAT+EMD 120311	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	0.1	sc	(o)	Antagonism of the anxiolytic-like effects of 8-OH-DPAT	Böttcher et al., 1998	Soc. Neurosci. Abstr. 24:1108

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT+EMD 122010	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	0.1	sc	(o)	Antagonism of the anxiolytic-like effects of 8-OH-DPAT	Böttcher et al., 1998	Soc. Neurosci. Abstr. 24:1108
8-OH-DPAT+EMD 95750	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	0.1	sc	(o)	Antagonism of the anxiolytic-like effects of 8-OH-DPAT	Böttcher et al., 1998	Soc. Neurosci. Abstr. 24:1108
8-OH-DPAT+flumazenil (2 mg/kg)	5-HT_{1A} full agonist	Vogel conflict test	ICR mice (25-30g)	0.5	ip, 30	+	(1) No blockade of the effects of 8-OH-DPAT; (2) Electric shock of 0.5 mA/2 s	Liao et al., 2003	Eur. J. Pharmacol. 464:141-146
8-OH-DPAT+fluoxetine (100 mg/kg)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Wistar rats (173-287g)	0.55	po, 40-130	+	Scrambled shock of 1.8 mA/0.3 s	Bartoszyk et al., 1997	Eur. J. Pharmacol. 322:147-153
8-OH-DPAT+imipramine (15 mg/kg, 21-24 days)	5-HT_{1A} full agonist	DPAG stimulation	Female Wistar rats (199-237g)	8 nmol/0.25 µl	dorsal PAG, 10	(+)	Basal aversive theshold inducing escape was increased further by imipramine	Jacob et al., 2002	Pharmacol. Biochem. Behav. 72:761-766
8-OH-DPAT+MDL 100,151	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	ED50=0,053	sc, 15	(+)	(1) No antagonism of the effects of 8-OH-DPAT, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
8-OH-DPAT+MM-77 (0.03 mg/kg)	5-HT_{1A} full agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.01	ip, 20	(o)	(1) Antagonism; (2) Mice were subjected to swim stress prior to testing	Alfredo and Ofir, 2005	Eur. J. Pharmacol. 508:155-158
8-OH-DPAT+MM-77 (0.05 mg/kg)	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (250-300g)	0.5	ip, 20	(o)		Briones-Aranda et	Pharmacol. Biochem. Behav. 92:182-189

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								al., 2009	
8-OH-DPAT+MM-77 (0.05 mg/kg)	5-HT_{1A} full agonist	Elevated plus-maze	Adrenalectomized Wistar rats (250-300g)	0.5	ip, 20	(o)		Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
8-OH-DPAT+MM-77 (0.05 mg/kg)	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (250-300g)	0.5	ip, 20	(o)	Shocks of 0.3 mA were applied	Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
8-OH-DPAT+MM-77 (0.05 mg/kg)	5-HT_{1A} full agonist	Shock-probe burying test	Adrenalectomized Wistar rats (250-300g)	0.5	ip, 20	(o)	Shocks of 0.3 mA were applied	Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
8-OH-DPAT+NMDA (100 pmol/0.3 µl)	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (280-330g, 12-16-week-old)	2-8 nmol/0.3 µl	dorsal PAG, 5	o	No interaction	Moraes et al., 2008	Behav. Brain Res. 194:181-186
8-OH-DPAT+pindolol (10 mg/kg)	5-HT_{1A} full agonist	Vogel conflict test	ICR mice (25-30g)	0.5	ip, 30	(o)	(1) Blockade of the effects of 8-OH-DPAT; (2) Electric shock of 0.5 mA/2 s	Liao et al., 2003	Eur. J. Pharmacol. 464:141-146
8-OH-DPAT+S 15535 (0.5-1 mg/kg)	5-HT_{1A} full agonist	Conditioned fear	C57BL/6J (9-11-week-old)	0.3	sc, 15	(+)	(1) Shocks of 0.7 mA/2 s were applied; (2) The combination affected both context- and tone-dependent fear conditioning	Youn et al., 2009	Neuropharmacology 5:567-576
8-OH-DPAT+SB269970 (5 nmol/0.2 µl)	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.6 nmol/0.2 µl	ventrolateral PAG, 10	(o)		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
8-OH-DPAT+SB269970 (5 nmol/0.2 µl)	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1.6 nmol/0.2 µl	ventrolateral PAG, 10	o	No interaction	de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT+SCH23390 (0,1 mg/kg)	5-HT_{1A} full agonist	Acoustic startle reflex	Rats	0,5	sc	-	No interaction	Meloni and David, 1999	Soc. Neurosci. Abstr. 25:2132
8-OH-DPAT+SKF82958 (1 mg/kg)	5-HT_{1A} full agonist	Acoustic startle reflex	Rats	0,1	sc	(-)	Syngergistic potentiation	Meloni and David, 1999	Soc. Neurosci. Abstr. 25:2132
8-OH-DPAT+WAY 100635	5-HT_{1A} full agonist+antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	0.3	sc, 10	(o)	Antagonism of the effects of 8-OH-DPAT	Joordens et al., 1998	Psychopharmacology 139:383-390
8-OH-DPAT+WAY 100635	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	ED50=0,053	sc, 15	(o)	(1) Antagonism of the effects of 8-OH-DPAT, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
8-OH-DPAT+WAY 100635	5-HT_{1A} full agonist	Geller-Seifter conflict test	Fisher 344 rats	0.25-2	sc, 10	(o)	(1) Antagonism of the effects of 8-OH-DPAT; (2) Rats were tested during the light phase	Gleason and Leander, 1999	Behav. Pharmacol. 10:758-91
8-OH-DPAT+WAY 100635	5-HT_{1A} full agonist	Geller-Seifter conflict test	Fisher 344 rats	0.25-2	sc, 10	(o)	(1) Antagonism of the effects of 8-OH-DPAT; (2) Rats were tested during the dark phase	Gleason and Leander, 1999	Behav. Pharmacol. 10:758-91
8-OH-DPAT+WAY 100635 (0,1 mg/kg)	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	0,03-10	sc, 15	(o)	Antagonism of the effects of 8-OH-DPAT	Fish et al., 2000	Psychopharmacology 149:277-85
8-OH-DPAT+WAY 100635 (0,63-10 mg/kg)	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	ED50=0,053	sc, 15	(+)	(1) No antagonism of the effects of 8-OH-DPAT, (2) Rats received four 1 mA	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							inescapable footshocks each of 10 s, (3) WAY was given 24 h prior 8-OH-DPAT		
8-OH-DPAT+WAY 100635 (0.04 nmol/0.2 µl)	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.6 nmol/0.2 µl	ventrolateral PAG, 10	(o)		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
8-OH-DPAT+WAY 100635 (0.04 nmol/0.2 µl)	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1.6 nmol/0.2 µl	ventrolateral PAG, 10	o	No interaction	de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
8-OH-DPAT+WAY 100635 (0.1 mg/kg)	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats		ip	(o)	Blockade of the anxiolytic-like effects of 8-OH-DPAT	De Vry et al., 2001	Behav. Pharmacol. 12 (Suppl. 1):S29
8-OH-DPAT+WAY 100635 (0.1-1 mg/kg)	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (200g)	0.1-3	ip, 30	(o)	(1) Blockade of the anxiolytic-like effects of 8-OH-DPAT; (2) Electric shocks of 0.6 mA/2 s were applied	De Vry et al., 2004	Eur. Neuropsychopharmacol. 14:487-495
8-OH-DPAT+WAY 100635 (0.3 mg/kg)	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	1 µg/0.5 µl	dorsal raphe, 10	(o)	(1) Antagonism of the effects of 8-OH-DPAT; (2) VI-20 s	Cervo et al., 2000	Neuropharmacology 39:1037-43
8-OH-DPAT+WAY 100635 (0.3 mg/kg)	5-HT_{1A} full agonist	Elevated T-maze	Sprague-Dawley rats (250-300g)	0.3	sc, 24 h	(o)	(1) Antagonism of the effects; (2) Rats were subjected to immobilization stress 30 min after drug injection	Rioja et al., 2004	Ann. N.Y. Acad. Sci. 1018:333-338

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
8-OH-DPAT+WAY 100635 (0.3 mg/kg)	5-HT_{1A} full agonist	Conditioned fear	C57BL/6J (9-11-week-old)	0.3	sc, 15	(o)	Shocks of 0.7 mA/2 s were applied	Youn et al., 2009	Neuropharmacology 5:567-576
8-OH-DPAT+WAY 100635 (0.37 nmol/0.2 µl)	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	3 nmol/0.2 µl	lateral septum, 10	(o)		Viana et al., 2008	Pharmacol. Biochem. Behav. 89:360-366
8-OH-DPAT+WAY 100635 (0.37 nmol/0.2 µl)	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	3 nmol/0.2 µl	lateral septum, 10	o	No interaction	Viana et al., 2008	Pharmacol. Biochem. Behav. 89:360-366
8-OH-DPAT+WAY 100635 (0.6 nmol/0.2 µl)	5-HT_{1A} full agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-250g)	0.6 nmol/0.2 µl	median raphe nucleus, 10	(o)		Vicente et al., 2008	Neurosci. Lett. 445:204-208
8-OH-DPAT+WAY 100635 (0.6 nmol/0.2 µl)	5-HT_{1A} full agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	0.6 nmol/0.2 µl	median raphe nucleus, 10	o	No interaction	Vicente et al., 2008	Neurosci. Lett. 445:204-208
8-OH-DPAT+WAY 100635 (1 mg/kg)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Wistar rats (173-287g)	0.55	po, 30-120	(o)	(1) Antagonism of the effects of 8-OH-DPAT; (2) Scrambled shock of 1.8 mA/0.3 s	Bartoszyk et al., 1997	Eur. J. Pharmacol. 322:147-153
8-OH-DPAT+WAY 100635 (10 nmol/0.2 µl)	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (250-280g)	8 nmol/0.2 µl	dorsal PAG, 10	(o)	Antagonism of the effects of 8-OH-DPAT	Broiz et al., 2008	Pharmacol. Bicohem. Behav. 89:76-84
8-OH-DPAT+WAY 100635 (10 nmol/0.2 µl)	5-HT_{1A} full agonist	Conditioned fear	Wistar rats (250-280g)	8 nmol/0.2 µl	dorsal PAG, 10	(o)	(1) Antagonism of the effects of 8-OH-DPAT; (2) Shocks of 0.6 mA/1 s were applied 24 h prior to testing	Broiz et al., 2008	Pharmacol. Bicohem. Behav. 89:76-84

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
A-843277	5-HT_{5A} antagonist	Open-field	Wistar rats (240-290g)	3-30	ip, 30	o		Kassai et al., 2012	Behav. Pharmacol. 23:397-406
A-843277	5-HT_{5A} antagonist	Ultrasonic distress vocalizations	Wistar rats (225-360g)	3-30	ip, 30	o	Shocks of 0.6 mA/1 s were applied	Kassai et al., 2012	Behav. Pharmacol. 23:397-406
Ad-1AP antisense	Decreases 5-HT_{1A} receptor function	Elevated plus-maze	Female C57BL/6J mice (5-8-month-old)		hypothalamus, 7 days	o	Locomotor activity was decreased	Li et al., 2004	J. Neurosci. 24:10868-10877
Ad-1AP antisense	Decreases 5-HT_{1A} receptor function	Open-field	Female C57BL/6J mice (5-8-month-old)		hypothalamus, 7 days	o	Locomotor activity was decreased	Li et al., 2004	J. Neurosci. 24:10868-10877
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Social interaction	Sprague-Dawley rats (240-260g)	2.5-10	ip, 30	+	HLU conditions were used	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar rats (200-250g)	40-80	ip, 30	+	Electric shocks of 0.3 mA/0.5 s	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Wistar rats (200-250g)	40-80	ip, 30	+		Millan et al., 2005	Psychopharmacology 177:1-12 (?)
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	0.63-80	ip, 30	o	Electric shocks of 0.8 mA/8 s	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Exploration behavior	Wistar rats (3-4-month-old)	10	ip, 5	+	Following social defeat	Tuma et al., 2005	Eur. Neuropsychopharmacol. 15:545-555
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Exploration behavior	Wistar rats (3-4-month-old)	750-1500 ppm	food pellets, for 3 days	+	Following social defeat	Tuma et al., 2005	Eur. Neuropsychopharmacol. 15:545-555
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Exploration behavior	SCN lesioned Wistar rats (3-4-month-old)	5	ip, 10	o	(1) Following social defeat; (2) SCN lesion abolished the	Tuma et al., 2005	Eur. Neuropsychopharmacol. 15:545-555

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							effects of agomelatine		
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Wistar rats (about 260g)	50-75	ip, 30	+	The drug was administered at 10:00 AM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Wistar rats (about 260g)	10-50	ip, 30	+	The drug was administered at 6:00 PM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar rats (about 260g)	50	ip, 30	+	(1) Electric shocks of 0.4 mA/0.5 s; (2) The drug was administered at 10:00 AM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar rats (about 260g)	50	ip, 30	+	(1) Electric shocks of 0.4 mA/0.5 s; (2) The drug was administered at 6:00 PM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (about 260g)	100-125	ip, 30	+	(1) Electric shocks of 0.8 mA were delivered; (2) The drug was administered at 10:00 AM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (about 260g)	100-125	ip, 30	+	(1) Electric shocks of 0.8 mA were delivered; (2) The drug was administered at 6:00 PM	Papp et al., 2006	Behav. Pharmacol. 17:9-18

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar AF rats (200-250g)	40	ip, 30	o	(1) The test was conducted between 13:30 and 14:30; (2) Electric shocks of 0.45 mA/45 ms were applied	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar AF rats (200-250g)	40	ip, 30	+	(1) The test was conducted between 17:30 and 18:30; (2) Electric shocks of 0.45 mA/45 ms were applied	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Safety signal withdrawal conflict test	Wistar AF rats (350-400g)	40	ip, 30	+	The test was conducted between 17:00 and 20:00	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Wistar AF rats (200-230g)	20-40	ip, 30	o	The test was conducted between 17:00 and 20:00	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Novelty-suppressed feeding	Wistar AF rats (180-200g)	40	ip, 30	o	The test was conducted between 17:00 and 20:00	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Sprague-Dawley rats (2-3-month-old)	40	ip, for 3 weeks, o.d.	o		Morley-Fletcher et al., 2011	Psychopharmacology 217:301-313
Agomelatine	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Sprague-Dawley rats (2-3-month-old)	40	ip, for 3 weeks, o.d.	+	Animals were subjected to prenatal restraint stress from E11 to birth	Morley-Fletcher et al., 2011	Psychopharmacology 217:301-313
Agomelatine+diazepam (0.25 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar AF rats (200-250g)	20	ip, 30	(+)	(1) Synergistic effects; (2) Electric shocks of 0.45 mA/45	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							ms were applied		
Agomelatine+diazepam (0.25 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Safety signal withdrawal conflict test	Wistar AF rats (350-400g)	20	ip, 30	o	(1) No interaction; (2) The test was conducted between 17:00 and 20:00	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine+diazepam (0.25 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Wistar AF rats (200-230g)	20-40	ip, 30	(+)	(1) Synergistic effects; (2) The test was conducted between 17:00 and 20:00	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine+diazepam (0.25 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Novelty-suppressed feeding	Wistar AF rats (180-200g)	40	ip, 30	o	(1) No interaction; (2) The test was conducted between 17:00 and 20:00	Loiseau et al., 2006	Eur. Neuropsychopharmacol. 16:417-428
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar rats (200-250g)	80	ip, 30	+	(1) No antagonism by the melatonin antagonist; (2) Electric shocks of 0.3 mA/0.5 s	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Social interaction	Sprague-Dawley rats (240-260g)	2.5	ip, 30	+	(1) No antagonism by the melatonin antagonist; (2) Electric shocks of 0.3 mA/0.5 s	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Wistar rats (about 260g)	50	ip, 30	+	(1) No interaction; (2) The drug was administered at 10:00 AM	Papp et al., 2006	Behav. Pharmacol. 17:9-18

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Elevated plus-maze	Wistar rats (about 260g)	50	ip, 30	(o)	(1) Antagonism of the effects of agomelatine; (2) The drug was administered at 6:00 PM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar rats (about 260g)	50	ip, 30	(+)	(1) Potentiation of the effects of agomelatine; (2) Electric shocks of 0.4 mA/0.5 s; (3) The drug was administered at 10:00 AM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Vogel conflict test	Wistar rats (about 260g)	50	ip, 30	(+)	(1) Potentiation of the effects of agomelatine; (2) Electric shocks of 0.4 mA/0.5 s; (3) The drug was administered at 6:00 PM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (about 260g)	100	ip, 30	(+)	(1) Potentiation of the effects of agomelatine; (2) Electric shocks of 0.8 mA were delivered; (3) The drug was administered at 10:00 AM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Agomelatine+S22153 (20 mg/kg)	5-HT_{2C} antagonist/melatonin agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (about 260g)	100	ip, 30	(+)	(1) Potentiation of the effects of agomelatine; (2) Electric shocks of 0.8 mA were delivered; (3) The drug was administered at 6:00 PM	Papp et al., 2006	Behav. Pharmacol. 17:9-18

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
ALEPH-2	5-HT_2 ligand	Holeboard	CF1 mice (25-35g)	2	ip	o		Scorza et al., 1996	Pharmacol. Biochem. Behav. 54:355-361
ALEPH-2	5-HT_2 ligand	Elevated plus-maze	CF1 mice (25-35g)	2-6	ip, 15	+		Scorza et al., 1996	Pharmacol. Biochem. Behav. 54:355-361
ALEPH-2	5-HT_2 ligand	Elevated plus-maze	Wistar rats (200-240g)	2-4	ip, 15	+		Scorza et al., 1996	Pharmacol. Biochem. Behav. 54:355-361
ALEPH-2	5-HT_2 ligand	Elevated T-maze	Wistar rats (200-240g)	4	ip, 15	+		Scorza et al., 1996	Pharmacol. Biochem. Behav. 54:355-361
Alnespirone (S20499)	5-HT_{1A} full agonist	Geller-Seifter conflict test	Wistar AF rats (300-400g)	0.5	sc, 30	+	FR8/FR1	Charrier et al., 1994	Pharmacol. Biochem. Behav. 48:281-289
Alnespirone (S20499)	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (195-245g)	4	ip, 30	+		Porsolt et al., 1992	Drug Dev. Res. 27:389-402
Alnespirone (S20499)	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.03-3	im	+		Barrett et al., 1994	Psychopharmacology 116:73-78
Alnespirone (S20499)	5-HT_{1A} full agonist	Elevated plus-maze	BALB/cByJ (8-week-old)	0.01-1	ip, 30	o		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Alnespirone (S20499)	5-HT_{1A} full agonist	Elevated plus-maze	Rats		for 14 days	+		Lesourd et al., 1993	In: Anxiety - Neurobiological, Clinical and Therapeutics, p. 18
Alnespirone (S20499)	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.25	sc, 30	+		Curle et al., 1994	Drug Dev. Res. 32:183-190
Alnespirone (S20499)	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	1-10	po, 30	+		Curle et al., 1994	Drug Dev. Res. 32:183-190
Alnespirone (S20499)	5-HT_{1A} full agonist	Elevated plus-maze	Lister rats (170g)	0.04-0.2	po, 60	+		File and Andrews, 1994	Behav. Pharmacol. 5:99-102
Alnespirone (S20499)	5-HT_{1A} full agonist	Elevated plus-maze	Lister rats (170g)	0.04-0.2	po, 60	+	Diazepam pretreatment	File and Andrews, 1994	Behav. Pharmacol. 5:99-102
Alnespirone (S20499)	5-HT_{1A} full agonist	Light/dark test	Swiss mice (10-week-old)	1-3	ip, 20	+		Griebel et al., 1992	Neuroreport 3:84-86

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Alnespirone (S20499)	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.25-10	po, 30	+	LLU	Curle et al., 1994	Drug Dev. Res. 32:183-190
Alnespirone (S20499)	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.25-5	po, 30	+	HLU	Curle et al., 1994	Drug Dev. Res. 32:183-190
Alnespirone (S20499)	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.1-1	po, 30	+	LLF	Curle et al., 1994	Drug Dev. Res. 32:183-190
Alnespirone (S20499)	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.25-5	po, 30	+	HLF	Curle et al., 1994	Drug Dev. Res. 32:183-190
Alnespirone (S20499)	5-HT_{1A} full agonist	Social interaction	Lister rats (170g)	1	po, 60	+		File and Andrews, 1994	Behav. Pharmacol. 5:99-102
Alnespirone (S20499)	5-HT_{1A} full agonist	Social interaction	Lister rats (170g)	0.04-1	po, 60	+	Diazepam pretreatment	File and Andrews, 1994	Behav. Pharmacol. 5:99-102
Alnespirone (S20499)	5-HT_{1A} full agonist	Mirrored chamber	BALB/cByJ (8-week-old)	0.01-0.1	ip, 30	+		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Alnespirone (S20499)	5-HT_{1A} full agonist	Shock-probe burying test	Rats			+		Munoz et al., 1997	Soc. Neurosci. Abstr. 23:1216
Alnespirone (S20499)	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (350-375g)	0.5-1	sc, 30	+	Unpunished responding was decreased at 1 mg/kg	Cervo et al., 1998	Soc. Neurosci. Abstr. 24:1364
Alnespirone (S20499)	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	10	ip, o.d. for 2 weeks	o		McGrath and Norman, 1999	Eur. Neuropsychopharmacol. 9:21-27
Alnespirone (S20499)+bulbectomy	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	10	ip, o.d. for 2 weeks	o		McGrath and Norman, 1999	Eur. Neuropsychopharmacol. 9:21-27
Alnespirone (S20499)+WAY 100635 (0.3 mg/kg)	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (350-375g)	0.5	sc, 30	(o)	Antagonism of the effects of alnespirone	Cervo et al., 1998	Soc. Neurosci. Abstr. 24:1364
Alpha-Me-5-HT	Non selective agonist	Geller-Seifter	Female CFN rats	0.3-2	ip	o	VI30/FR10	Winter, 1972	Arch. Int. Pharmacodyn. 197:147-159

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		conflict test							
Alpha-Me-5-HT	Non selective agonist	Conflict test	White Carneau Pigeons	1-3	im, 0	-	FI5/FR30	Graeff and Schoenfeld, 1970	J. Pharmacol. Exp. Ther. 173:277-283
Alpha-Me-5-HT	Non selective agonist	Elevated plus-maze	Lister hooded rats (280-400g)	3.1 nmol	amygdala, 1	o		Duxon et al., 1995	Br. J. Pharmacol. 116:331P
Alpha-Me-5-HT	Non selective agonist	DPAG stimulation	Wistar rats (250-280g)	20 nmol/0.2 µl	dorsal PAG, 10	+	The drug increased escape theshold	Oliveira et al., 2007	Psychopharmacology 191:253-262
Alpha-Me-5-HT	Non selective agonist	Conditioned fear	Wistar rats (250-280g)	20 nmol/0.2 µl	dorsal PAG, 10	+	The drug reduced freezing in the same context they erceived footshocks (0.6 mA/1 s)	Oliveira et al., 2007	Psychopharmacology 191:253-262
Alpha-Me-5-HT	Non selective agonist	DPAG stimulation	Wistar rats (250-280g)	20 nmol/0.2 µl	dorsal PAG, 10	+	(1) The drug increased escape theshold; (2) Animals were under conditioned fear	Oliveira et al., 2007	Psychopharmacology 191:253-262
Altanserin	Antagonist	Geller-Seifter conflict test	Rats	0.5	sc, 30	o		Kennett et al., 1992	Psychopharmacology 107:379-384
Altanserin	Antagonist	Geller-Seifter conflict test	CFY rats 400-600g)	0.5-1	sc, 30	o	VI30/FR5	Kennett et al., 1994	Psychopharmacology 114:90-96
Altanserin	Antagonist	Social interaction	Sprague-Dawley rats 250-320g)	0.5-5	sc, 30	o	Locomotion decreased	Kennett, 1992	Psychopharmacology 107:379-384
□-methyl-5-hydroxytryptamine	Selective 5-HT_{2A} agonist	IC-stimulation	Wistar rats (250-300g)	2-5 nmol	inferior colliculus, 15	+		Melo and Brandão, 1995	Behav. Pharmacol. 6:413-417

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
□-methyl-5-hydroxytryptamine	Selective 5-HT_{2A} agonist	Elevated plus-maze	Wistar rats (250-300g)	20 nmol	inferior colliculus, 20	+		Melo and Brandão, 1995	Behav. Pharmacol. 6:413-417
Amino acid mixture	Tryptophan depletion	Open-field	Wistar rats (4-month-old)		for 2 weeks	-		Blokland et al., 2002	J. Psychopharmacol. 16:39-49
Amino acid mixture	Tryptophan depletion	Emergence test	Wistar rats (4-month-old)		for 10 weeks	o		Blokland et al., 2002	J. Psychopharmacol. 16:39-49
Amitriptyline	5-HT reuptake inhibitor	Geller-Seifter conflict test	Sprague-Dawley rats (200-320g)	1-10	ip, 20	o	FR40	Kilts et al., 1981	Psychopharmacology 74:290-296
Amitriptyline	5-HT reuptake inhibitor	Vogel conflict test	Sprague-Dawley rats (200g)	3-10	ip, 30	-	VI21, also decreased non-punished responding	Kilts et al., 1982	Psychopharmacology 78:156-164
Amitriptyline	5-HT reuptake inhibitor	Vogel conflict test	Rats			o		Beer et al., 1972	Science 176:428-430
Amitriptyline	5-HT reuptake inhibitor	Vogel conflict test	Sprague-Dawley rats (200-320g)	1-10	ip, 30	o	VI21	Kilts et al., 1981	Psychopharmacology 74:290-296
Amitriptyline	5-HT reuptake inhibitor	Vogel conflict test	Female Sprague-Dawley rats (225-275g)	0.625-10	ip, 10	o	Modified Vogel test	Fontana et al., 1989	Psychopharmacology 98:157-162
Amitriptyline	5-HT reuptake inhibitor	Vogel conflict test	Female Sprague-Dawley rats (225-275g)	5	ip, for 5-9 weeks (o.d.)	+	Modified Vogel test	Fontana et al., 1989	Psychopharmacology 98:157-162
Amitriptyline	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (170-200g)	1-30	po, 60	o		Luscombe et al., 1990	Br. J. Pharmacol. 100:356P
Amitriptyline	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.1-1	sc, 30	o		Klint, 1991	Behav. Pharmacol. 2:481-489
Amitriptyline	5-HT reuptake inhibitor	Light/dark test	BKW mice (20-30g)	30	ip, 45	-	Asymmetric compartments and sedation (?)	Costall et al., 1989	Pharmacol. Biochem. Behav. 32:777-785
Amitriptyline	5-HT reuptake inhibitor	Open-field	AB mice (4-6-week-old)	5	4 weeks in drinking water	-	Low active mice	Jähkel et al., 1994	Pharmacol. Biochem. Behav. 49:263-269

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Amitriptyline	5-HT reuptake inhibitor	Open-field	AB mice (4-6-week-old)	5	4 weeks in drinking water	o	High active mice	Jähkel et al., 1994	Pharmacol. Biochem. Behav. 49:263-269
Amitriptyline	5-HT reuptake inhibitor	Shock-probe burying test	Wistar rats (250-280g)	0.63-40	sc, 60	o		Meert and Colpaert, 1986	Psychopharmacology 88:445-450
Amitriptyline	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (9-12-day-old)	1-8	ip, 30	o		Gardner, 1985	J. Pharmac. Meth. 14:181-187
Amitriptyline	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats	30	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Amitriptyline	5-HT reuptake inhibitor	Novelty-suppressed feeding	Long-Evans rats (300-325g)	10	ip, 60	-		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Amitriptyline	5-HT reuptake inhibitor	Novelty-suppressed feeding	Long-Evans rats (300-325g)	10	for 21 days (o.d.)	+		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Amitriptyline	5-HT reuptake inhibitor	Novelty-suppressed feeding	Long-Evans rats (300-325g)	10	60	+		Bodnoff et al., 1988	Psychopharmacology 95:298-302
Amitriptyline	5-HT reuptake inhibitor	Novelty-suppressed feeding	Long-Evans rats (300-325g)	10	for 21 days (o.d.)	o		Bodnoff et al., 1988	Psychopharmacology 95:298-302
Amitriptyline	5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice (12-14g)			o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Amitriptyline	5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice (12-14g)	3-30	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Amitriptyline	5-HT reuptake inhibitor	Fear-potentiated startle reflex	Wistar rats (175-200g)	2.5-10	ip, 60	o		Hijzen et al., 1995	Psychopharmacology 118:150-154

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Amitriptyline	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	10	ip, for 21 days (o.d.)	o		Harro et al., 1997	Naunyn Schmied. Arch. Pharmacol. 355:57-63
Amitriptyline	5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice (12-14g)	3-30	po, 60	o	The stressor was repeated temperature measurement	Van der Heyden et al., 1997	Physiol. Behav. 62:463-470
Amitriptyline	5-HT reuptake inhibitor	Mirrored chamber	Mice	5		-		Fundarò and Ricci-Gamalero, 1997	Behav. Pharmacol. 8:647
Amitriptyline	5-HT reuptake inhibitor	Pinch-induced catalepsy	Female and male Swiss mice (25-30g)	20-30	ip, 30	+	The drug shortened the duration of catalepsy	Fundaro, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:147-158
Amitriptyline	5-HT reuptake inhibitor	Open-field	Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Amitriptyline	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Amitriptyline	5-HT reuptake inhibitor	Acoustic startle reflex	Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Amitriptyline	5-HT reuptake inhibitor	Open-field	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Amitriptyline	5-HT reuptake inhibitor	Elevated plus-maze	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Amitriptyline	5-HT reuptake inhibitor	Acoustic startle reflex	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Amitriptyline	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (230-280g)	10	po, 2h	-		Weinstock et al., 2002	Psychopharmacology 160:318-324
Amitriptyline	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (230-280g)	10	po, o.d. for 2 weeks	-		Weinstock et al., 2002	Psychopharmacology 160:318-324

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Amitriptyline	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day-old)	30	ip, 30	o		Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
Amitriptyline	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	10	ip, 30	-		Troelsen et al., 2005	Psychopharmacology 181:741-750
Amitriptyline	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	10	po, for 21 days, b.i.d. daily	o		Troelsen et al., 2005	Psychopharmacology 181:741-750
Amitriptyline	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Female and male CD rat pups (8-10-day-old, 17-30g)	10-30	ip, 30	+		Hodgson et al., 2008	Pharmacol. Biochem. Behav. 88:341-348
Amitriptyline	5-HT reuptake inhibitor	Stress-induced grooming	Wistar rats (320-370g, 6-8-month-old)	5	ip, 25	-	The drug modified the behavioral microstructure of grooming activity	Enginar et al., 2008	Pharmacol. Biochem. Behav. 89:450:455
Amitriptyline	5-HT reuptake inhibitor	Holeboard	Wistar rats (320-370g, 6-8-month-old)	5-10	ip, 25	o		Enginar et al., 2008	Pharmacol. Biochem. Behav. 89:450:455
Amperozide	5-HT_2 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (11 day-old)	0.3-1	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
Amperozide	5-HT_2 antagonist	Passive-avoidance test	Sprague-Dawley rats (200g)	1	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
Anpirtoline	5-HT_{1B} agonist	Light/dark test	BKW mice 25-30g)	0.000001-0.001	ip, 45	+	Asymmetric compartments	Metzenauer et al., 1992	Neuroreport 3:527-529
Anpirtoline	5-HT_{1B} agonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	0.5	ip, 45	+		Clénet et al., 2005	Behav. Brain Res. 158:339-348
Antisense oligonucleotide	5-HT_6 receptors	Elevated plus-maze	Wistar rats (260-280g)	2,2µg/µl	1 µl/h for 4 days	-		Otano et al., 1999	Neuroscience 92:1001-1009
Antisense oligonucleotide	5-HT_6 receptors	Social interaction	Wistar rats (260-280g)	2,2µg/µl	1 µl/h for 4 days	-		Otano et al., 1999	Neuroscience 92:1001-1009

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Antisense oligonucleotide	5-HT_6 receptors	Elevated plus-maze	Wistar rats (260-280g)	2.2µg/µl	1 µl/h for 4 days	-		Hamon et al., 1999	Neuropsychopharmacology 21:68S-76S
Antisense oligonucleotide	5-HT_6 receptors	Social interaction	Wistar rats (260-280g)	2.2µg/µl	1 µl/h for 4 days	-	HLU condition	Hamon et al., 1999	Neuropsychopharmacology 21:68S-76S
Antisense oligonucleotide	5-HT_{2A} receptors	Elevated plus-maze	Sprague-Dawley rats (150-200g)	100µg/10 µl	icv, for 4 days	+		Cohen et al., 2005	Depress Anxiety 22:84-93
AR-A000002	5-HT_{1B} antagonist	Distress vocalizations	Guinea pig pups	30	sc, 15	+		Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
AR-A000002	5-HT_{1B} antagonist	Conflict test	Pigeons	0.1	im, o.d. for 5 days	+	VI30 (food)/FR5 (shock) schedule was in use	Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
AR-A000002	5-HT_{1B} antagonist	Conflict test	Pigeons	0.3	im	+	VI30 (food)/FR5 (shock) schedule was in use	Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
AR-A000002	5-HT_{1B} antagonist	Conflict test	Squirrel monkeys		im	o	VI30 (food)/FR5 (shock) schedule was in use	Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
Aripiprazole	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Marble burying	NMRI mice (20-22g)	10	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
Aripiprazole	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Elevated plus-maze	ddY mice	1-3	po, 60	-		Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
Aripiprazole	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Elevated plus-maze	ddY mice	3	po, 60	+	The drug attenuated anxionegic-like effects of ethanol withdrawal	Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
Aripiprazole	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Elevated plus-maze	WAG/Rij rats (6-month-old)	1	ip, for 2 weeks	+		Russo et al., 2012	Neuropharmacology 64:371-379

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Aripiprazole	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Open-field	WAG/Rij rats (6-month-old)	1-3	ip, for 2 weeks	+		Russo et al., 2012	Neuropharmacology 64:371-379
Aripiprazole+WAY 100635 (0.03-0.1 mg/kg)	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Elevated plus-maze	ddY mice	3	po, 60	(o)		Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
Aripiprazole+WAY 100635 (0.03-0.1 mg/kg)	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Elevated plus-maze	ddY mice	3	po, 60	(o)	The drug attenuated anxionegic-like effects of ethanol withdrawal	Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
AZD3783	5-HT_{1B} antagonist	Distress vocalizations	Hartley guinea pig pups (0.2-0.4g)	sc, 0	0.5-2	+		Zhang et al., 2011	J. Pharmacol. Exp. Ther. 339:567-578
B-20991	5-HT_{1A} agonist	Social interaction	Swiss mice (20-25g)	2.5-20	sc, 30	+		Beneytez et al., 1998	Eur. J. Pharmacol. 344:127-135
B-20991	5-HT_{1A} agonist	Light/dark test	Swiss mice (20-25g)	2.5-10	sc, 30	+		Beneytez et al., 1998	Eur. J. Pharmacol. 344:127-135
Barakol	5-HT antagonist	Elevated plus-maze	Wistar rats (150-170g)	10-50	ip, 30	+		Thongsaard et al., 1996	Pharmacol. Biochem. Behav. 53:753-758
BAY R 1531	5-HT_{1A} agonist	Elevated plus-maze	PVG rats (180-260g)	0.1-1.2	ip, 30	-	Observations during 10-min	Critchley et al., 1992	Psychopharmacology 106:484-490
BAY R 1531	5-HT_{1A} agonist	DPAG stimulation	Rats	4-16 nmol	dorsal PAG, 10	+		Graeff et al., 1993	Behav. Brain Res. 58:123-131
BAY R 1531	5-HT_{1A} agonist	DPAG stimulation	Wistar rats (200-250g)	4-16 nmol	dorsal PAG, 10	+		Nogueira and Graeff, 1995	Pharmacol. Biochem. Behav. 52:1-6
Berberine	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100-500	po, 60	+		Peng et al., 2004	Life Sci. 75:2451-2462
Berberine	MAO A inhibitor	Light/dark test	ICR mice (18-25g)	100-500	po, 60	+		Peng et al., 2004	Life Sci. 75:2451-2462
Berberine+8-0H-DPAT (0.75 mg/kg)	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100	po, 60	+	No interaction	Peng et al., 2004	Life Sci. 75:2451-2462

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Berberine+buspirone (0.05 mg/kg)	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100	po, 60	(+)	Synergistic action	Peng et al., 2004	Life Sci. 75:2451-2462
Berberine+diazepam (0.5 mg/kg)	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100	po, 60	+	No interaction	Peng et al., 2004	Life Sci. 75:2451-2462
Berberine+DOI (1.5 mg/kg)	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100	po, 60	+	No interaction	Peng et al., 2004	Life Sci. 75:2451-2462
Berberine+p-MPPI (0.5 mg/kg)	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100	po, 60	+	No interaction	Peng et al., 2004	Life Sci. 75:2451-2462
Berberine+ritanserin (0.01 mg/kg)	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100	po, 60	+	No interaction	Peng et al., 2004	Life Sci. 75:2451-2462
Berberine+WAY 100635 (0.3 mg/kg)	MAO A inhibitor	Elevated plus-maze	ICR mice (18-25g)	100	po, 60	+	No interaction	Peng et al., 2004	Life Sci. 75:2451-2462
Bifeprunox	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Marble burying	NMRI mice (20-22g)	0.0025-2.5	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
BMY 7378	5-HT_{1A} partial agonist	Conflict test	Squirrel Monkeys (800-1050g)	0.003-0.1	im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337
BMY 7378	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	0.03-3	im, 5	+		Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
BMY 7378	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	1-5.6	im, 15	+	FR30 and weak effect	Ahlers et al., 1992	J. Pharmacol. Exp. Ther. 260:474-481
BMY 7378	5-HT_{1A} partial agonist	Conflict test	Pigeons	0.16	im, 5	+	FR30	Colpaert et al., 1992	Drug Dev. Res. 26:21-48
BMY 7378	5-HT_{1A} partial agonist	Light/dark test	Female T/O mice (22-30g)	1	sc, 30	+	Asymmetric compartments	Bill et al., 1989	Br. J. Pharmacol. 98 (Suppl.):679P
BMY 7378	5-HT_{1A} partial agonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	MED=1	sc, 30	+		Bill and Fletcher, 1994	Br. J. Pharmacol. 111:151P
BMY 7378	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Adult rats	LED=3	ip	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
BMY 7378	5-HT_{1A} partial agonist	Ultrasonic distress	Wistar rats (180-280g)	1-3	ip, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		vocalizations							
BMY 7378	5-HT_{1A} partial agonist	Distress vocalizations	Guinea pig pups (5 day-old)	1-10	ip	o		Molewijk et al., 1996	Psychopharmacology 128:31-38
BMY 7378	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (500-650g)	0.2-1	im, 5	+		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
BP 554	5-HT_{1A} agonist	Elevated plus-maze	CD rats (160-200g)	0.1-3	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
BRL 46470A	5-HT_3 antagonist	Elevated plus-maze	Sprague-Dawley rats 250-300g)	0.0001-0.1	po, 30	+	Asymmetric compartments	Blackburn et al., 1993	Psychopharmacology 110:257-264
BRL 46470A	5-HT_3 antagonist	Light/dark test	CD1 mice 40-55g)	0.0025	ip, 30	+	Asymmetric compartments	Gao and Cutler, 1992	Neuropharmacology 31:207-213
BRL 46470A	5-HT_3 antagonist	Social interaction	CD1 mice 40-55g)	0.0025-2.5	ip, 30	+	Familiar and neutral box	Gao and Cutler, 1992	Neuropharmacology 31:207-213
BRL 46470A	5-HT_3 antagonist	Social interaction	CD1 mice 40-44g)	0.01	po, for 12-14 days (o.d.)	+	Familiar and neutral box	Gao and Cutler, 1992	Neuropharmacology 31:743-748
BRL 46470A	5-HT_3 antagonist	Social interaction	Sprague-Dawley rats 250-300g)	0.0001-0.1	sc, 30	+		Blackburn et al., 1993	Psychopharmacology 110:257-264
BRL 46470A	5-HT_3 antagonist	Social interaction	Female CD1 mice 30-35g)	40 µg/l	drinking fluid for 6-8 days	+	Oestrous mice	Gao and Cutler, 1993	Neuropharmacology 32:969-975
BRL 46470A	5-HT_3 antagonist	Social interaction	Female CD1 mice 30-35g)	40 µg/l	drinking fluid for 6-8 days	+	Dioestrous mice	Gao and Cutler, 1993	Neuropharmacology 32:969-975
BRL 46470A	5-HT_3 antagonist	Social interaction	CD1 mice	0.0025-2.5	ip, 30	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
BRL 46470A	5-HT_3 antagonist	Social interaction	CD1 mice	0.0025-2.5	ip, 30	+	Neutral cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
BRL 46470A	5-HT_3 antagonist	Social interaction	CD1 mice	0.0025	drinking fluid for 12-15 days	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
BRL 46470A	5-HT_3 antagonist	Free observation	Cynomolgus monkeys	0.001-0.1	po, for 15 days	+		Piper et al. , 1992	In: 2nd International Symposium on Serotonin, from Cell Biology to Pharmacology and Therapeutics, p. 36
BRL 46470A	5-HT_3 antagonist	Elevated T-maze	Wistar rats (250-300g)	0.1	ip, 30	+		Gargiulo et al., 1996	Neuropsychobiology 33:189-195
BRL 46470A	5-HT_3 antagonist	Elevated T-maze	Wistar rats (250-300g)	0.3 ng	amygdala	-		Gargiulo et al., 1996	Neuropsychobiology 33:189-195
BRL 46470A	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (190-240g)	0,001-0,1	ip, 30	o		Setem et al., 1999	Pharmacol. Biochem. Behav. 62:515-521
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	1	sc	-		Baduel et al., 1986	Neurosci. Lett. 26 (Suppl.):S278
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (180-200g)	5	ip, 30	-	VI30	Sanger, 1992	J. Pharmacol. Exp. Ther. 261:513-517
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	1-10	ip, 15	o		Amrick and Bennett, 1986	Soc. Neurosi. Abstr. 12:907
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	1-10	ip, 30	o		Amrick and Bennett, 1986	Soc. Neurosi. Abstr. 12:907
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	0.5-10	ip, 30	o		Gardner, 1986	Pharmacol. Biochem. Behav. 24:1479-1485
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	2	ip, 30	o	Trial 2	Soubrié, 1989	In: Behavioural Pharmacology opf 5-HT, pp. 337-352
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict	Rats	2	ip, 30	o	Trial 3	Soubrié, 1989	In: Behavioural Pharmacology opf 5-HT, pp. 337-352

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (250-270g)	0.04-10	sc, 60	o	VI30	Brocco et al., 1990	Behav. Pharmacol. 1:403-418
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats	1-10	ip, 15	o		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (400-500g)	1.25-5	ip, 30	o		Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (400-500g)	10-40	po, 30	o		Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Albino mice (several months)	1-30	po, 30	o		Martin et al., 1993	Pharmacol. Biochem. Behav. 46:905-910
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Albino mice (several months)	10	po, 30	o	After diazepam treatment	Martin et al., 1993	Pharmacol. Biochem. Behav. 46:905-910
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Albino mice (several months)	5	po, for 4 weeks	o		Martin et al., 1993	Pharmacol. Biochem. Behav. 46:905-910
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (229-271g)	0.3	ip, 30	o	VI/FR4	Zhang and Luo, 1993	Chung. Kuo. Yao. Li. Hsueh. Pao. 14:354-357
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	ddY mice (7-8-week-old)	1-10	po	o	VI1.5/FR5	Kuribara, 1994	Jpn. J. Pharmacol. 64:273-280

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats	0.25-15	ip	+		Hartmann and Geller, 1981	Proc. West Pharmac. Soc. 24:179-181
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats	2.5-5	po, 30	+		Geller and Hartmann, 1982	J. Clin. Psychiatry 43:25-33
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	10		+	Weak effect	Sullivan et al., 1983	Soc. Neurosci. Abstr. 9:434
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	0.5	sc	+		Baduel et al., 1986	Neurosci. Lett. 26 (Suppl.):S278
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-225g)	0.3-3	ip, 60	+	VI30/FR30	Mason et al., 1987	Psychopharmacology 92:30-34
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (420-480g)	5-40	po, 30	+		Young et al., 1987	Eur. J. Pharmacol. 143:361-371
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	2	ip, 30	+	Trial 1	Soubrié, 1989	In: Behavioural Pharmacology opf 5-HT, pp. 337-352
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	2	ip, 30	+	Trial 4	Soubrié, 1989	In: Behavioural Pharmacology opf 5-HT, pp. 337-352
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.1-5.6	sc	+	FR30/FR10 and weak effect	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Ovariectomized Long-Evans female rats	5-10	po, 60	+	FR1	Howard and Pollard, 1990	Drug Dev. Res. 19:37-49

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Ovariectomized Long-Evans female rats	5	po, 60	+	FR10	Howard and Pollard, 1990	Drug Dev. Res. 19:37-49
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Ovariectomized Long-Evans female rats	5	po, 60	+	Rats never treated before	Howard and Pollard, 1990	Drug Dev. Res. 19:37-49
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Ovariectomized Long-Evans female rats	1	sc, 60	+		Howard and Pollard, 1990	Drug Dev. Res. 19:37-49
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	0.25-2	ip	+	Modified Geller-Seifter test	Thiébot et al., 1990	Psychopharmacology 101:S57
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (350-500g)	1.1-10	ip, 20	+	FI60	Panickar and McNaughton, 1991	Pharmacol. Biochem. Behav. 39:275-278
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (250-350g)	0.25-2	ip, 30	+	Modified Geller-Seifter test	Thiébot et al., 1991	Psychopharmacology 103:415-424
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	0.5-1		+	FR8	Hascoët et al., 1992	J. Psychopharmacol. 6:129
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (180-200g)	1.25	ip, 30	+	VI30	Sanger, 1992	J. Pharmacol. Exp. Ther. 261:513-517
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-250g)	32	po, 30	+	VI30/FR3	Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-250g)	1	sc, 15	+	VI30/FR3	Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar AF rats (300-400g)	0.125-0.5	sc, 30	+	FR8/FR1	Charrier et al., 1994	Pharmacol. Biochem. Behav. 48:281-289
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (250-300g)	0.125-0.5	ip, 30	+	Modified test FR1/FR8	Hascoët et al., 1994	J. Psychopharmacol. 8:227-237
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-220g)	0.005	hippocampus, 5	-		Stefanski et al., 1993	Neuropharmacology 32:977-985
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-220g)	0.005	nucleus accumbens, 5	-		Stefanski et al., 1993	Neuropharmacology 32:977-985
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	50	po	o		Goldberg et al., 1983	Neuropharmacology 22:1499-1504
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	1.25-20		o		Sullivan et al., 1983	Soc. Neurosci. Abstr. 9:434
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (300-400g)	1-10	ip, 30	o		Sanger et al., 1985	J. Pharmacol. Exp. Ther. 232:831-837
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	2-10	po	o		Budhram et al., 1986	Br. J. Pharmacol. 88 (Suppl.):331P
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	2-10	po	o		Gardner, 1986	Pharmacol. Biochem. Behav. 24:1479-1485
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	CD-COBS rats (200-300g)	0.0001-0.01	dorsal raphe, 10	o		Carli et al., 1989	Br. J. Pharmacol. 96:829-836
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (220-240g)	0.04-10	sc, 60	o	Modified Vogel test	Brocco et al., 1990	Behav. Pharmacol. 1:403-418
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Female Long-Evans rats (225-249g)	0.125-0.625	sc, 15	o	Predictable and moderate predictable shocks	Costello et al., 1991	Pharmacol. Biochem. Behav. 40:787-794

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats		hippocampus	o		Plaznik et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 190
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	CD rats (85-100g)	10-80	po, 60	+		Oakley and Jones, 1983	Eur. J. Pharmacol. 87:499-500
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200g)	0.5-5	po, 30	+	Modified Vogel test	Weissman et al., 1984	Drug Dev. Res. 4:83-93
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	90	po, 30	+		File, 1985	Neuropsychobiology 13:55-62
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	1-10	po	+		Taylor et al., 1985	Pharmacol. Biochem. Behav. 23:687-694
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (250-350g)	10	ip, 15	+	Modified Vogel test	Eison et al., 1986	Pharmacol. Biochem. Behav. 24:701-707
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200-250g)	0.6-1.2	sc, 15	+		Pich and Samanin, 1986	Psychopharmacology 89:125-130
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	5.6-10	ip	+		Heym et al., 1987	Soc. Neurosci. Abstr. 13:455
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Lister rats (200-250g)	0.0004-0.002	dorsal raphe, 5	+		Higgins et al., 1987	Br. J. Pharmacol. 90:658P
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Female rats (225-250g)	0.25-1	ip, 10	+	Weak effect	McCloskey et al., 1987	Pharmacol. Biochem. Behav. 27:171-175
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Female rats (225-250g)	0.125-1	sc, 10	+		McCloskey et al., 1987	Pharmacol. Biochem. Behav. 27:171-175
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	5-10	ip, 30	+	Modified Vogel test	Shimizu et al., 1987	Jpn. J. Pharmacol. 45:493-500
Buspirone	5-HT_{1A} partial agonist	Vogel conflict	Sprague-Dawley rats (200-300g)	20	po, 30	+	Modified Vogel test	Shimizu et al., 1987	Jpn. J. Pharmacol. 45:493-500

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Lister rats (210-270g)	0.0004-0.01	dorsal raphe, 5	+		Higgins et al., 1988	Neuropharmacology 27:993-1001
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (240-300g)	0.25-4	sc, 30	+	Modified Vogel test	Gower and Tricklebank, 1988	Eur. J. Pharmacol. 155:129-137
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (240-300g)	1-50	po, 30	+	Modified Vogel test	Gower and Tricklebank, 1988	Eur. J. Pharmacol. 155:129-137
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (170-210g)	0.25-2	sc, 30	+		Moser et al., 1988	Br. J. Pharmacol. 93 (Suppl.):3P
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	CD-COBS rats (200-300g)	0.001-0.005	median raphe, 10	+		Carli et al., 1989	Br. J. Pharmacol. 96:829-836
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (225-275g)	0.125-2	ip, 10	+	Modified Vogel test and weak effect	Schefke et al., 1989	Psychopharmacology 99:427-429
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (225-275g)	2-4	ip, for 8 weeks (b.i.d.)	+	Modified Vogel test	Schefke et al., 1989	Psychopharmacology 99:427-429
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	5-10	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats	0.05-0.15	sc	+		Hibert and Moser, 1990	Drugs Fut. 15:159-170
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	0.25-1	sc, 30	+		Moser et al., 1990	Br. J. Pharmacol. 99:343-349
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Female Long-Evans rats (225-249g)	0.125	sc, 15	+	Unpredictable shocks	Costello et al., 1991	Pharmacol. Biochem. Behav. 40:787-794
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-166g)	10-20	po, 60	+		Wada and Fukada, 1991	Psychopharmacology 104:444-450

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Lister rats (200-280g)	0.0002	dorsal raphe, 5	+		Higgins et al., 1992	Psychopharmacology 106:261-267
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	SPRD rats (200g)	0.04	ip, 30	+		Horváth et al., 1992	Acta Physiol. Hung. 79:153-161
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (195-245g)	8	ip, 30	+		Porsolt et al., 1992	Drug Dev. Res. 27:389-402
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-220g)	0.62-2.5	ip, 30	+	Modified Vogel test	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	0.62		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-200g)	3-60	po, 60	+	Modified Vogel test	Takao et al., 1992	Pharmacol. Biochem. Behav. 43:503-508
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (211-347g)	10	po, 30	+	Modified Vogel test	Amano et al., 1993	Jpn. J. Pharmacol. 61:311-317
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (211-347g)	10	po, for 7 days	+	Modified Vogel test	Amano et al., 1993	Jpn. J. Pharmacol. 61:311-317
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (200-250g)	3-5	ip, 30	+	Modified Vogel test	Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (12-week-old)	10	ip, 30	+	0.16 and 0.32 mA shocks	Meneses and Hong, 1993	Pharmacol. Biochem. Behav. 46:569-573
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats			+		Miyauchi et al., 1993	Soc. Neurosci. Abstr. 19:1867
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (230-270g)	0.3-3µg	hippocampus,10	+		Przegalinski et al., 1994	Neuropharmacology 33:1109-1115
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-220g)	1-8	ip, 45	+	0.1 mA, 2 s	Artaiz et al., 1995	Psychopharmacology 117:137-148

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats			+		Porsolt et al., 1995	Soc. Neurosci. Abstr. 21:1131
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	5-10	ip, 30	+		Yamashita et al., 1995	Pharmacol. Biochem. Behav. 50:477-479
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	5-10	ip, for 7 days (o.d.)	+		Yamashita et al., 1995	Pharmacol. Biochem. Behav. 50:477-479
Buspirone	5-HT_{1A} partial agonist	Conflict test	Rats			o		Porsolt et al., 1995	Soc. Neurosci. Abstr. 21:1131
Buspirone	5-HT_{1A} partial agonist	Conflict test	Squirrel monkeys	5		-		Sullivan et al., 1983	Soc. Neurosci. Abstr. 9:434
Buspirone	5-HT_{1A} partial agonist	Conflict test	Squirrel monkeys	10	po	o		Goldberg et al., 1983	Neuropharmacology 22:1499-1504
Buspirone	5-HT_{1A} partial agonist	Conflict test	Squirrel monkeys	1.25-2.5		o		Sullivan et al., 1983	Soc. Neurosci. Abstr. 9:434
Buspirone	5-HT_{1A} partial agonist	Conflict test	Monkeys	0.01-0.3	iv, 10	o		Wettstein, 1988	Eur. J. Pharmacol. 151:341-344
Buspirone	5-HT_{1A} partial agonist	Conflict test	Squirrel Monkeys (800-1050g)	0.003-0.1	im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337
Buspirone	5-HT_{1A} partial agonist	Conflict test	Squirrel monkeys	0.25-15	im	+		Hartmann and Geller, 1981	Proc. West Pharmac. Soc. 24:179-181
Buspirone	5-HT_{1A} partial agonist	Conflict test	Cynomolgus monkeys (4-7 kg)	0.5-5	im, 60	+		Geller and Hartmann, 1982	J. Clin. Psychiatry 43:25-33
Buspirone	5-HT_{1A} partial agonist	Conflict test	Squirrel monkeys (0.7-0.8 kg)	3-30	po, 30	+		Weissman et al., 1984	Drug Dev. Res. 4:83-93
Buspirone	5-HT_{1A} partial agonist	Conflict test	Pigeons	0.03-10	im	+		Barrett et al., 1984	Fed. Proc. 43: 931
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.03-10	im, 5	+		Barrett et al., 1986	J. Pharmacol. Exp. Ther. 238:1009-1013
Buspirone	5-HT_{1A} partial agonist	Conflict test	Pigeons	0.03-3	im, 0	+		Witkin and Barrett, 1986	Pharmacol. Biochem. Behav. 24:751-756

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons (480-528g)	0.1-5.6	im, 5	+	FR30	Witkin et al., 1987	J. Pharmacol. Exp. Ther. 243:970-977
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.1-10	im, 0	+	FR30	Mansbach et al., 1988	J. Pharmacol. Exp. Ther. 246:114-120
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.1-10	im, 0	+	FR30	Mansbach et al., 1988	J. Pharmacol. Exp. Ther. 246:114-120
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons (500-600g)	0.63	im, 5	+	FR30	Brocco et al., 1990	Behav. Pharmacol. 1:403-418
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.3-5.6		+	FR30	Nader, 1991	Pharmacol. Biochem. Behav. 38:611-616
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.1-3	im, 15	+	FR30	Nanry et al., 1991	Drug Dev. Res. 24:269-276
Buspirone	5-HT_{1A} partial agonist	Conflict test	Pigeons	0.63	im, 5	+	FR30	Colpaert et al., 1992	Drug Dev. Res. 26:21-48
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.03-3	im, 0	+		Barrett and Vanover, 1993	Psychopharmacology 112:1-12
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (1 year)	0.1-3	im, 0	+	VI1/VI3/FR10	Wojnicki and Barrett, 1993	Psychopharmacology 112:26-33
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (1 year)	0.1-3	im, 0	+	VI3/VI1/FR10	Wojnicki and Barrett, 1993	Psychopharmacology 112:26-33
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons (500-650g)	0.63	im, 5	+	FR30:FR30	Kleven and Koek, 1996	J. Pharmacol. Exp. Ther. 276:388-397
Buspirone	5-HT_{1A} partial agonist	Timeout from avoidance procedure	Holtzman specific-pathogen free rats (80-120 day-old)	0.5-2	ip, 15	o	VI	Galizio et al., 1990	Pharmacol. Biochem. Behav. 37:235-238
Buspirone	5-HT_{1A} partial agonist	Timeout from avoidance procedure	Holtzman specific-pathogen free rats (80-120 day-old)	0.3-1	ip, 15	o	VI15	Galizio et al., 1993	Behav. Pharmacol. 4:487-493
Buspirone	5-HT_{1A} partial agonist	Acquisition of fixed interval schedule	Sprague-Dawley rats (300-500g)	0.1	ip, for 60 days (3 times a day)	+	FI60-S	Zhu and McNaughton, 1995	J. Psychopharmacol. 9:326-330

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Conditioned emotional response	Wistar rats (400-500g)	1.25-5	ip, 30	+		Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426
Buspirone	5-HT_{1A} partial agonist	Avoidance test	Rats	1	30	+	Caffeine-pretreated rats	Martin, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 203
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (250-350g)	4-8	ip, 30	-		Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.125-2	sc, 30	-		Moser et al., 1988	Br. J. Pharmacol. 93 (Suppl.):3P
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.25-1	sc, 30	-		Moser, 1989	Psychopharmacology 99:48-53
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	1	sc, for 16 days (x 2)	-		Moser, 1989	Psychopharmacology 99:48-53
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.125-2	sc, 30	-	PCPA pretreatment	Moser, 1989	Psychopharmacology 99:48-53
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	1-2	sc, 30	-	Decreased total open arm entries	Moser, 1989	In: Behavioural Pharmacology of 5-HT, pp. 371-375
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (140-230g)	1		-		Redfern and Williams, 1989	Br. J. Pharmacol. 98 (Suppl.):682P
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats	1-4		-		Kostowski et al., 1990	Psychopharmacology 101:S31
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.015-2	sc, 30	-		Moser et al., 1990	Br. J. Pharmacol. 99:343-349
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (180g)	0.8	sc, 15	-		File and Andrews, 1991	Psychopharmacology 105:578-582
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.1-1	sc, 30	-	Locomotion decreased	Klint, 1991	Behav. Pharmacol. 2:481-489
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Long-Evans rats (320-340g)	1.25	ip, 15	-		Lal et al., 1991	Alcohol 8:467-471
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	PVG rats (180-260g)	0.025-5	ip, 30	-	Locomotion decreased and	Critchley et al., 1992	Psychopharmacology 106:484-490

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							observations during 10-min		
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (345-405g)	0.06, 0.25-4	ip, 30	-		Kostowski et al., 1992	Pharmacol. Toxicol. 71:24-30
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats			-		Onaivi, 1993	Soc. Neurosci. Abstr. 19:755
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (300g)	4-8	ip, 15	-		Dawson et al., 1995	Psychopharmacology 118:316-323
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (250-350g)	0.5-20	ip, 30	o		Pellow and File, 1986	Pharmacol. Biochem. Behav. 24:525-529
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats	0.5-20		o		File et al., 1987	Br. J. Pharmacol. 90:265P
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (300-400g)	2	ip, 40	o		Moulton and Morinan, 1990	Br. J. Pharmacol. 101 (Suppl.):516P
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (151-202g)	2.5-20	po, 60	o		Wada and Fukada, 1991	Psychopharmacology 104:444-450
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	PVG rats (200-260g)	0.05	ip, 30	o	Observations during 10-min	Critchley et al., 1988	Br. J. Pharmacol. 94 (Suppl.):389P
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	SPRD rats (200g)	0.08-1.25	ip, 30	o		Horváth et al., 1992	Acta Physiol. Hung. 79:153-161
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	BALB/cByJ (8-week-old)		ip, 30	o		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (170g)	0.2	sc, 15	o		File and Andrews, 1994	Behav. Pharmacol. 5:99-102
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (170g)	0.2	sc, 15	o	Diazepam pretreatment	File and Andrews, 1994	Behav. Pharmacol. 5:99-102
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats	0.01-2.5	sc	o		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (180-220g)	0.1-1	ip, 30	o	0.1 mA, 2 s	Artaiz et al., 1995	Psychopharmacology 117:137-148

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	o		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (225-250g)	0.5-1	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (180-220g)	0.0025	hippocampus, 20	+		Kostowski et al., 1989	Psychiatr. Pol. 23:117-124
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	8-2048 nmol	sc, 10	+		Söderpalm et al., 1989	Pharmacol. Biochem. Behav. 32:259-265
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (150-200g)	2	30	+		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	DBA/2 mice (12-14 week-old)	1-10	ip, 15	+		Lee and Rodgers, 1991	Behav. Pharmacol. 2:491-496
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (345-405g)	0.125	ip, 30	+		Kostowski et al., 1992	Pharmacol. Toxicol. 71:24-30
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	CD rats (160-200g)	0.01-3	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	DBA/2 mice (10-14 week-old)	1.25-5	ip, 20	+	Additional measures of anxiety	Cole and Rodgers, 1994	Psychopharmacology 114:288-296
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	DBA/2 mice (10-14 week-old)	1.25-5	ip, for 15 days (o.d.)	+	Additional measures of anxiety	Cole and Rodgers, 1994	Psychopharmacology 114:288-296
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	10	ip, for 5 weeks (b.i.d.)	+		Söderpalm et al., 1993	Eur. J. Pharmacol. 239:69-73
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (213-263g)	1	ip, 20	+		Zhang and Luo, 1993	Chung. Kuo. Yao. Li. Hsueh. Pao. 14:354-357
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (150-200g)	1	30	+		Korkmaz et al., 1994	Neurosci. Res. Comm. 14:125-132
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Wistar rats (150-200g)	2	30	o	Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Buspirone	5-HT_{1A} partial agonist	Light/dark test	C57BL/6J mice (18-20g)	0.1-1	sc, 15	o	Asymmetric compartments	Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Rats	0.1	sc, 15	+	Weak effect	Pich and Samanin,	Psychopharmacology 89:125-130

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1986	
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Mice (25-35g)	0.06-4	ip, 30	+	Asymmetric compartments	Costall et al., 1988	Rev. Neurosci. 2:41-65
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Mice	3.16-10	ip	+		Young and Johnson, 1988	Soc. Neurosci. Abstr. 14:207
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Mice	10-56.2	po	+		Young and Johnson, 1988	Soc. Neurosci. Abstr. 14:207
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female T/O mice (22-30g)	1	sc, 30	+	Asymmetric compartments	Bill et al., 1989	Br. J. Pharmacol. 98 (Suppl.):679P
Buspirone	5-HT_{1A} partial agonist	Light/dark test	CD-COBS rats (200-300g)	0.1	sc, 15	+	Transitions only	Carli et al., 1989	Br. J. Pharmacol. 96:829-836
Buspirone	5-HT_{1A} partial agonist	Light/dark test	CD-COBS rats (200-300g)	0.005	median raphe, 10	+	Transitions only	Carli et al., 1989	Br. J. Pharmacol. 96:829-836
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Mice C57Bl/6J (18-20g)	0.1-10	sc, 20	+		Kilfoil et al., 1989	Neuropharmacology 28:901-905
Buspirone	5-HT_{1A} partial agonist	Light/dark test	BKW mice (20-30g)	0.25-1	ip, 45	+	Asymmetric compartments and rears	Costall et al., 1989	Br. J. Pharmacol. 96:325-332
Buspirone	5-HT_{1A} partial agonist	Light/dark test	ICR mice (20-35g)	1-5	ip, 30	+	Transitions and asymmetric compartments	Onaivi and Martin, 1989	Prog. Neuropsychopharmacol. Biol. Psychiatry 13:963-976
Buspirone	5-HT_{1A} partial agonist	Light/dark test	BKW mice (30-35g)	0.125-4	ip, 45	+	Asymmetric compartments	Barnes et al., 1991	Pharmacol. Biochem. Behav. 40:89-96
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Mice	0.25-2	ip, for 7 days (o.d.)	+	Asymmetric compartments	Costall and Naylor, 1991	Therapie 46:437-444
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female ICR-DUB mice (17-35g)	3.16-17.8	ip, 30	+	Asymmetric compartments	Young and Johnson, 1991	Eur. J. Pharmacol. 201:151-155
Buspirone	5-HT_{1A} partial agonist	Light/dark test	BKW mice (25-30g)	0.25-2	ip, 40	+	Asymmetric compartments	Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	MED=1	sc, 30	+		Bill and Fletcher,	Br. J. Pharmacol. 111:151P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1994	
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss mice (20-25g)	0.25-2	ip, 45	+	Asymmetric compartments	Artaiz et al., 1995	Psychopharmacology 117:137-148
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Mice	30	po	+	Locomotion decreased	Inagawa et al., 1995	Soc. Neurosci. Abstr. 21:978
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Lundbeck mice strain (30-35g)	0.024-0.12 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Buspirone	5-HT_{1A} partial agonist	Light/dark test	ddY mice (4-week-old)	0.25-1	ip, 30	+	Modified test	Shimada et al., 1995	Gen. Pharmacol. 26:205-210
Buspirone	5-HT_{1A} partial agonist	Holeboard	Wistar rats (150-200g)	2	30	+		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats	2.5	ip, 15	-		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Buspirone	5-HT_{1A} partial agonist	Social interaction	Rats			o	HLU	File, 1984	In: Drugs in Psychiatry, pp. 13-30
Buspirone	5-HT_{1A} partial agonist	Social interaction	Rats	0.25-2.5	30	o		File, 1984	In: Drugs in Psychiatry, pp. 13-30
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (180-200g)	5-10	po, 30	o	Familiar congener	Guy and Gardner, 1985	Neuropsychobiology 13:194-200
Buspirone	5-HT_{1A} partial agonist	Social interaction	DAP mice (22-30g)	0.3-10	ip, 30	o	Isolated mice	Olivier et al., 1989	Psychopharmacology 97:154-156
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (225-275g)	0.125-2	ip, 45	o	HLU	Barnes et al., 1991	Pharmacol. Biochem. Behav. 40:89-96
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (180g)	0.2-0.8	sc, 15	o		File and Andrews, 1991	Psychopharmacology 105:578-582
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-280g)	0.00004-0.0002	dorsal raphe, 5	o		Higgins et al., 1992	Psychopharmacology 106:261-267
Buspirone	5-HT_{1A} partial agonist	Social interaction	Rats	0.2	sc, 15	o		Andrews and File, 1993	Psychopharmacology 112:21-25

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (180-200g)	5-20	po, 30	+	Familiar congener	Guy and Gardner, 1985	Neuropsychobiology 13:194-200
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-250g)	0.0004-0.002	dorsal raphe, 5	+	HLU	Higgins et al., 1987	Br. J. Pharmacol. 90:658P
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (210-270g)	0.004-0.01	dorsal raphe, 5	+	LLF	Higgins et al., 1988	Neuropharmacology 27:993-1001
Buspirone	5-HT_{1A} partial agonist	Social interaction	Mice	10	sc, 30	+		Schreur, 1988	Behav. Neurosci. 102:163-172
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (225-250g)	5-10	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
Buspirone	5-HT_{1A} partial agonist	Social interaction	Female and male DBA/2 mice (24-36g)	2.3-2.6	po, for 5-10 days (o.d.)	+	HLU	Cutler, 1991	Neuropharmacology 30:299-306
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats	1.25	ip, 15	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (250-300g)	1-2	ip, 40	+	HLU	Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
Buspirone	5-HT_{1A} partial agonist	Social interaction	CD1 mice (40-44g)	3.4	po, for 12-14 days	+	HLU and LLF	Gao and Cutler, 1992	Neuropharmacology 31:743-748
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-280g)	0.00004-0.0002	dorsal raphe, 5	+	HLU	Higgins et al., 1992	Psychopharmacology 106:261-267
Buspirone	5-HT_{1A} partial agonist	Social interaction	CD1 mice (35-45g)	1-5	ip, 30	+	Home cage	Gao and Cutler, 1993	Neuropharmacology 32:265-272
Buspirone	5-HT_{1A} partial agonist	Social interaction	CD1 mice (35-45g)	1-5	ip, 30	+	Neutral cage	Gao and Cutler, 1993	Neuropharmacology 32:265-272
Buspirone	5-HT_{1A} partial agonist	Social interaction	Female CD1 mice (30-35g)	12.8 mg/l	drinking fluid for 6-8 days	+	Oestrous mice	Gao and Cutler, 1993	Neuropharmacology 32:969-975
Buspirone	5-HT_{1A} partial agonist	Social interaction	Female CD1 mice (30-35g)	12.8 mg/l	drinking fluid for 6-8 days	+	Dioestrous mice	Gao and Cutler, 1993	Neuropharmacology 32:969-975
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (213-263g)	1	ip, 15	+		Zhang and Luo, 1993	Chung. Kuo. Yao. Li. Hsueh. Pao. 14:354-357
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (170g)	0.2	sc, 15	+		File and Andrews,	Behav. Pharmacol. 5:99-102

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1994	
Buspirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (170g)	0.2	sc, 15	+	Diazepam pretreatment	File and Andrews, 1994	Behav. Pharmacol. 5:99-102
Buspirone	5-HT_{1A} partial agonist	Social interaction	CD1 mice	1-5	ip, 30	+	Neutral cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Buspirone	5-HT_{1A} partial agonist	Social interaction	CD1 mice	1-5	ip, 30	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Buspirone	5-HT_{1A} partial agonist	Social interaction	CD1 mice	1	drinking fluid for 12-15 days	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Buspirone	5-HT_{1A} partial agonist	Open-field	Sprague-Dawley rats (330-420g)	0.04-10	ip, 20	-	15W	Panickar and McNaughton, 1991	J. Psychopharmacol. 5:72-76
Buspirone	5-HT_{1A} partial agonist	Open-field	Rats (180-220g)	0.1-5 µg	nucleus accumbens, 5	-		Plaznik et al., 1991	Pharmacol. Biochem. Behav. 39:43-48
Buspirone	5-HT_{1A} partial agonist	Open-field	CD-COBS rats (200-300g)	0.1-1	sc, 15	o	Non-stressed rats	Carli et al., 1989	Neuropharmacology 28:471-476
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (180-220g)	0.0001-0.005	nucleus accumbens, 5	o		Stefanski et al., 1993	Neuropharmacology 32:977-985
Buspirone	5-HT_{1A} partial agonist	Open-field	CD-COBS rats (200-300g)	0.1-1	sc, 15	+	Stressed rats	Carli et al., 1989	Neuropharmacology 28:471-476
Buspirone	5-HT_{1A} partial agonist	Open-field	Rats		hippocampus	+		Plaznik et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 190
Buspirone	5-HT_{1A} partial agonist	Open-field	SPRD rats (200g)	0.62	ip, 30	+		Horváth et al., 1992	Acta Physiol. Hung. 79:153-161
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (180-220g)	0.3-2.5	ip, 30	+	65 dB noise	Stefanski et al., 1992	Neuropharmacology 31:1251-1258

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Open-field	Rats	0.62-2.5		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Buspirone	5-HT_{1A} partial agonist	Open-field	Female and male Wistar rats (180-day-old)	1.25-2.5	ip, 30	+	Sedation?	Hughes, 1993	Life Sci. 53:1217-1225
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (180-220g)	0.0025-0.005	hippocampus, 5	+		Stefanski et al., 1993	Neuropharmacology 32:977-985
Buspirone	5-HT_{1A} partial agonist	Staircase test	CD1 mice (22-25g)	8-128	po, 30	o		Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
Buspirone	5-HT_{1A} partial agonist	Staircase test	Rats	10-20	po	+		Boaventura et al., 1986	Neurosci. Lett. 26 (Suppl.):S278
Buspirone	5-HT_{1A} partial agonist	Defense test battery	Female and male Rattus rattus (100-250g)	10-20	ip, 30	+		Blanchard et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 145-147
Buspirone	5-HT_{1A} partial agonist	Reaction towards Tawny Owl call	Mice			o		Hendrie and Neill, 1992	J. Psychopharmacol. 6:125
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50>30	sc, 210	o	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	1-3	30	+	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	1-3	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	1-10	ip, 15	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats			+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	3-6	30	+		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11-day-old)	0.3-3	sc, 30	+		Winslow and Insel, 1991	Prog. Neuropsychopharmacol. Biol. Psychiatry 15:745-757
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	0.03-0.3	sc	+		Winslow and Insel, 1991	Prog. Neuropsychopharmacol. Biol. Psychiatry 15:745-757
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=2	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=7.5	po, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Adult rats	LED=1	ip	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.38	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.588	ip, 15	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.00006	dorsal raphe, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0219	hippocampus, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0129	amygdala, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (11-day-old)	0.3-3	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=7.1	po, 30	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=0.36	sc, 30	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=10.1	po, 120	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=5.3	sc, 120	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=15.4	po, 210	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (180-280g)	1-3	ip, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (7-12-day-old)	0.1-3	ip	+		Salter et al., 1995	Neuropharmacology 34:217-227
Buspirone	5-HT_{1A} partial agonist	Face-to-face test	CF-1 mice (18-29g)	10	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Center test (thigmotaxis)	Sprague-Dawley rats (170-190g)	10	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
Buspirone	5-HT_{1A} partial agonist	Center test (thigmotaxis)	Swiss mice (20-25g)	7.5-15	sc, 20	+		Simon et al., 1994	Behav. Brain Res. 61:59-64
Buspirone	5-HT_{1A} partial agonist	Social competition	Wistar rats (120g)	0.6-1.25	ip, 30	+		Joly and Sanger, 1991	Behav. Pharmacol. 2:205-213
Buspirone	5-HT_{1A} partial agonist	Social competition	Rats	0.3-5		+		Sanger and Joly, 1992	J. Psychopharmacol. 6:141
Buspirone	5-HT_{1A} partial agonist	Marble burying	Female MF1 mice (23-35g)	1-20	ip, 30	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Buspirone	5-HT_{1A} partial agonist	Mirrored chamber	BALB/cByJ (8-week-old)		ip, 30	+		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (250-280g)	0.63-40	sc, 60	o		Meert and Colpaert, 1986	Psychopharmacology 88:445-450
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (3-week-old)	2.5-5	ip, 30	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (7-week-old)	2.5-5	ip, 30	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (11-week-old)	2.5-5	ip, 30	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (21-week-old)	2.5-5	ip, 30	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Sprague-Dawley rats (250-350g)	0.05-1	sc	+		Treit and Fundytus, 1988	Pharmacol. Biochem. Behav. 30:1071-1075
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats	5	ip, 30	+		Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats	5	ip, 30	+	+5,7-DHT	Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (250-350g)	5	ip, 30	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1994	Behav. Pharmacol. 5:42-51
Buspirone	5-HT_{1A} partial agonist	Shock-induced fighting	Mice	ED50=42	po, 60	+		Abe et al., 1995	Soc. Neurosci. Abstr. 21:2106
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Long-Evans rats (325-500g)	8-64	ip, 30	o		Craft et al., 1988	Pharmacol. Biochem. Behav. 30:775-780
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Wistar rats (200-250g)	5-20	po, 10	-		Hijzen et al., 1991	Pharmacol. Biochem. Behav. 38:769-773
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Rats	0.6		+		Davis, 1988	Psychopharmacology 95:151-156

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	5-10	sc, 0	+		Davis et al., 1988	Psychopharmacology 94:14-20
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	0.6-5	sc, 0	+		Kehne et al., 1988	Psychopharmacology 94:8-13
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats	1.25-5	sc, 10	+		Mansbach and Geyer, 1988	Eur. J. Pharmacol. 156:375-383
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (330-400g)	5		+		Melia and Davis, 1991	Physiol. Behav. 49:603-611
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (330-400g)	5		+	Lesion of the septum	Melia and Davis, 1991	Physiol. Behav. 49:603-611
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Wistar rats (200g)	5		+		Munonyedi et al., 1991	Biol. Psychiatry 29:683-686
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	CD rats (250-450g)	1-5.6	ip, 30	+	0.25 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	CD rats (250-450g)	1-5.6	ip, 30	+	0.5 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254
Buspirone	5-HT_{1A} partial agonist	Agonistic behavior	NMRI mice	3-30	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	Swiss mice (25-30g)	10	ip, 45	+		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	Mice	10	po	+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	NMRI mice (12-14g)			+		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	NMRI mice	ED50=21.6	po	+		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	10-20	po, 60	+		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Buspirone	5-HT_{1A} partial agonist	Stress-induced gastric lesion	ICR mice (7-8-week-old)	2.5-5	po, 60	o		Ogawa et al., 1993	Jpn. J. Pharmacol. 61:115-121
Buspirone	5-HT_{1A} partial agonist	Stress-induced gastric lesion	ICR mice (7-8-week-old)	2-10	po, for 3 days	+		Ogawa et al., 1993	Jpn. J. Pharmacol. 61:115-121
Buspirone	5-HT_{1A} partial agonist	Avoidance test	Sprague-Dawley rats	0.5-7.5	ip, 30	+	Auditive stimulus	Geller and Hartmann, 1982	J. Clin. Psychiatry 43:25-33
Buspirone	5-HT_{1A} partial agonist	Conditioned avoidance	Wistar rats	ED50=3.64	ip	+		Allen et al., 1974	Psychopharmacologia 34:1-10
Buspirone	5-HT_{1A} partial agonist	Conditioned avoidance	Wistar rats	ED50=18.2	po	+		Allen et al., 1974	Psychopharmacologia 34:1-10
Buspirone	5-HT_{1A} partial agonist	Conditioned avoidance	Sprague-Dawley rats (200-300g)	ED50=69	po, 30	+		Shimizu et al., 1987	Jpn. J. Pharmacol. 45:493-500
Buspirone	5-HT_{1A} partial agonist	Conditioned avoidance	Wistar rats (220-240g)	5-10	ip, 30	+		Sanger et al., 1989	Behav. Pharmacol. 1:153-160
Buspirone	5-HT_{1A} partial	Passive-	Wistar rats (220-240g)	5-10	ip, 30	+		Sanger et	Behav. Pharmacol. 1:153-160

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	agonist	avoidance test						al., 1989	
Buspirone	5-HT_{1A} partial agonist	Passive-avoidance test	Wistar rats (220-240g)	5	ip, 30	+		Sanger and Joly, 1989	Behav. Pharmacol. 1:153-160
Buspirone	5-HT_{1A} partial agonist	Passive-avoidance test	Sprague-Dawley rats (200-250g)	0.01-1	sc, 30	+		Klint, 1991	Behav. Pharmacol. 2:481-489
Buspirone	5-HT_{1A} partial agonist	Passive-avoidance test	Wistar rats (7-8-week-old)	25	po, 60	+		Ogawa et al., 1993	Jpn. J. Pharmacol. 61:115-121
Buspirone	5-HT_{1A} partial agonist	Passive-avoidance test	Sprague-Dawley rats (1200g)	0.1-1	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
Buspirone	5-HT_{1A} partial agonist	Conditioned place aversion	Long-Evans rats (8-week-old)	0.5-5	ip, 60	+		Ervin et al., 1987	Drug. Dev. Res. 11:87-95
Buspirone	5-HT_{1A} partial agonist	Conditioned place aversion	Long-Evans rats (8-week-old)	1-10	po, 60	+		Ervin et al., 1987	Drug. Dev. Res. 11:87-95
Buspirone	5-HT_{1A} partial agonist	Taste aversion conflict test	Sprague-Dawley rats (200-250g)	0.3	sc, 15	+		Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
Buspirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	Long-Evans rats (300-325g)	4	ip, 60	o		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Buspirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	Long-Evans rats (300-325g)	4	for 21 days (o.d.)	+		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Buspirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	Sprague-Dawley rats (270-320g)	0.5-2.5	sc, 30	+		Fletcher and Davies, 1990	Psychopharmacology 102:301-308
Buspirone	5-HT_{1A} partial agonist	Human threat	Marmoset Callithrix jacchus (350-440g)	0.05-1	sc, 45	+		Barnes et al., 1991	Pharmacol. Biochem. Behav. 40:89-96
Buspirone	5-HT_{1A} partial agonist	Human threat	Marmoset Callithrix jacchus (350-440g)	0.1-1	sc, 45	+		Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
Buspirone	5-HT_{1A} partial agonist	Cork gnawing	Long-Evans rats (435-640g)	8-32	po, 30	+		Pollard and Howard,	Drug Dev. Res. 22:179-187

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1991	
Buspirone	5-HT_{1A} partial agonist	Cork gnawing	Ovariectomized Long-Evans CD (300g)	3	po, 30	+		Pollard et al., 1992	Eur. J. Pharmacol. 221:297-305
Buspirone	5-HT_{1A} partial agonist	Straw suspension	Sprague-Dawley rats (140-170g)	0.5-5	ip, 30	+		Nishimura et al., 1993	Pharmacol. Biochem. Behav. 46:647-651
Buspirone	5-HT_{1A} partial agonist	Stress-induced analgesia	ddY mice (18-20g)	1-10	ip, 30	+		Tokuyama et al., 1993	Jpn. J. Pharmacol. 61:237-242
Buspirone	5-HT_{1A} partial agonist	Stress-induced colonic motor alterations	Wistar rats (250-300g)	1	ip, 30	+		Gué et al., 1993	Eur. J. Pharmacol. 233:193-199
Buspirone	5-HT_{1A} partial agonist	Four-plate test	CF-1 mice (18-29g)	10	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
Buspirone	5-HT_{1A} partial agonist	Hot-plate	Wistar rats (200-250g)	2.5-10	ip, 30	+		Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
Buspirone	5-HT_{1A} partial agonist	Successive negative contrast	Female Wistar rats (180-235g)	0.25-1	ip, 30	o		Torres et al., 1995	Eur. J. Pharmacol. 280:277-284
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	MED=0.38	sc, 30	+	Inescapable footshock of 1 mA	Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-175g)	MED>12	sc, 30	o	0.6 mA	Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	10-30	po, 30	+	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	20	po, 2h	+	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	20	po, 4h	o	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	10	po, for 14 days	+	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (350-500g)	0.37	ip, 20	+	Rats received metyrapone+corticosterone; FI60s	McNaughton et al., 1996	Pharmacol. Biochem. Behav. 54:51-56
Buspirone	5-HT_{1A} partial agonist	Operant conditioning	Sprague-Dawley rats (300-500g)	0.1	ip, for 60 days (3 times a day)	+	FI60s	Zhu and McNaughton, 1995	J. Psychopharmacol. 9:326-330
Buspirone	5-HT_{1A} partial agonist	Stress-induced freezing	Sprague-Dawley rats (350g)	5	30	+	Rats were defeated by conspecific 24h before	Hotsenpiller and Williams, 1996	Psychobiology 24:118-126
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-250g)	10-40	po, 30	+	40 h water deprivation	Abe et al., 1996	J. Pharmacol. Exp. Ther. 278:898-905
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (150-250g)	10-20	po, 30	+	HLU	Abe et al., 1996	J. Pharmacol. Exp. Ther. 278:898-905
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	5	ip, 30	+	Electric shock of 0.3 mA	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	2.5-10	ip, 30	o		López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	5	ip, 30	+	Electric shock of 0.3 mA+PCPA treatment	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	10	ip, 30	+	Electric shock of 0.3 mA+5,7-DHT lesion	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=0.4	sc, 30	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=7.1	po, 30	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=5.3	sc, 120	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=10.1	po, 120	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 210	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=15.4	po, 210	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Buspirone	5-HT_{1A} partial agonist	Defensive withdrawal	CD rats (250-300g)	0.1-30	po, 40	o		Weidemann et al., 1996	Soc. Neurosci. Abstr. 22:1544
Buspirone	5-HT_{1A} partial agonist	Isolation-induced aggression	CDY mice (18-22g)	ED50=1.63	ip, 20	+		Chamberlain, 1996	Soc. Neurosci. Abstr. 22:1584
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Rats	ED50=0.2	ip	+		Kallman et al., 1996	Soc. Neurosci. Abstr. 22:1036
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats	ED50=0.6	ip	+		Kallman et al., 1996	Soc. Neurosci. Abstr. 22:1036
Buspirone	5-HT_{1A} partial agonist	Mirrored chamber	C57/BL/6J mice	5-10	ip, 30	+		Seale et al., 1996	Neuroreport 7:1803-1808
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	C57/BL/6J mice	0.1-5	ip, 30	o		Seale et al., 1996	Neuroreport 7:1803-1808

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	1	im, 15	+	1.5 to 5.5 mA, 250 msec	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	1	im, 15	+	1.5 to 5.5 mA, 250 msec	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	1	im, 15	+	1.5 to 5.5 mA, 250 msec	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Buspirone	5-HT_{1A} partial agonist	Cork gnawing	Ovariectomized female Long-Evans CD	3.13	po, 60	+		Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Buspirone	5-HT_{1A} partial agonist	Cork gnawing	Ovariectomized female Long-Evans CD	3.13	po, 60	+		Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Mice	MED=10	ip	+		Comoy et al., 1996	J. Med. Chem. 39:4285-4298
Buspirone	5-HT_{1A} partial agonist	Distress vocalizations	Guinea pig pups (5 day-old)	0.3-3	ip	o		Molewijk et al., 1996	Psychopharmacology 128:31-38
Buspirone	5-HT_{1A} partial agonist	Social interaction	CD1 mice (23-45g)	0.75-10	ip, for 21 days (o.d.)	o		Cutler et al., 1997	Pharmacol. Biochem. Behav. 56:287-293
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	CD1 mice (23-45g)	0.75-3	ip, for 21 days (o.d.)	o		Rodgers et al., 1997	Pharmacol. Biochem. Behav. 57:127-136
Buspirone	5-HT_{1A} partial agonist	Conditioned emotional response	Lister hooded rats (208g)	0.1-1	sc, 30	o		Stanhope and Dourish, 1996	Psychopharmacology 128:293-303.
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	0.1-10	im, 15	+	FR30/FR30. 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	0.32-10	im, 15	o	FR30/FR30. 3.2-5.6 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	0.32-1	im, 15	+	VI30/FR5, 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons	0.32	im, 15	o	VI30/FR20. 1.7-3.8 mA shocks	Benvenga and	Behav. Pharmacol. 7:540-550

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								Leander, 1996	
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	5	po, 30	+	Deprivation period of 24 h	Akunne et al., 1997	Neuropharmacology 36:51-62
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss mice (10-week-old)	4	ip, 30	+		Belzung and Ågmo, 1997	Eur. J. Pharmacol. 323:133-136
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Wistar rats (200-250g)	0.0001 and 0.1	sc, 30	+	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Mice	0.03-3	sc	+		Helton et al., 1995	Soc. Neurosci. Abstr. 21:1367
Buspirone	5-HT_{1A} partial agonist	Elevated zero-maze	Female Wistar rats (200-250g)	0.04-5	sc, 30	o		Matto et al., 1997	Neuropharmacology 36:389-396
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar mice (25-30g)	5	ip, 30	+		Bhattachary a and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (300 g)	1-4	sc, 15	-		Collinson and Dawson, 1997	Psychopharmacology 132:35-43
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.1	sc, 30	+		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (500-600g)	0.63	im, 5	+		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (220-240g)	0.002-40	sc, 30	o		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizati ons	Wistar rats (220-240g)	0.02-2.5	sc, 30	+		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
Buspirone	5-HT_{1A} partial agonist	Isolation-induced aggression	CD1 mice (20-25g)	0.16-10	sc, 30	+		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (31-42g)	3	ip, 20	+		Cao and Rodgers, 1997	Neuropharmacology 36:1089-1097

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Female and male wild Voles (Microtus socialis)	4	ip, 30	+		Hendrie et al., 1997	Pharmacol. Biochem. Behav. 58:573-576
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female and male wild Voles (Microtus socialis)	1	ip, 30	+		Hendrie et al., 1997	Pharmacol. Biochem. Behav. 58:573-576
Buspirone	5-HT_{1A} partial agonist	Light-enhanced startle	Sprague-Dawley rats (350-400g)	5	sc, 0	+	Startle responses were elicited by 50-msec white noise burts (90-105 dB)	Walker and Davis, 1997	Biol. Psychiatry 42:461-471
Buspirone	5-HT_{1A} partial agonist	Canopy stretched attend posture test	TO mice (25-35g)	1-3	sc, 30	+		Grewal et al., 1997	Psychopharmacology 133:29-38
Buspirone	5-HT_{1A} partial agonist	Light/dark test	BKW mice (30-35g)	1-2	ip, 40	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (250-300g)	5	ip, 20	+	Animals received an electric shock of 0.3 mA	Fernández-Guasti and Picazo, 1997	Behav. Brain Res. 88:213-218
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar female proestrus rats (250-300g)	5	ip, 20	+	Animals received an electric shock of 0.3 mA	Fernández-Guasti and Picazo, 1997	Behav. Brain Res. 88:213-218
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar female metoestrus rats (250-300g)	5	ip, 20	+	Animals received an electric shock of 0.3 mA	Fernández-Guasti and Picazo, 1997	Behav. Brain Res. 88:213-218
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar female delayed anovulatory rats (250-300g)	5	ip, 20	+	Animals received an electric shock of 0.3 mA	Fernández-Guasti and Picazo, 1997	Behav. Brain Res. 88:213-218
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar female acyclic rats (250-300g)	5	ip, 20	+	Animals received an electric shock of 0.3 mA	Fernández-Guasti and Picazo, 1997	Behav. Brain Res. 88:213-218

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Rats	ED50=0.6	sc	+		Kallman et al., 1997	Soc. Neurosci. Abstr. 23:130
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats	ED50=0.2	sc	+		Kallman et al., 1997	Soc. Neurosci. Abstr. 23:130
Buspirone	5-HT_{1A} partial agonist	Social interaction	Rats	MED=2.5	sc, 30	+	Rats were tested in a HLU condition	Brocco et al., 1997	Soc. Neurosci. Abstr. 23:1215
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	MED=0.63	sc, 30	+	Animals received an electric shock of 0.3 mA, 0.5 ms	Brocco et al., 1997	Soc. Neurosci. Abstr. 23:1215
Buspirone	5-HT_{1A} partial agonist	Distress vocalizations	Chicks			-		Watson et al., 1997	Soc. Neurosci. Abstr. 23:1352
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-230g)	10		+	Animals received an electric shock of 0.7 mA, 2 s	Naranjo-Rodríguez et al., 1997	Soc. Neurosci. Abstr. 23:2053
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Pinealectomized Wistar rats (180-230g)	10		+	Animals received an electric shock of 0.7 mA, 2 s	Naranjo-Rodríguez et al., 1997	Soc. Neurosci. Abstr. 23:2053
Buspirone	5-HT_{1A} partial agonist	Marble burying	NMRI mice	ED50=60.9 µmol/kg	po, 60	+		Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats		po	+		Hirotsu et al., 1991	Soc. Neurosci. Abstr. 17:1602
Buspirone	5-HT_{1A} partial agonist	Social interaction	Rats		po	+		Hirotsu et al., 1991	Soc. Neurosci. Abstr. 17:1602
Buspirone	5-HT_{1A} partial agonist	Open-field	Sprague-Dawley rats (350-650g)	5	ip, 5 daily injections	+	Animals were tested on 5 consecutive days	Angrini et al., 1998	Pharmacol. Biochem. Behav. 59:387-397
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss mice (20-25g)	0.25-0.5	ip, 30	+	Animals were exposed twice to the test and injected before	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							the second trial		
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Wistar rats (180-220g)	0.25-0.5	ip, 20	+		Bilkei-Gorzó et al., 1998	Psychopharmacology 136:291-298
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (285-300g)	5	ip, 30	+		Fernández-Guasti and López-Rubalcava, 1998	Pharmacol. Biochem. Behav. 60:27-32
Buspirone	5-HT_{1A} partial agonist	Mirrored chamber	C57BL/6J mice (7-week-old)	0.32-1	ip, 30	+		Garrett et al., 1998	Behav. Genet. 28:125-136
Buspirone	5-HT_{1A} partial agonist	Mirrored chamber	A/J mice (7-week-old)	0.1-1	ip, 30	+		Garrett et al., 1998	Behav. Genet. 28:125-136
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	NMRI mice (25-35g)	4	ip, 30	+		Pokk and Zharkovsky, 1998	J. Physiol. Pharmacol. 49:175-186
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	NMRI mice (25-35g)	1-4	ip, 30	o	Animals were stress by small platform exposure	Pokk and Zharkovsky, 1998	J. Physiol. Pharmacol. 49:175-186
Buspirone	5-HT_{1A} partial agonist	Holeboard	NMRI mice (25-35g)	2-4	ip, 30	+		Pokk and Zharkovsky, 1998	J. Physiol. Pharmacol. 49:175-186
Buspirone	5-HT_{1A} partial agonist	Holeboard	NMRI mice (25-35g)	1-4	ip, 30	o	Animals were stress by small platform exposure	Pokk and Zharkovsky, 1998	J. Physiol. Pharmacol. 49:175-186
Buspirone	5-HT_{1A} partial agonist	Stress-induced fighting behavior	ddY mice (17-28g)	100	po, 60	+	Animals received a footshock (240 V AC) for 1 min	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Buspirone	5-HT_{1A} partial agonist	Stress-induced fighting behavior	ddY mice (17-28g)	ED50=160	po, 120	+	Animals received a footshock (240 V AC) for 1 min	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-250g)	20	po, 60	+	Animals received footshocks (240	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							V AC) for 2 s		
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-250g)	20	po, 120	o	Animals received footshocks (240 V AC) for 2 s	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Buspirone	5-HT_{1A} partial agonist	Marble burying	ICR mice (25-35g)	80-160	po, 60	+		Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Buspirone	5-HT_{1A} partial agonist	Stress-induced gastric lesion	ICR mice (7-8-week-old)	1-5	po, 30	+	Footshocks (from 0.6 to 1 mA/10 s) for 3 h, during 3 days	Hara et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S207
Buspirone	5-HT_{1A} partial agonist	Stress-induced gastric lesion	ICR mice (7-8-week-old)	1-5	po, for 3 days (o.d.)	o	Footshocks (from 0.6 to 1 mA/10 s) for 3 h, during 3 days	Hara et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S207
Buspirone	5-HT_{1A} partial agonist	Marble burying	ICR mice (20-30g)	30-60	po, 60	+		Ichimaru et al., 1998	Jpn. J. Pharmacol. 68:65-70
Buspirone	5-HT_{1A} partial agonist	Marble burying	ICR mice (20-30g)	30-60	po, for 14 days (o.d.)	o		Ichimaru et al., 1998	Jpn. J. Pharmacol. 68:65-70
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Charles Foster rats (180-220g)	2.5	ip, 15	+		Bhattachary a et al., 1998	Biog. Amines 14:217-237
Buspirone	5-HT_{1A} partial agonist	Conflict test	Wistar rats (400-500g)	0.62-2.5	ip, 30	o	VI30s for food, VI10s for shock	Griebel et al., 1998	Psychopharmacology 138:55-66
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-200g)	2.5	ip, 30	+	0.3 mA shock every 20 licks	Griebel et al., 1998	Psychopharmacology 138:55-66
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (180-230g)	1	ip, 30	+	Weak effects	Griebel et al., 1998	Psychopharmacology 138:55-66
Buspirone	5-HT_{1A} partial agonist	Light/dark test	BALB/c mice (7-week-old)	1.2-15	ip, 30	o		Griebel et al., 1998	Psychopharmacology 138:55-66
Buspirone	5-HT_{1A} partial agonist	Free-exploration test	BALB/c mice (7-week-old)	1.25-5	ip, 30	o		Griebel et al., 1998	Psychopharmacology 138:55-66
Buspirone	5-HT_{1A} partial agonist	Mouse defense test	Swiss mice (10-week-old)	1.25-5	ip, 30	+	Defensive theat and attack reactions were	Griebel et al., 1998	Psychopharmacology 138:55-66

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		battery					decreased		
Buspirone	5-HT_{1A} partial agonist	PTZ-induced anxiety syndrome	Rhesus mokeys (*Macaca mulatta*) (4-6 kg)	10	po, , 0	+		Palit et al., 1998	Eur. Neuropsychopharmacol. 8:195-201
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Rats	0.1-0.3	po	+	Weak effects	Rostock et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S79
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	0.1-0.3	po	+	Weak effects	Rostock et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S79
Buspirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (500-650g)	1	im, 5	+		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (300g)	3	ip	+	Rats received a sucrose solution and were non-water deprived	Robledo et al., 1998	Soc. Neurosci. Abstr. 24:1931
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (350-375g)	1	sc, 30	+	Unpunished responding was decreased	Cervo et al., 1998	Soc. Neurosci. Abstr. 24:1364
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=7	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=0.4	sc, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Buspirone	5-HT_{1A} partial agonist	Conflict test	Adult Columbia libia pigeons	0.3	im, 0	+	Low shock intensity (ie punished rate was 10% of unpunished rate)	Castejón and Cubeddu, 1998	Pharmacol. Biochem. Behav. 61:451-457
Buspirone	5-HT_{1A} partial agonist	Conflict test	Adult Columbia libia pigeons	0.3	im, 0	o	High shock intensity (ie punished rate was 5% of unpunished rate)	Castejón and Cubeddu, 1998	Pharmacol. Biochem. Behav. 61:451-457

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Long-Evans rats (300-450g)	0.1	sc, 15	+		Dringenberg et al., 1998	Behav. Brain Res. 96:161-172
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Long-Evans rats (300-450g)	0.1	sc, 15	o	Testing was performed in amygdala-lesioned rats	Dringenberg et al., 1998	Behav. Brain Res. 96:161-172
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Long-Evans rats (300-450g)	0.1	sc, 15	o	Testing was performed in hippocampus-lesioned rats	Dringenberg et al., 1998	Behav. Brain Res. 96:161-172
Buspirone	5-HT_{1A} partial agonist	Food carrying test	Long-Evans rats (300-450g)	0.5-1.5	sc, 15	+		Dringenberg et al., 1998	Behav. Brain Res. 96:161-172
Buspirone	5-HT_{1A} partial agonist	Food carrying test	Long-Evans rats (300-450g)	0.5-1.5	sc, 15	+	Testing was performed in amygdala-lesioned rats	Dringenberg et al., 1998	Behav. Brain Res. 96:161-172
Buspirone	5-HT_{1A} partial agonist	Food carrying test	Long-Evans rats (300-450g)	0.5-1.5	sc, 15	+	Testing was performed in hippocampus-lesioned rats	Dringenberg et al., 1998	Behav. Brain Res. 96:161-172
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (220-250g)	0.62-2.5	ip, 30	+	Shock of 0.5 mA	Dereń-Wesołek et al., 1998	J. Psychopharmacol. 12:380-384
Buspirone	5-HT_{1A} partial agonist	Open-field	Female and male C57BL6/Jx129/sv mice	0.05-2.5		o		Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	5-20	po, 60	o	Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-350g)	5	ip, 30	+	Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
Buspirone	5-HT_{1A} partial agonist	Face-to-face test	ICR mice (20-25g)	1-10	ip, 30	+		Lee et al., 1999	Arch. Pharm. Res. 22:157-164
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	ICR mice (30-40g)	0,125-8	sc, 10	o	(1) Animals were habituated to the test; (2) Shock of 0.1 mA	Umezu, 1999	Jpn. J. Pharmacol. 80:111-118

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (300g)	3	ip, 30	+	Rats received a sucrose solution and were non-water deprived	Vanover et al., 1999	Psychopharmacology 145:333-341
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female and male NCAM-/- deficient mice (12-14-week-old)	0,02	ip, 30	+	NCAM=neural cell adhesion molecule	Stork et al., 1999	J. Neurobiol. 40:343-355
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female and male NCAM+/+ deficient mice (12-14-week-old)	0,4	ip, 30	+	NCAM=neural cell adhesion molecule	Stork et al., 1999	J. Neurobiol. 40:343-355
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	CD1 mice (20-24g)	5-10	ip, 30	+		Borsini et al., 1999	Pharmacol. Biochem. Behav. 64:137-146
Buspirone	5-HT_{1A} partial agonist	Light/dark test	ICR mice (20-30g)	3-10	po, 30	+		Chaki et al., 1999	Soc. Neurosci. Abstr. 25:436
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ICR mice (20-30g)	3	po, 30	+		Chaki et al., 1999	Soc. Neurosci. Abstr. 25:436
Buspirone	5-HT_{1A} partial agonist	Free-exploration test	Diestrus female Swiss mice			+		Palanza et al., 1999	Soc. Neurosci. Abstr. 25:2135
Buspirone	5-HT_{1A} partial agonist	Free-exploration test	Female Swiss mice			+	Estrus female were more sensitive than diestrus	Palanza et al., 1999	Soc. Neurosci. Abstr. 25:2135
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	1-10	ip	+	Sedation at 10 and 30 mg/kg	Abou-Gharbia et al., 1999	J. Biol. Chem. 42:5077-94
Buspirone	5-HT_{1A} partial agonist	Staircase test	Mice	4	ip, 30	+		Pokk et al., 2000	Eur. Neuropsychopharmacol. 10 (Suppl. 2):S68
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Rats (7 to 11-week-old)	2.5-5		+	(1) No effect in 3- and 21-week old rats; (2) Shock of 0.3 mA	Fernández-Guasti et al., 1996	Salud Mental 19:36-41
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying	Female and male adult rats	5		+	(1) Females were either in pro or	Fernández-Guasti et al., 1996	Salud Mental 19:36-41

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test					metestrous phase; (2) Shock of 0.3 mA		
Buspirone	5-HT_{1A} partial agonist	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}=0.45	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
Buspirone	5-HT_{1A} partial agonist	Distress vocalizations	Mice (8-day-old)	10	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
Buspirone	5-HT_{1A} partial agonist	Distress vocalizations	Female and male Sprague-Dawley rat pups (9-11 day-old)	0.625-2.5	ip, 30	+		Kehne et al., 2000	Neuropharmacology 39:1357-67
Buspirone	5-HT_{1A} partial agonist	Holeboard	ICR mice (25-30g)	1-10	ip, 24 h	+	(1) Holeboard testing was preceded by 60 min restraint; (2) weak effects	Tsuji et al., 2000	Psychopharmacology 152:157-66
Buspirone	5-HT_{1A} partial agonist	Holeboard	ICR mice (25-30g)	0.3	ip, 30	o	Holeboard testing was preceded by 60 min restraint	Tsuji et al., 2000	Psychopharmacology 152:157-66
Buspirone	5-HT_{1A} partial agonist	Holeboard	ICR mice (25-30g)	1-10	ip, 30	+	All behavioral parameters were reduced (sedation?)	Tsuji et al., 2000	Psychopharmacology 152:157-66
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female and male NCAM+/+180- deficient mice	0.4	ip, 30	+	C57B/6JxDBA background mice	Stork et al., 2000	Eur. J. Neurosci. 12:3291-306
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female and male NCAM+/+180+ deficient mice	0.02	ip, 30	+	C57B/6JxDBA background mice	Stork et al., 2000	Eur. J. Neurosci. 12:3291-306
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female and male NCAM-/-180- deficient mice	0.02	ip, 30	+	C57B/6JxDBA background mice	Stork et al., 2000	Eur. J. Neurosci. 12:3291-306
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Female and male NCAM-/-180+ deficient mice	0.02	ip, 30	+	C57B/6JxDBA background mice	Stork et al., 2000	Eur. J. Neurosci. 12:3291-306

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (250-300g)	0.5-2	ip, 30	o	Rats were defeated for 4 days, and reexposed to the resident on day 5	Becker et al., 2001	J. Neurosci. 21:262-9
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (200-240g)	0.63	sc, 30	+	0.3 mA/0.5 s shock	Dekeyne et al., 2000	Psychopharmacology 152:55-66
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (240-260g)	0.16-0.63	sc, 30	+	HLU conditions	Dekeyne et al., 2000	Psychopharmacology 152:55-66
Buspirone	5-HT_{1A} partial agonist	DPAG stimulation	Long Evans rats (390-410g)	10	ip, 30	+	Non specific effects	Jung et al., 2001	Pharmacol. Biochem. Behav. 68:33-42
Buspirone	5-HT_{1A} partial agonist	DPAG stimulation	Long Evans rats (390-410g)	2.5	ip, every 8h for 3 days	+		Jung et al., 2001	Pharmacol. Biochem. Behav. 68:33-42
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (180-220g)	0.3-2.4	ip, 30	+	The drug was active on day 1 and 24 h later after retesting	Siemiatkowski et al., 2000	Pharmacol. Biochem. Behav. 66:645-651
Buspirone	5-HT_{1A} partial agonist	Open-field	Sprague-Dawley rats (325-375g)	3	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (325-375g)	3	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Buspirone	5-HT_{1A} partial agonist	Acoustic startle reflex	Sprague-Dawley rats (325-375g)	3	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Buspirone	5-HT_{1A} partial agonist	Open-field	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	3	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	3	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Buspirone	5-HT_{1A} partial agonist	Acoustic startle reflex	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	3	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	ICR mice (33-37g)	0.5-1	sc, 20	o	Multiple FR20/FR20-punishment schedule was in use	Umezu, 2000	Jpn. J. Pharmacol. 83:150-153
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ddY mice (23-28g)	5-10	ip, 60	+	Specific alternation of rhythm in temperature was used as stressor	Hata et al., 2001	Jpn. J. Pharmacol. 85:189-196
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ddY mice (23-28g)	2.5-10	ip, 60	o		Hata et al., 2001	Jpn. J. Pharmacol. 85:189-196
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ddY mice (23-28g)	2.5-10	ip, for 7 days (o.d.)	o	Specific alternation of rhythm in temperature was used as stressor	Hata et al., 2001	Jpn. J. Pharmacol. 85:189-196
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ddY mice (23-28g)	2.5-10	ip, for 7 days (o.d.)	o		Hata et al., 2001	Jpn. J. Pharmacol. 85:189-196
Buspirone	5-HT_{1A} partial agonist	Free-exploration test	BALB/c mice (8-week-old)	1	ip, 30	+		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Buspirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-270g)	1.5-5	ip, 60	+	Buspirone also reduced defecations and gastric ulcers	Krysiak et al., 2000	Neuropeptides 34:148-157
Buspirone	5-HT_{1A} partial agonist	Conflict test	Wistar rats (350-425g)	0.25-0.5	ip, 30	o	FI-30s schedule with 0.5 mA/45 ms footshocks	Beaufour et al., 2001	Behav. Neurosci. 115:125-137
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3-10	ip, 60	o		Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3-10	ip, 60	o	Isolated animals were used	Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3-10	ip, 4h	o		Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	10	ip, 4h	+	Isolated animals were used	Haller et al., 2000	Behav. Pharmacol. 11:403-412

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (300-400g)	3-10	ip, 60	o		Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (300-400g)	3-10	ip, 60	o	Isolated animals were used	Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (300-400g)	3-10	ip, 4h	o		Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (300-400g)	3-10	ip, 4h	+	Isolated animals were used	Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Social interaction	Adrenalectomized Wistar rats (300-400g)	10	ip, 60	+		Haller et al., 2000	Behav. Pharmacol. 11:403-412
Buspirone	5-HT_{1A} partial agonist	Predator exposure-induced scent marking	Female and male Cerrado marmosets (300-400g)	0.5-1	sc, 20	+		Barros et al., 2001	Pharmacol. Biochem. Behav. 68:255-262
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Ovariectomized female Wistar rats (250-300g)	2.5-5	ip, 30	o		Fernández-Guasti et al., 2001	Pharmacol. Biochem. Behav. 70:85-93
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lactating female Wistar rats (250-300g)	2.5-5	ip, 30	o		Fernández-Guasti et al., 2001	Pharmacol. Biochem. Behav. 70:85-93
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Ovariectomized female Wistar rats (250-300g)	2.5-5	ip, 30	+	(1) Activity was reduced at 5 mg/kg; (2) electric shock of 0.3 mA	Fernández-Guasti et al., 2001	Pharmacol. Biochem. Behav. 70:85-93
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Lactating female Wistar rats (250-300g)	2.5-5	ip, 30	+	(1) Activity was reduced; (2) electric shock of 0.3 mA	Fernández-Guasti et al., 2001	Pharmacol. Biochem. Behav. 70:85-93
Buspirone	5-HT_{1A} partial agonist	Four-plate test	Swiss mice (20-24g)	0.06-0.5	ip, 45	o	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss mice (20-24g)	0.06-0.5	ip, 45	o		Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
Buspirone	5-HT_{1A} partial agonist	Acoustic startle reflex	High DPAT sensitivity rat line (320-390g)	4	ip, 10	o		McQueen et al.,2001	Behav. Pharmacol. 12:509-516

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Acoustic startle reflex	Low DPAT sensitivity rat line (320-390g)	4	ip, 10	-	Startle was increased by drug-treatment	McQueen et al.,2001	Behav. Pharmacol. 12:509-516
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	High DPAT sensitivity rat line (320-390g)	4	ip, 10	+		McQueen et al.,2001	Behav. Pharmacol. 12:509-516
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Low DPAT sensitivity rat line (320-390g)	4	ip, 10	+		McQueen et al.,2001	Behav. Pharmacol. 12:509-516
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Female Mongolian gerbils (30-50g)	3-30	sc, 30	+	High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:357-370
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Mice	6-20 ng	dorsal raphe	+		Coubard and Barone, 2001	Behav. Pharmacol. 12 (Suppl. 1):S24
Buspirone	5-HT_{1A} partial agonist	Tonic immobility	Dunkin Hartley guinea-pigs (600-800g)	2.3	sc, 30	+		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	OF1/IC mice (18-20 g)	7.5-15	po, 60	+		Spooren et al., 2002	Eur. J. Pharmacol. 435:161-170
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Albino mice (22-25g)	1	ip, 30	+		Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
Buspirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (300-400g)	3-10	ip, 60	o	LLF condition	Haller et al., 2001	Psychopharmacology 157:388-394
Buspirone	5-HT_{1A} partial agonist	Social interaction	Adrenalectomized Wistar rats (300-400g)	3-10	ip, 60	+	(1) Experiment was repeated 3 times on different days; (2) LLF condition	Haller et al., 2001	Psychopharmacology 157:388-394
Buspirone	5-HT_{1A} partial agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	0.3	ip, 30	+		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	0.3-3	ip, o.d. for 3 weeks	o	Locomotor activity was impaired	Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Mice	1	ip	-	Mice were winners from short experiences of aggression during 3 days	Kudryavtseva and Bondar, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S198
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Mice	1	ip	o	Mice were winners from short experiences of aggression during 20 days	Kudryavtseva and Bondar, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S198
Buspirone	5-HT_{1A} partial agonist	Seed finding	Syrian Golden hamsters (120-130g)	0.001-1	ip, 90	+	Fasting and isolation were used as stressors	King et al., 2002	Neuropsychobiology 45:150-155
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Wistar rats (225-300g)	0.3-3	ip, 30	o		Brodkin et al., 2002	Pharmacol. Biochem. Behav. 73:359-366
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (225-300g)	1-3	ip, 30	+	Shocks of 1 mA/4 s were applied	Brodkin et al., 2002	Pharmacol. Biochem. Behav. 73:359-366
Buspirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (290-330g)	0.1-0.3	ip, 30	+	A FR-30 was in use	Brodkin et al., 2002	Pharmacol. Biochem. Behav. 73:359-366
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.075-0.15	ip, 20	+		Briones-Aranda et al., 2002	Psychopharmacology 162:147-155
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.075	ip, 20	-	Animals had forced swim stress 1 or 24 h prior to testing	Briones-Aranda et al., 2002	Psychopharmacology 162:147-155

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Stress-induced gastric lesion	Sprague-Dawley rats (200-250g)	2	ip, b.i.d., -2 and +2 h	o	Rats were subjected to 4 h of immobilization stress	Gabry et al., 2002	Mol. Psychiatry 7:474-483
Buspirone	5-HT_{1A} partial agonist	Marble burying	ICR mice (20-30g)	10-30	sc, 30	+		Chaki et al., 2003	J. Pharmacol. Exp. Ther. 304:818-826
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (350-450g)	1-5	ip, 30	+	The drug was active in the intertrial and safety signal periods	Jelen et al., 2003	Behav. Brain Res. 141:63-72
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Long-Evans rats (250-300g)	0.5-1	ip, 30	o		Paine et al., 2002	Behav. Pharmacol. 13:511-523
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.2	ip, 30	o	Activity was reduced at this dose	Overstreet et al., 2003	Psychopharmacology 167:344-352
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.6	ip, 5 and 10 days	+	The drug was given after the first and second cycles	Overstreet et al., 2003	Psychopharmacology 167:344-352
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.2	ip, 4.5 h	+	The drug was given after removal of ethanol on the third cycle	Overstreet et al., 2003	Psychopharmacology 167:344-352
Buspirone	5-HT_{1A} partial agonist	Conditioned fear	Wistar rats (200-230g)	0.95-4.6	ip, 30	+	Electric shock of 0.5 mA/200 ms was applied on day 1	Sánchez et al., 2003	Pharmacol. Biochem. Behav. 75:903-907
Buspirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	CD1 mice (10-week-old)	4	sc, for 17 days	+		Merali et al., 2003	Biol. Psychiatry 54:552-565
Buspirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	CD1 mice (10-week-old)	4	sc, for 3 days	o		Merali et al., 2003	Biol. Psychiatry 54:552-565
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3-10	ip, 30	o	(1) Rat were group housed; (2) The drug	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							suppressed locomotion		
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3-10	ip, 30	o	(1) Rat were individually housed; (2) The drug suppressed locomotion	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3	ip, 2h	+	Rat were group housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3	ip, 2h	+	Rat were individually housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	3	ip, 4h	o	Rat were group housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (300-400g)	10	ip, 4h	+	Rat were individually housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (28-40g)	2-6	ip, 30	o	(1) Mice were group housed; (2) The drug suppressed locomotion	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (28-40g)	2-6	ip, 30	o	(1) Mice were individually housed; (2) The drug suppressed locomotion	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (28-40g)	6	ip, 2h	+	Mice were group housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (28-40g)	2-6	ip, 2h	o	Mice were individually housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (28-40g)	6	ip, 4h	+	Mice were group housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (28-40g)	2-6	ip, 4h	+	Mice were individually housed	Majercsik et al., 2003	Prog. Neuropsychopharmacol. Biol. Psychiatry 27:1187-1199
Buspirone	5-HT_{1A} partial agonist	Canopy stretched attend posture test	BALB/c mice	2	ip	+	The drug reduced stretched attend postures	Dubowchik et al., 2003	Bioorg. Med. Chem. 13:3997-4000
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.6	ip, 30	+	The drug attenuated the reduction in social interaction in rats subjected to ethanol withdrawal and restraint stress	Breese et al., 2004	Neuropsychopharmacology 29:470-482
Buspirone	5-HT_{1A} partial agonist	Conflict test	NIH Swiss mice (28-34g)	0.3-10	ip, 30	o	A mixed FR1 (food)+FR1 (food+shock) schedule was used	Witkin et al., 2004	Psychopharmacology 172:52-57
Buspirone	5-HT_{1A} partial agonist	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 7 day-old posthatch	2.5-10	im, 15	o		Feltenstein et al., 2004	Pharmacol. Biochem. Behav. 77:221-226
Buspirone	5-HT_{1A} partial agonist	Conflict test	Sprague-Dawley rats (250-288g)	1-6	ip	+	A multiple FI90/FI90 (punishment) schedule was used	McMillan et al., 1991	J. Pharmacol. Exp. Ther. 258:1015-1018
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress	Sprague-Dawley rat pups (10-day-old)	0.63-5	ip, 30	+		Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		vocalizations							
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.1-1	ip, 60	o	Rats were exposed to a 4-open arm maze 24 h prior to treatment	Gower et al., 2003	Eur. J. Pharmacol. 481:67-74
Buspirone	5-HT_{1A} partial agonist	Escape behavior in the elevated T-maze	Wistar rats (200-300g)	0.3-3	ip, 30	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Buspirone	5-HT_{1A} partial agonist	Escape behavior in the elevated T-maze	Wistar rats (200-300g)	0.3-3	ip, o.d. for 3 weeks	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Buspirone	5-HT_{1A} partial agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-300g)	0.3-3	ip, 30	+	The drug facilitated inhibitory avoidance	Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Buspirone	5-HT_{1A} partial agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-300g)	0.3-3	ip, o.d. for 3 weeks	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Wild-type CB1 (+/+) mice (25-35g)	1-2	ip, 30	+		Urigüen et al., 2004	Neuropharmacology 46:966-973
Buspirone	5-HT_{1A} partial agonist	Light/dark test	CB1 (-/-) mice (25-35g)	2	ip, 30	+	The drug was less active than in wild-type animals	Urigüen et al., 2004	Neuropharmacology 46:966-973
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (225-250g)	4	ip, 15	+		Commissaris et al., 2004	Depress. Anxiety 19:146-151
Buspirone	5-HT_{1A} partial agonist	Light/dark test	ICR mice (18-25g)	2	po, 60	+		Peng et al., 2004	Life Sci. 75:2451-2462

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ICR mice (18-25g)	2	ip, 30	+		Peng et al., 2004	Life Sci. 75:2451-2462
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (260-270g)	1	ip, 30	+		Jung et al., 2005	Pharmacol. Biochem. Behav. 81:205-210
Buspirone	5-HT_{1A} partial agonist	Social interaction	Alcohol-preferring inbred P rats (160-180g)	0.6	ip, 60	+	The drug reversed anxiety-like behavior induced by repeated ethanol withdrawals	Overstreet et al., 2005	Pharmacol. Biochem. Behav. 81:122-130
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.07	ip, 20	-	Mice were subjected to swim stress prior to testing	Alfredo and Ofir, 2005	Eur. J. Pharmacol. 508:155-158
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (180-200g)	5	ip, 30	+	Shocks of 0.3 mA were applied	Fernández-Guasti et al., 2005	Psychopharmacology 180:399-407
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (180-200g)	2.5-5	ip, 30	+	(1) Animals were pretreated with the pain agent uric acid at 3.75%; (2) Shocks of 0.3 mA were applied	Fernández-Guasti et al., 2005	Psychopharmacology 180:399-407
Buspirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (180-200g)	2.5-5	ip, 30	o	(1) Animals were pretreated with the pain agent uric acid at 7.5%; (2) Shocks of 0.3 mA were applied	Fernández-Guasti et al., 2005	Psychopharmacology 180:399-407
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (180-200g)	0.6	ip, for the first 2 withdrawal periods	+	The drug attenuated the reduction in social interaction in rats subjected	Breese et al., 2005	Neuropsychopharmacology 30:1662-1669

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							to ethanol withdrawal and restraint stress		
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (180-200g)	0.6	ip, 30 min prior the application of stress	+	The drug attenuated the reduction in social interaction in rats subjected to ethanol withdrawal and restraint stress	Breese et al., 2005	Neuropsychopharmacology 30:1662-1669
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Long-Evans Hooded rats (180-200g)	0,03-0,3	po, 60	+		Vaidya et al., 2005	Methods Find Exp Clin Pharmacol 27:245-255
Buspirone	5-HT_{1A} partial agonist	Vogel conflict test	Long-Evans Hooded rats (180-200g)	10-30	po, 60	+		Vaidya et al., 2005	Methods Find Exp Clin Pharmacol 27:245-255
Buspirone	5-HT_{1A} partial agonist	DPAG stimulation	Wistar rats (220-240g)	0.3	ip, o.d., for 21-24 days	o	The drug did not change the escape theshold	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Buspirone	5-HT_{1A} partial agonist	Conflict test	Female and male rhesus monkeys (Macaca mulatta) (6.8-8.9 kg)	0.1	iv	+	(1) The drug produced modest effects; (2) An FR18 schedule was used	Rowlett et al., 2006	Psychopharmacology 184:201-211
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (about 260g)	2.5	ip, 30	+	(1) Electric shocks of 0.8 mA were delivered; (2) The drug was administered at 10:00 AM	Papp et al., 2006	Behav. Pharmacol. 17:9-18
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (about 260g)	2.5	ip, 30	+	(1) Electric shocks of 0.8 mA were delivered; (2) The drug was administered at 6:00 PM	Papp et al., 2006	Behav. Pharmacol. 17:9-18

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Nestlet shredding	NIH Swiss mice (28-32g)	0.3-3	ip, 30	o		Li et al., 2006	Life Sci. 78:1933-1939
Buspirone	5-HT_{1A} partial agonist	Marble burying	NIH Swiss mice (28-32g)	0.3-10	ip, 30	o		Li et al., 2006	Life Sci. 78:1933-1939
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ICR mice (25-30g)	2	ip, 60	+		Jung et al., 2006	Biol. Pharm. Bull. 29:261-265
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Female and male Sprague-Dawley rat pups (9- to 11-day-old, 21-30g)	1-3	ip, 30	+		Iijima and Chaki, 2005	Pharmacol. Biochem. Behav. 82:652-657
Buspirone	5-HT_{1A} partial agonist	Shock-induced social avoidance	Wistar rats (250-300g)	1	ip, 30	+	Electric shocks of 3 mA/0.01 s were applied one day prior to testing	Leveleki et al., 2006	Brain Res. Bull. 69:153-160
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	10-30	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
Buspirone	5-HT_{1A} partial agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	0.3	ip, for 21 days, o.d.	+	The drug impaired inhibitory avoidance	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Buspirone	5-HT_{1A} partial agonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	0.3	ip, for 21 days, o.d.	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Buspirone	5-HT_{1A} partial agonist	Social interaction	Mongolian gerbils (*Meriones unguiculatus*) (7-week-old, 50-60g)	10	po, 60	+		Salomé et al., 2006	Pharmacol. Biochem. Behav. 83:533-539
Buspirone	5-HT_{1A} partial agonist	Marble burying	ICR mice (25-34g)	30-100	ip, 30	+	Mice were housed alone	Young et al., 2006	Pharmacol. Biochem. Behav. 84:62-73
Buspirone	5-HT_{1A} partial agonist	Marble burying	ICR mice (25-34g)	10-30	ip, 30	+	Mice were housed in groups	Young et al., 2006	Pharmacol. Biochem. Behav. 84:62-73

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	ICR mice (25-34g)	10	po, 60	+		Iijima et al., 2007	Psychopharmacology 190:233-239
Buspirone	5-HT_{1A} partial agonist	Chick separation stress paradigm	Cockerels (Gallus gallus, 7 day-old after hatch)	2,5-10	im, 15	o		Warnick et al., 2006	Behav. Pharmacol. 17:581-587
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	ICR mice (5-week-old)	6	ip, 30	+		Komiya et al., 2006	Behav. Brain Res. 172:240-249
Buspirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	30-60	po, 60	+	Electric shock of 2.5 mA/30 s were applied the day before	Nishikawa et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:926-931
Buspirone	5-HT_{1A} partial agonist	Open-field	Mixed 129SvEvBrd x C57BL6/J background mice (9-11 week-old, 25-30g)	0.3-4	ip, 30	+	The open-field contained a rectangular ceramic platform	Pogorelov et al., 2007	J. Neurosci. Methods 162:222-228
Buspirone	5-HT_{1A} partial agonist	Open-field	Mixed female 129SvEvBrd x C57BL6/J background mice (9-11 week-old, 25-30g)	2-4	ip, 30	+	The open-fiedl contained a rectangular ceramic platform	Pogorelov et al., 2007	J. Neurosci. Methods 162:222-228
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	3 µg/µl	amygdala	o	The drug was given after the fifth and tenth cycles of ethanol exposure	Overstreet et al., 2006	Psychopharmacology 187:1-12
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.3-3 µg/µl	dorsal raphe	+	The drug was given after the fifth and tenth cycles of ethanol exposure	Overstreet et al., 2006	Psychopharmacology 187:1-12
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.3-3 µg/µl	nucleus accumbens	o	The drug was given after the fifth and tenth cycles of ethanol exposure	Overstreet et al., 2006	Psychopharmacology 187:1-12

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.3-3 µg/µl	paraventricular nucleus	o	The drug was given after the fifth and tenth cycles of ethanol exposure	Overstreet et al., 2006	Psychopharmacology 187:1-12
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Rhesus monkeys (28-32-month-old)	5-10	po	o		Winslow et al., 2007	Biol. Psychiatry 61:389-395
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (260-270g)	1	ip, 30	+		Jung et al., 2006	J. Ethnopharmacol. 108:193-197
Buspirone	5-HT_{1A} partial agonist	Conflict test	Sprague-Dawley rats (300-325g)	2.5-5	ip, 30	+	The drug reduced number of retreats of rats running in an alley for IV cocaine	Ettenberg and Bernardi, 2006	Pharmacol. Biochem. Behav. 85:393-399
Buspirone	5-HT_{1A} partial agonist	Ultrasound-induced defensive behaviors	Lister hooded rats (220-250g)	0.3-3	sc, 60	o		Nicolas et al., 2007	Psychopharmacology 194:243-252
Buspirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	C57BL/6J (21-30g)	10	po, 60	+	Hyperthermia was produced by exposure to an open-field	Grundmann et al., 2006	Planta Med. 72:1366-1371
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	C57BL/6 (6-12-week-old, 22-34g)	10	po, 60	+		Grundmann et al., 2006	J. Ethnopharmacol. 110:406-411
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Fisher rats (10-week-old)	0.1-10	po, 60	o		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (7-week-old)	0.32-10	po, 60	o		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
Buspirone	5-HT_{1A} partial agonist	Light/dark test	BALB/c mice (7-week-old)	3.2	po, 60	o		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
Buspirone	5-HT_{1A} partial agonist	Holeboard	ICR mice (6-week-old)	0.32-10	po, 60	o		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
Buspirone	5-HT_{1A} partial agonist	Novelty-elicited head-bob	New Zealand rabbits (1.6-1.8 kg)	2.5	sc, 60	+		Aloyo et al., 2007	Behav. Pharmacol. 18:651-659

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		behavior							
Buspirone	5-HT_{1A} partial agonist	Punished schedule-induced polydipsia	Wistar rats (370-450g)	0.1-1	ip, 30	o		Pérez and Pellón, 2007	Behav. Pharmacol. 18:681-689
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Female and male CD rat pups (8-10-day-old, 17-30g)	1-10	ip, 30	+		Hodgson et al., 2008	Pharmacol. Biochem. Behav. 88:341-348
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (7-8-week-old, 200-220g)	1	sc, 30	+		Louis et al., 2008	Pharmacol. Biochem. Behav. 89:36-45
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	C57J/BL6 mice (6-12-week-old, 22-34g)	10	po, 60	+		Grundmann et al., 2008	Planta Med. 74:1769-1773
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	BALB/cAnN Ico mice (7-month-old)	1	ip, 30	+		Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
Buspirone	5-HT_{1A} partial agonist	Emergence test	BALB/cAnN Ico mice (7-month-old)	1-3	ip, 30	o		Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	C57BL/6JIco mice (7-month-old)	1-3	ip, 30	o		Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
Buspirone	5-HT_{1A} partial agonist	Emergence test	C57BL/6JIco mice (7-month-old)	1-3	ip, 30	o		Lalonde et al., 2009	Fund. Clin. Pharmacol. 24: 365-376
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (180-200g)	0.3-1	sc, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
Buspirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (180-200g)	1	sc, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (8-10-week-old)	3	ip, 30	+		Hamed et al., 2009	Physiol. Behav. 98:474-480
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (350-400g)	3	ip, 30	+/-		Lim et al., 2008	Arzneimittelforschung 58:269-276
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (350-400g)	3	ip, 30	+/-	Animals were tested in an	Lim et al., 2008	Arzneimittelforschung 58:269-276

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							enclosed open-field		
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (200-250g)	0.5	ip, 45	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (200-250g)	0.5	ip, for 2 weeks	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (200-250g)	0.5	ip, 3 days after 2 weeks treatment	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (200-250g)	0.5	ip, 45	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (200-250g)	0.5	ip, for 2 weeks	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (200-250g)	0.5	ip, 3 days after 2 weeks treatment	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Wistar rats (200-250g)	0.5	ip, 45	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Wistar rats (200-250g)	0.5	ip, for 2 weeks	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Light/dark test	Wistar rats (200-250g)	0.5	ip, 3 days after 2 weeks treatment	+		Khan and Haleem, 2007	Acta Biol. Hung. 58:345-357
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rat pups (P11)	0.1-3	ip, 30	+		Brunelli et al., 2009	Pharmacol. Biochem. Behav. 94:8-15
Buspirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rat pups (P11)	0.1-3	ip, 30	+	High line ultrasonic vocalizations was used	Brunelli et al., 2009	Pharmacol. Biochem. Behav. 94:8-15

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone	5-HT_{1A} partial agonist	Novel tank diving	Zebrafish (*D. rerio*)	6.25-50	immersion, 5	+		Bencan et al., 2009	Pharmacol. Biochem. Behav. 94:75-80
Buspirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (270-300g)	1-5	ip, 30	+	Shocks of 1 mA/30 s were applied	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	C57J/BL6 mice (6-12-week-old, 27.3□0.1g)	10	po, 60	+		Grundmann et al., 2009	Phytomedicine 16:295-302
Buspirone	5-HT_{1A} partial agonist	DPAG stimulation	Wistar rats (300-350g)	3	sc, for 20 days	+		Lim et al., 2011	Behav. Brain Res. 218:301-307
Buspirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	F344 rats (8-10-week-old)	100	po, 30	+		Steiner et al., 2012	Psychopharmacology 223:465-475
Buspirone	5-HT_{1A} partial agonist	Acoustic startle reflex	F344 rats (8-10-week-old)	300	po, 30	-	Rats were tested in dark condition	Steiner et al., 2012	Psychopharmacology 223:465-475
Buspirone	5-HT_{1A} partial agonist	Acoustic startle reflex	F344 rats (8-10-week-old)	300	po, 30	o	Rats were tested in light condition	Steiner et al., 2012	Psychopharmacology 223:465-475
Buspirone	5-HT_{1A} partial agonist	Open-field	Female zebrafish (*Danio rerio*, 5-month-old)	5 mg/L	container exposed, 0 or 3.5 h	o		Maaswinkel et al., 2012	Behav. Brain Res. 234:365-374
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar/ST rats (10-13-week-old)	1	ip, for 14 days	o		Yamaguchi et al., 2012	J. Ethnopharmacol. 143:533-539
Buspirone	5-HT_{1A} partial agonist	Conditioned fear	Wistar/ST rats (10-13-week-old)	1	ip, for 14 days	+	Shocks of 0.5 mA were applied	Yamaguchi et al., 2012	J. Ethnopharmacol. 143:533-539
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss mice (30g)	1.3 µmol	ip, 30	+		de Brito et al., 2012	Life Sci. 90:910-916
Buspirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	5	ip, 60	+		Khatri et al., 2012	Arch. Pharm. Res. 35:1143-1152
Buspirone+5-HT (20 nmol)	5-HT_{1A} partial agonist	DPAG stimulation	Wistar rats (220-240g)	0.3	ip, o.d., for 21-24 days	+	(1) No interaction, but the escape theshold was increased; (2) 5-	de Bortoli et al., 2006	Psychopharmacology 183:422-428

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							HT was infused into the dorsal PAG		
Buspirone+8-OH-DPAT (3.2 nmol/0.2 µl)	5-HT_{1A} partial agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	0.3	ip, for 21 days, o.d.	+	The combination impaired inhibitory avoidance	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Buspirone+8-OH-DPAT (3.2 nmol/0.2 µl)	5-HT_{1A} partial agonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	0.3	ip, for 21 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Buspirone+8-OH-DPAT (8 nmol)	5-HT_{1A} partial agonist	DPAG stimulation	Wistar rats (220-240g)	0.3	ip, o.d., for 21-24 days	+	(1) No interaction, but the escape theshold was increased; (2) 8-OH-DPAT was infused into the dorsal PAG	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Buspirone+adrenalectomy	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-350g)	5	ip, 15	(o)	(1) Blockade of the anxiolytic-like effects, (2) Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
Buspirone+cocaine (20 mg/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	Long-Evans rats (250-300g)	0.5-1	ip, 30	(-)	No blockade of the anxiogenic-like effects of cocaine	Paine et al., 2002	Behav. Pharmacol. 13:511-523
Buspirone+cocaine (repeated 20 mg/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	Long-Evans rats (250-300g)	0.5-1	ip, 30	(-)	No blockade of the anxiogenic-like effects of cocaine withdrawal	Paine et al., 2002	Behav. Pharmacol. 13:511-523
Buspirone+corticosterone (0.5 mg/kg)	5-HT_{1A} partial agonist	Social interaction	Adrenalectomized Wistar rats (300-400g)	10	ip, 60	(-/+)	(1) Experiment was repeated 3 times on different days; (2) LLF condition	Haller et al., 2001	Psychopharmacology 157:388-394

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Buspirone+demedulectomy	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-350g)	5	ip, 15	+	Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
Buspirone+DOI (16 nmol)	5-HT_{1A} partial agonist	DPAG stimulation	Wistar rats (220-240g)	0.3	ip, o.d., for 21-24 days	+	(1) No interaction, but the escape theshold was increased; (2) DOI was infused into the dorsal PAG	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Buspirone+DOI (16 nmol/0.2 µl)	5-HT_{1A} partial agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	0.3	ip, for 21 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Buspirone+DOI (16 nmol/0.2 µl)	5-HT_{1A} partial agonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	0.3	ip, for 21 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Buspirone+ketoconazole (10 mg/kg)	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	10-30	po, 60	(+)	(1) Potentiation of the anxiolytic-like effects of tandospirone; (2) Electric shock of 2.5 mA/30 s were applied the day before	Nishikawa et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:926-931
Buspirone+lemon oil vapor	5-HT_{1A} partial agonist	Elevated plus-maze	ICR mice (5-week-old)	2	ip, 30	+	No blockade of the anxiolytic-like effects of lemon oil vapor	Komiya et al., 2006	Behav. Brain Res. 172:240-249
Buspirone+MM-77 (0.03 mg/kg)	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.07	ip, 20	-	(1) No antagonism; (2) Mice were subjected to swim stress prior	Alfredo and Ofir, 2005	Eur. J. Pharmacol. 508:155-158

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							to testing		
Buspirone+NAN-190 (1.3 µmol/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss mice (30g)	1.3 µmol	ip, 30	(o)		de Brito et al., 2012	Life Sci. 90:910-916
Buspirone+prazosin (0.03 mg/kg)	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (270-300g)	2	ip, 30	+	(1) Shocks of 1 mA/30 s were applied; (2) No interaction	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398
Buspirone+SKF82958 (1 mg/kg)	5-HT_{1A} partial agonist	Acoustic startle reflex	Rats	1	sc	(-)	Syngergistic potentiation	Meloni and David, 1999	Soc. Neurosci. Abstr. 25:2132
Buspirone+Stress	5-HT_{1A} partial agonist	Staircase test	Mice	2-4	ip, 30	o	Animals were stress by small platform exposure surrounded by water for 24h	Pokk et al., 2000	Eur. Neuropsychopharmacol. 10 (Suppl. 2):S68
Buspirone+Substance P	5-HT_{1A} partial agonist	Distress vocalizations	Guinea pig pups		ip, 30	+		Kramer et al., 1998	Science 281:1640-1645
Buspirone+trimyristin (10-100 mg/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	Albino mice (22-25g)	1	ip, 30	(o)	Blockade of the anxiolytic-like effects of buspirone	Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
Buspirone+WAY 100635 (0.3 mg/kg)	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (350-375g)	1	sc, 30	(o)	Antagonism of the effects of buspirone	Cervo et al., 1998	Soc. Neurosci. Abstr. 24:1364
Buspirone+WAY 100635 (0.5 mg/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	C57BL/6 (6-12-week-old, 22-34g)	10	po, 60	(o)	Antagonism of the effects of buspirone	Grundmann et al., 2006	J. Ethnopharmacol. 110:406-411
Buspirone+WAY 100635 (0.5 mg/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	5	ip, 60	(o)		Khatri et al., 2009	Bioorg. Med. Chem. 17:1890-1897
Buspirone+WAY 100635 (1 mg/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	ddY mice (23-28g)	10	ip, 60	(o)	(1) antagonism of the effects of buspirone; (2) Specific alternation of	Hata et al., 2001	Jpn. J. Pharmacol. 85:189-196

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							rhythm in temperature was used as stressor		
Buspirone+WAY 100635 (1 mg/kg)	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (270-300g)	0.3-1	ip, 30	(o)	Shocks of 1 mA/30 s were applied	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398
Buspirone+WAY 100635 (1-3 mg/kg)	5-HT_{1A} partial agonist	Stress-induced hyperthermia	ICR mice (25-34g)	10	po, 60	(o)	Antagonism of the effects of buspirone	Iijima et al., 2007	Psychopharmacology 190:233-239
BW 723C86	5-HT_{2B} agonist	Geller-Seifter conflict test	Sprague-Dawley rats (400-500g)	1-50	sc, 30	+		Kennett et al., 1995	Br. J. Pharmacol. 116:330P
BW 723C86	5-HT_{2B} agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	2-10	sc, 30	o		Kennett et al., 1995	Br. J. Pharmacol. 116:330P
BW 723C86	5-HT_{2B} agonist	Elevated plus-maze	Lister hooded rats (280-400g)	0.31 nmol	amygdala, 1	+		Duxon et al., 1995	Br. J. Pharmacol. 116:331P
BW 723C86	5-HT_{2B} agonist	Social interaction	Sprague-Dawley rats (200-250g)	3-10	sc, 30	+		Kennett et al., 1995	Br. J. Pharmacol. 116:330P
BW 723C86	5-HT_{2B} agonist	Social interaction	Sprague-Dawley rats (250g)	3	sc, 20	+		Kennett et al., 1996	Br. J. Pharmacol. 117:1443-1448
BW 723C86	5-HT_{2B} agonist	Social interaction	Sprague-Dawley rats (210-230g)	0.09 and 0.93 nmol/500 nl	medial amygdala, 5	+		Duxon et al., 1997	Neuropharmacology 36:601-608
BW 723C86	5-HT_{2B} agonist	Vogel conflict test	Sprague-Dawley rats (210-230g)	0.09-0.93 nmol/500 nl	medial amygdala, 5	o		Duxon et al., 1997	Neuropharmacology 36:601-608
BW 723C86	5-HT_{2B} agonist	Social interaction	Rats	sc, 20	3	+		Kennett et al., 1998	Soc. Neurosci. Abstr. 24:1371
BW 723C86	5-HT_{2B} agonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	10-30	ip, 30	+	Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
BW 723C86	5-HT_{2B} agonist	Four-plate test	Swiss mice (20-24g)	8-16	ip, 30	+	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
BW 723C86	5-HT_{2B} agonist	Light/dark test	Swiss mice (20-24g)	0.125-16	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
BW 723C86	5-HT_{2B} agonist	Elevated plus-maze	Swiss mice (20-24g)	0.5, 4-16	ip, 30	+		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
BW 723C86	5-HT_{2B} agonist	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.5-2	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
BW 723C86	5-HT_{2B} agonist	Four-plate test	Swiss mice (20-24g)	8	ip, 30	+	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
BW 723C86	5-HT_{2B} agonist	Four-plate test	Swiss mice (20-24g)	1-16	ip, 30	o	(1) Animals were exposed to the test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
BW 723C86	5-HT_{2B} agonist	Four-plate test	Swiss mice (18-22g)	0.5-2	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
BW 723C86	5-HT_{2B} agonist	Elevated plus-maze	Swiss mice (18-22g)	0.06-0.25	ip, 45	o		Massé et al., 2007	Behav. Brain Res. 177:214-226
BW 723C86+alprazolam (0,03-0,125 mg/kg)	5-HT_{2B} agonist	Four-plate test	Swiss mice (18-22g)	0.125	ip, 45	(+)	(1) Potentiation of the anxiolytic-like effects of alprazolam; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
BW 723C86+alprazolam (0,03-0.06 mg/kg)	5-HT_{2B} agonist	Elevated plus-maze	Swiss mice (18-22g)	0.06-0.25	ip, 45	(+)	Potentiation of the anxiolytic-like effects of alprazolam	Massé et al., 2007	Behav. Brain Res. 177:214-226
BW 723C86+diazepam (0.06 mg/kg)	5-HT_{2B} agonist	Elevated plus-maze	Swiss mice (18-22g)	0.06-0.25	ip, 45	(+)	Potentiation of the anxiolytic-like effects of diazepam	Massé et al., 2007	Behav. Brain Res. 177:214-226
BW 723C86+diazepam (0.125 mg/kg)	5-HT_{2B} agonist	Four-plate test	Swiss mice (18-22g)	2	ip, 45	(+)	(1) Potentiation of the anxiolytic-like effects of diazepam; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
BW 723C86+SB 206553 (10-20 mg/kg)	5-HT_{2B} agonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	10	ip, 30	(o)	(1) Antagonism; (2) Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
BW 723C86+SB 215505 (3 mg/kg)	5-HT_{2B} agonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	10	ip, 30	(o)	(1) Antagonism; (2) Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
BW 723C86+SB 242084 (5 mg/kg)	5-HT_{2B} agonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	10	ip, 30	+	(1) No antagonism; (2) Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
BW 723C86+WAY 100635 (0.1-0.3 mg/kg mg/kg)	5-HT_{2B} agonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	10	ip, 30	(o)	(1) No antagonism; (2) Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
C-1A-siRNA	5-HT_{1A} suppressor	Elevated plus-maze	C57BL/6J (10-15-week-old)	1 µl	dorsal raphe nucleus, b.i.d., 24 h	o	5-HT_{1A} autoreceptors were suppressed selectively	Bortolozzi et al., 2012	Mol. Psychiatry 17:612-623
Cassia siamea	5-HT antagonist	Elevated plus-maze	Wistar rats (150-170g)	1-12	po, 60	+		Thongsaard et al., 1996	Pharmacol. Biochem. Behav. 53:753-758

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CGS 12066B	Non selective agonist	Elevated plus-maze	Swiss mice NIH (20-30g)	3.125	ip, 30	o		Benjamin et al., 1990	Life Sci. 47:195-203
CGS 12066B	Non selective agonist	Elevated plus-maze	DBA/2 mice (6-8-week-old)	2.5-10	ip, 20	-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
CGS 12066B	Non selective agonist	Elevated plus-maze	Mice	1 0		-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
CGS 12066B	Non selective agonist	Social interaction	Lister rats (200-280g)	0.0025	dorsal raphe, 5	+	HLU	Higgins et al., 1992	Psychopharmacology 106:261-267
CGS 12066B	Non selective agonist	Agonistic behavior	BKW mice (25-35g)	0.5-5	sc, 30	-		Bell et al., 1995	Pharmacol. Biochem. Behav. 52:7-16
CGS 12066B	Non selective agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11-day-old)	1-3	sc, 30	-		Winslow and Insel, 1991	Prog. Neuropsychopharmacol. Biol. Psychiatry 15:745-757
CGS 12066B	Non selective agonist	Ultrasonic distress vocalizations	Rats	1-3	sc	-		Winslow and Insel, 1991	Psychopharmacology 105:513-520
CGS 18102A	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau Pigeons (500-650g)	0.16-0.63	im, 5	+	FR30:FR30	Kleven and Koek, 1996	J. Pharmacol. Exp. Ther. 276:388-397
Cianopramine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (150-220g)	1-10	ip, 30	-		Griebel et al., 1994	Psychopharmacology 113:463-470
Cianopramine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (150-220g)	10	ip, for 21 days (o.d.)	+		Griebel et al., 1994	Psychopharmacology 113:463-470
Cianopramine	5-HT reuptake inhibitor	Light/dark test	Swiss mice (10-week-old)	1-10	ip, 30	-		Griebel et al., 1994	Psychopharmacology 113:463-470
Cianopramine	5-HT reuptake inhibitor	Light/dark test	Swiss mice (10-week-old)	10	ip, for 21 days (o.d.)	o		Griebel et al., 1994	Psychopharmacology 113:463-470
Cianopramine	5-HT reuptake inhibitor	Free-exploration test	Swiss mice (10-week-old	10	ip, 30	-		Griebel et al., 1994	Psychopharmacology 113:463-470
Cinanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Female CFN rats	3-25	ip, 0	o	VI30/FR10	Winter, 1972	Arch. Int. Pharmacodyn. 197:147-159

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cinanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Female CFN rats	3-25	ip, 80	o	VI30/FR10	Winter, 1972	Arch. Int. Pharmacodyn. 197:147-159
Cinanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	60		o		Sepinwall and Cook, 1978	In: Handbook of Psychopharmacology, pp. 345-393
Cinanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-320g)	10-56	ip, 60	o	FR40	Kilts et al., 1981	Psychopharmacology 74:290-296
Cinanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (4 months)	60	ip, 60	+		Geller et al., 1974	Pharmacol. Biochem. Behav. 2:545-548
Cinanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	15-60	ip, 60	+	FR10/VI30	Cook and Sepinwall, 1975	In: Mechanisms of Actions of Benzodiazepines, pp. 1-28
Cinanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (220g)	10-60	ip, 30	o	Modified Vogel test	Petersen and Lassen, 1981	Psychopharmacology 75:236-239
Cinanserin	5-HT_2 antagonist	Vogel conflict test	Sprague-Dawley rats (200-320g)	56	ip, 60	+	VI21	Kilts et al., 1981	Psychopharmacology 74:290-296
Cinanserin	5-HT_2 antagonist	Vogel conflict test	Sprague-Dawley rats (200g)	56	ip, 60	+	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
Cinanserin	5-HT_2 antagonist	Conflict test	Squirrel monkeys (550-900g)	1-3	im	+	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112
Cinanserin	5-HT_2 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	10	ip, 15	o		Davis et al., 1988	In: The Psychology of Learning and Motivation, pp. 263-305
Cinanserin	5-HT_2 antagonist	Light/dark test	NIH Swiss mice (18-22g)	2.5	ip, 30	o		Emmanouil et al., 2006	Pharmacol. Biochem. Behav. 84:313-320

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cinanserin+N_2O	5-HT_2 antagonist	Light/dark test	NIH Swiss mice (18-22g)	2.5	ip, 30	(o)	Weak antagonism of the anxiolytic-like effects of N_2O	Emmanouil et al., 2006	Pharmacol. Biochem. Behav. 84:313-320
Citalopram	5-HT reuptake inhibitor	Geller-Seifter conflict test	Rats	4		+	FR8, weak effect	Hascoët et al., 1992	J. Psychopharmacol. 6:129
Citalopram	5-HT reuptake inhibitor	Vogel conflict test	Rats	10	sc, 45	-		Broekkamp and Jenck, 1989	Behavioural Pharmacology of 5-HT, pp. 321-335
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	3-10	sc, 60	+	Inescapable electric footshock of 2.5 mA	Hashimoto et al., 1996	Psychopharmacology 123:182-186
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (150-220g)	10-30	ip, 30	-		Griebel et al., 1994	Psychopharmacology 113:463-470
Citalopram	5-HT reuptake inhibitor	Light/dark test	Swiss mice (10-week-old)	1-30	ip, 30	-		Griebel et al., 1994	Psychopharmacology 113:463-470
Citalopram	5-HT reuptake inhibitor	Light/dark test	Lundbeck mice strain (30-35g)	0.61-6.1 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Citalopram	5-HT reuptake inhibitor	Free-exploration test	Swiss mice (10-week-old	30	ip, 30	-		Griebel et al., 1994	Psychopharmacology 113:463-470
Citalopram	5-HT reuptake inhibitor	Marble burying	Female MF1 mice (23-35g)	1-20	ip, 30	+		Njung'e and Handley, 1991	Pharmacol. Biochem. Behav. 38:63-67
Citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	1	sc	+		Winslow and Insel, 1991	Psychopharmacology 105:513-520
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-300g)	10	sc, 20	+	Inescapable footshock of 2.5 mA	Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-300g)	3-10	sc, 40	+		Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	10	ip, for 21 days (o.d.)	o		Harro et al., 1997	Naunyn Schmied. Arch. Pharmacol. 355:57-63
Citalopram	5-HT reuptake inhibitor	Light/dark test	Wistar rats (200-250g)	0.000025-0.00025 µmol/kg	sc, 30	-		Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Citalopram	5-HT reuptake inhibitor	Light/dark test	Wistar rats (200-250g)	0.025-0.25 µmol/kg	sc, 30	+		Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=1	sc, 30	+	Four 1.0 mV inescapable footshocks, each 10 s.	Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Rats	5-10	ip	-		Allikmets et al., 1995	Pharmacol. Toxicol. 76 (Suppl. 3):9
Citalopram	5-HT reuptake inhibitor	Exploration behavior	Female Wistar rats (200-250g)	10	ip, for 5 days	o		Matto et al., 1997	Neuropharmacology 36:389-396
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	10	ip, 60	o	Rats received inescapable electric footshocks (2.5 mA, 10 ms every 100 ms)	Cao and Rodgers, 1998	Psychopharmacology 139:185-194
Citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (180-200g)	3-10	ip, 60	+	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Rats	10		+	(1) Rats received a subchonic pretreatment with lithium; (2) potentiation	Muraki et al., 1998	Soc. Neurosci. Abstr. 24:1192
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Rats	10		+		Muraki et al., 1998	Soc. Neurosci. Abstr. 24:1192
Citalopram	5-HT reuptake inhibitor	Open-field	Female Wistar rats (250-350g)	10-15	ip, 30	-		Matto and Allikmets, 1999	Pharmacology 58:59-69
Citalopram	5-HT reuptake	Elevated	Wistar rats (200-300g)	5	ip, 30	o		Skrebuhhov	Med. Sci. Res. 27:277-280

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	inhibitor	plus-maze						a et al., 1999	
Citalopram	5-HT reuptake inhibitor	Schedule-induced polydipsia	Rats			+	The drug reversed polydipsia	Overshiner and Leander, 1999	Behav. Pharmacol. 10 (Suppl. 1):S69
Citalopram	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats	2,5	sc, 30	-		Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
Citalopram	5-HT reuptake inhibitor	Light/dark test	NMRI mice	49 µmol/kg/day	minipumps for 3 weeks	+	Social defeat-induced increase of anxiety in the light/dark test	Keeney and Hoog, 1999	Behav. Pharmacol. 10 (Suppl. 1):S52
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	10	sc, 60	+	Inescapable electric footshock for a total of 2,5 min (2,5 mA, 10 ms)	Hashimoto et al., 1999	Eur. J. Pharmacol. 378:23-30
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, 30	-		Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, for 3 weeks (o.d.)	+		Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	30	sc, 30	+	Electric footshock for 2.5 min (2.5 mA scrambled shock, 10-ms every 100 ms) was applied	Muraki et al., 1999	Eur. J. Pharmacol. 383:223-29
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	SHR rats (6-8-week-old)	10	ip, 60	-		Pollier et al., 2000	Neuropsychopharmacology 22:64-76
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (6-8-week-old)	1-10	ip, 60	o		Pollier et al., 2000	Neuropsychopharmacology 22:64-76
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Lewis rats (6-8-week-old)	10	ip, 60	-		Pollier et al., 2000	Neuropsychopharmacology 22:64-76
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, 30	-		Skrebuhhova-Malmros	Med. Sci. Res. 27:835-837

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								et al., 1999	
Citalopram	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-260g)	2.5	sc, 30	-	HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Citalopram	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	8-32	ip, 30	+	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344
Citalopram	5-HT reuptake inhibitor	Tonic immobility	Dunkin Hartley guinea-pigs (600-800g)	4-16	sc, 30	o		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
Citalopram	5-HT reuptake inhibitor	Acral lick dermatisis	Female and male dogs	0.5-1	po, for 8 weeks	+		Stein et al., 1998	Depress. Anxiety 8:39-42
Citalopram	5-HT reuptake inhibitor	DPAG stimulation	Sprague-Dawley rats	ED50=6.6	ip, 30	+		Hogg and Jessa, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S151
Citalopram	5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups	0.1-3	sc, 15	o		Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
Citalopram	5-HT reuptake inhibitor	Marble burying	ICR mice (28-40g)	5-15	ip, 20	+		Takeuchi et al., 2002	Jpn. J. Pharmacol. 90:197-200
Citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	0.5-2	sc, 30	+	Four footshocks of 1 mA were delivered	Sánchez et al., 2003	Psychopharmacology 167:353-362
Citalopram	5-HT reuptake inhibitor	Light/dark test	Mice derived from Bradford strain (30-35g)	0.13-2	sc, 30	o		Sánchez et al., 2003	Psychopharmacology 167:353-362
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (200-230g)	8	ip, 30	+	Electric shock of 0.5 mA/200 ms was applied on day 1	Sánchez et al., 2003	Pharmacol. Biochem. Behav. 75:903-907
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Rats	10		+		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37
Citalopram	5-HT reuptake inhibitor	Vogel conflict test	Rats	10		+		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		-		Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		-		Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	ED50=1.2	sc, 45	+	To elicit ultrasonic vocalizations, pups were placed on a 19°C surface for 4 min	Fish et al., 2004	J. Pharmacol. Exp. Ther. 308:474-480
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	3 µg/site	amygdala, 10	+	The drug reduced freezing 24 h after footshock	Inoue et al., 2004	Eur. J. Pharmacol. 497:311-316
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	3 µg/site	mediodorsal nucleus of the thalamus, 10	o	The drug did not reduce freezing 24 h after footshock	Inoue et al., 2004	Eur. J. Pharmacol. 497:311-316
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	3 µg/site	prefrontal cortex, 10	o	The drug did not reduce freezing 24 h after footshock	Inoue et al., 2004	Eur. J. Pharmacol. 497:311-316
Citalopram	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	5-40	ip, 30	o		Troelsen et al., 2005	Psychopharmacology 181:741-750
Citalopram	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	10	po, for 21 days, b.i.d. daily	o		Troelsen et al., 2005	Psychopharmacology 181:741-750
Citalopram	5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 8 day-old posthatch	1-5	ip, 15	o		Feltenstein et al., 2005	Psychopharmacology 181:153-159
Citalopram	5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 8 day-old posthatch	1-5	ip, o.d., for 3 days	o		Feltenstein et al., 2005	Psychopharmacology 181:153-159

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram	5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 8 day-old posthatch	1-5	ip, o.d., for 6 days	o		Feltenstein et al., 2005	Psychopharmacology 181:153-159
Citalopram	5-HT reuptake inhibitor	Nestlet shredding	NIH Swiss mice (28-32g)	3-10	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Citalopram	5-HT reuptake inhibitor	Marble burying	NIH Swiss mice (28-32g)	1-3	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-300g)	30	sc, 4h	+	Electric shocks of 0.2 mA/30s were applied	Izumi et al., 2006	Eur. J. Pharmacol. 534:129-132
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	10	sc, 4 h	+	Shocks of 2.5 mA/30 s were applied the day before	Inoue et al., 2006	Eur. J. Pharmacol. 540:91-95
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	10	sc, for 7 days, o.d.	+	Shocks of 2.5 mA/30 s were applied the day before	Inoue et al., 2006	Eur. J. Pharmacol. 540:91-95
Citalopram	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (260-280g)	ED50=6.6	ip, 30	+		Hogg et al., 2006	Neuropharmacology 51:141-145
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (350-400g)	10	ip, 60	-	Footshocks of 0.7 mA/0.5 s were delivered during conditioning	Burghardt et al., 2007	Biol. Psychiatry 62:1111-1118
Citalopram	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (234-354g)	10	ip, o.d. for 2 weeks	-		Tõnissar et al., 2008	Prog Neuropsychopharmacol Biol Psychiatry 32:164-177
Citalopram	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (234-354g)	10	ip, o.d. for 2 weeks	-	Animals were submitted to chonic variable stress for 20 days	Tõnissar et al., 2008	Prog Neuropsychopharmacol Biol Psychiatry 32:164-177
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	10-100	sc, 4h	+	Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Female and male CD rat pups (8-10-day-old, 17-30g)	0.3-30	ip, 30	+		Hodgson et al., 2008	Pharmacol. Biochem. Behav. 88:341-348
Citalopram	5-HT reuptake inhibitor	Elevated open-platform	ICR mice (6-8-week-old)	1-10	ip, 30	+		Miyata et al., 2007	J. Pharmacol. Sci. 105:272-278
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-350g)	30	ip, 4 h	+	(1) The drug reduced freezing when tested one but not 14 days after footshock; (2) Shocks of 2.5 mA/30 s were applied	Nishikawa et al., 2007	Eur. Neuropsychopharmacol. 17:643-450
Citalopram	5-HT reuptake inhibitor	Open-field	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207
Citalopram	5-HT reuptake inhibitor	Novelty-suppressed feeding	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207
Citalopram	5-HT reuptake inhibitor	Shock escape test	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-	Shocks of 0.2 mA/10 s were applied	Ansorge et al., 2008	J. Neurosci. 28:199-207
Citalopram	5-HT reuptake inhibitor	Light/dark test	Mice	10		o		Koslovskii et al., 2008	Eksp. Klin. Farmakol. 71:6-10
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-320g)	10	sc, 60	+	(1) the drug decreased freezing 1, but not 3, 7 or 11 days after fear conditioning; (2) Shock of 2.5 mA/30 s were	Hashimoto et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:113-117

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							applied		
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-320g)	10	sc, 7 days, b.i.d.	+	(1) the drug decreased freezing 11 days after fear conditioning; (2) Shock of 2.5 mA/30 s were applied	Hashimoto et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:113-117
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-320g)	10	sc	+	(1) the drug decreased freezing when given before or after fear conditioning, and before+after fear conditioning; (2) Shock of 2.5 mA/30 s were applied	Hashimoto et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:113-117
Citalopram	5-HT reuptake inhibitor	Marble burying	NMRI mice (20-22g)	2.5-40	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
Citalopram	5-HT reuptake inhibitor	Open-field	BALB/c mice (20-30g, 2-3-month-old)	3-30	ip, 30	o		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551
Citalopram	5-HT reuptake inhibitor	Light/dark test	BALB/c mice (20-30g, 2-3-month-old)	3	ip, 30	-		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551
Citalopram	5-HT reuptake inhibitor	Social interaction	Flingers sensitive line rats (80-day-old)	10	ip, b.i.d. for 14 days	+		Walker et al., 2009	J. Pharmacol. Exp. Ther. 328:900-911
Citalopram	5-HT reuptake inhibitor	Marble burying	CD1 mice (25-30g)	7.5-60	po, 60	+		Kobayashi et al., 2008	Psychopharmacology 197:567-580
Citalopram	5-HT reuptake inhibitor	Social interaction	Mongolian gerbils (50-70g)	0.63-10	ip, 30	-		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-260g)	2.5-10	ip, 30	-		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
Citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (225-250g)	10	ip, 30	+		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
Citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Syrian hamsters (*M. auratus*, 3-6-month-old)	10	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
Citalopram	5-HT reuptake inhibitor	T-tube	Syrian hamsters (*M. auratus*, 3-6-month-old)	10	ip, 30	-	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
Citalopram	5-HT reuptake inhibitor	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	10	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
Citalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-350g)	3-10	sc, 60	+	Shocks of 2.5 mA/30 s were applied the day before	Takamura et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 39:107-111
Citalopram+8-OH-DPAT (0.03-1 mg/kg)	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram+8-OH-DPAT (0.03-1 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram+buspirone (12.5 mg/kg)	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram+buspirone (12.5 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram+diazepam (3-10 mg/kg)	5-HT reuptake inhibitor	Open-field	BALB/c mice (20-30g, 2-3-month-old)	30	ip, 30	(o)		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551
Citalopram+diazepam (3-10 mg/kg)	5-HT reuptake inhibitor	Light/dark test	BALB/c mice (20-30g, 2-3-month-old)	30	ip, 30	(o)		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551
Citalopram+DOI	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram+DOI	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram+DSP-4 (50 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, 30	(-)	No blockade of the anti-exploratory effects of DSP-4	Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
Citalopram+DSP-4 (50 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, for 3 weeks (o.d.)	(o)	Blockade of the anti-exploratory effects of DSP-4	Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
Citalopram+GR 127935 (4 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	3	sc, 4h	o	(1) No interaction; (2) Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178
Citalopram+GR 127935 (4 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	30	sc, 4h	+	(1) No interaction; (2) Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178
Citalopram+Lithium (for 7 days)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	3-30	sc, 30	(+)	(1) Lithium potentiated effects; (2) Electric footshock for 2.5 min (2.5 mA scrambled shock, 10-ms every 100 ms) was applied	Muraki et al., 1999	Eur. J. Pharmacol. 383:223-29
Citalopram+LY426965	5-HT reuptake inhibitor	Schedule-induced polydipsia	Rats			(+)	Potentiation of the effects of citalopram	Overshiner and Leander, 1999	Behav. Pharmacol. 10 (Suppl. 1):S69
Citalopram+m-CPBG	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram+m-CPBG	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Citalopram+olanzapine (0.5 mg/kg)	5-HT reuptake inhibitor	Light/dark test	Mice	10		o	No interaction	Koslovskii et al., 2008	Eksp. Klin. Farmakol. 71:6-10
Citalopram+Ondansetron (0,16 mg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats	2,5	sc, 30	-	No interaction	Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
Citalopram+Ondansetron (0.16 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-260g)	2.5	sc, 30	-	(1) No blockade of the effects of citalopram; (2) HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Citalopram+ondansetron (4 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, 30	(-)	Potentiation of the effects of citalopram	Skrebuhhova-Malmros et al., 1999	Med. Sci. Res. 27:835-837
Citalopram+PCPA (350 mg/kg for 3 days)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, 30	(-)	No blockade of the anti-exploratory effects of PCPA	Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
Citalopram+PCPA (350 mg/kg for 3 days)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300-350g)	5	ip, for 3 weeks (o.d.)	(o)	Blockade of the anti-exploratory effects of DSP-4	Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
Citalopram+prazosin (0.03 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-350g)	3	sc, 60	(o)	Shocks of 2.5 mA/30 s were applied the day before	Takamura et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 39:107-111
Citalopram+reboxetine (10 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	10	sc, for 7 days, o.d.	(o)	(1) Effects of citalopram were lost; (2) Shocks of 2.5 mA/30 s were applied the day before	Inoue et al., 2006	Eur. J. Pharmacol. 540:91-95
Citalopram+reboxetine (1-10 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	10	sc, 4 h	(o)	(1) Effects of citalopram were lost; (2) Shocks of 2.5 mA/30 s were applied the day before	Inoue et al., 2006	Eur. J. Pharmacol. 540:91-95
Citalopram+SB 206553 (0,63 mg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats	2,5	sc, 30	(o)	Blockade of the effects of	Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							citalopram		
Citalopram+SB 206553 (0.63 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-260g)	2.5	sc, 30	(o)	(1) Blockade of the effects of citalopram; (2) HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Citalopram+SB 242084 (0,4 mg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats	2,5	sc, 30	(o)	Blockade of the effects of citalopram	Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
Citalopram+SB 242084 (0.04 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-260g)	2.5	sc, 30	(o)	(1) Blockade of the effects of citalopram; (2) HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Citalopram+SB 242084 (0.2 mg/kg)	5-HT reuptake inhibitor	Condition ed fear	Sprague-Dawley rats (350-400g)	10	ip, 60	(o)	(1) SB 242084 blocked the effecs of citalopram; (2) Footshocks of 0.7 mA/0.5 s were delivered during conditioning	Burghardt et al., 2007	Biol. Psychiatry 62:1111-1118
Citalopram+tandospirone (0,3 mg/kg)	5-HT reuptake inhibitor	Condition ed fear	Sprague-Dawley rats (250-350g)	10	ip, 4 h	(+)	(1) The combination reduced freezing when tested 14 days after footshock; (2) Shocks of 2.5 mA/30 s were applied	Nishikawa et al., 2007	Eur. Neuropsychopharmacol. 17:643-450
Citalopram+tropisetron (0.1 mg/kg)	5-HT reuptake inhibitor	Condition ed fear	Sprague-Dawley rats (350-400g)	10	ip, 60	-	(1) Tropisetron did not affect the effecs of citalopram; (2) Footshocks of 0.7 mA/0.5 s were delivered during conditioning	Burghardt et al., 2007	Biol. Psychiatry 62:1111-1118

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Citalopram+Volinanserin (0,04 mg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats	2,5	sc, 30	-	No interaction	Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
Citalopram+Volinanserin (0.04 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-260g)	2.5	sc, 30	-	(1) No blockade of the effects of citalopram; (2) HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Citalopram+WAY 100635	5-HT reuptake inhibitor	Schedule-induced polydipsia	Rats			(+)	Potentiation of the effects of citalopram	Overshiner and Leander, 1999	Behav. Pharmacol. 10 (Suppl. 1):S69
Citalopram+WAY 100635 (0,16 mg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats	2,5	sc, 30	(-)	Potentiation of the effects of citalopram	Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
Citalopram+WAY 100635 (0.15 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	3	sc, 4h	(+)	(1) Synergistic effects; (2) Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178
Citalopram+WAY 100635 (0.15 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	30	sc, 4h	+	(1) No interaction; (2) Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178
Citalopram+WAY 100635 (0.15 mg/kg)+GR 127935 (4 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	3	sc, 4h	(+)	(1) Synergistic effects; (2) Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178
Citalopram+WAY 100635 (0.16 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-260g)	2.5	sc, 30	-	(1) No blockade of the effects of citalopram; (2) HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Clomipramine	5-HT reuptake inhibitor	Vogel conflict test	Rats	1-50	30	o		Schoenfeld, 1976	Science 192:801-803

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Clomipramine	5-HT reuptake inhibitor	Open-field	AB mice (4-6-week-old)	5	4 weeks in drinking water	o	Low active mice	Jähkel et al., 1994	Pharmacol. Biochem. Behav. 49:263-269
Clomipramine	5-HT reuptake inhibitor	Open-field	AB mice (4-6-week-old)	5	4 weeks in drinking water	o	High active mice	Jähkel et al., 1994	Pharmacol. Biochem. Behav. 49:263-269
Clomipramine	5-HT reuptake inhibitor	Four-arm non-elevated plus-maze	Rats		for 28 days	+	Antiobsessional effect	Kameda and Yadin, 1994	Soc. Neurosci. Abstr. 20:385
Clomipramine	5-HT reuptake inhibitor	Social interaction	Rats	3-10	ip, 30	o	Chonic and acute treatments	File, 1985	Neuropsychobiology 13:55-62
Clomipramine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	5	sc	+		Winslow and Insel, 1991	Psychopharmacology 105:513-520
Clomipramine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats	30	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Clomipramine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Adult rats	LED=10	ip	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
Clomipramine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (180-280g)	10-20	ip, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
Clomipramine	5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice		po	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Clomipramine	5-HT reuptake inhibitor	Stress-induced stretched approach posture	Wistar rats (180-220g)	10	ip, 30	+	Elicited by electrified prod	Molewijk et al., 1995	Psychopharmacology 117:32-40
Clomipramine	5-HT reuptake inhibitor	DPAG stimulation	Rats (250g)	15	ip, 30 to 120	+		Kiser et al., 1978	Pharmacol. Biochem. Behav. 9:27-31

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Clomipramine	5-HT reuptake inhibitor	Psychosocial stress	Tree shrews	50	po, for 30 days (o.d.)	+	Effects on risk assessment	Fuchs et al., 1996	Pharmacol. Biochem. Behav. 54:219-228
Clomipramine	5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups (5 day-old)	ED50=4.2	ip	+		Molewijk et al., 1996	Psychopharmacology 128:31-38
Clomipramine	5-HT reuptake inhibitor	Marble burying	ICR mice (20-30g)	60	po, 60	+		Ichimaru et al., 1998	Jpn. J. Pharmacol. 68:65-70
Clomipramine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (200-250g)	5	ip, for 21 days (o.d.)	+	Defensive reactions were abolished by fluoxetine	Vargas and Schenberg, 2001	Psychopharmacology 155:260-268
Clomipramine	5-HT reuptake inhibitor	Marble burying	NMRI mice (20-25g)	10-40	ip, 30	+		Millan et al., 2002	Neuropharmacology 42:677-684
Clomipramine	5-HT reuptake inhibitor	Obsessive-compulsive behavior	Female and male dogs	3	po, for 4 weeks	+		Hewson et al., 1998	J. Am. Vet. Med. Assoc. 213:1760-1766
Clomipramine	5-HT reuptake inhibitor	Obsessive-compulsive behavior	Female and male dogs	1-4	po, b.i.d. for 1 month	+		Seksel and Lindeman, 2001	Aust. Vet. J. 79:252-256
Clomipramine	5-HT reuptake inhibitor	Obsessive-compulsive behavior	Female and male cats	0.3	po, for 1 month	+		Seksel and Lindeman, 1998	Aust. Vet. J. 76:317-321
Clomipramine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	3-30	ip, 30	o		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
Clomipramine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	3-30	ip, 30	o		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
Clomipramine	5-HT reuptake inhibitor	Escape behavior in the elevated	Wistar rats (250-300g)	5-15	ip, o.d. for 3 weeks	o	Locomotor activity was impaired	Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		T-maze							
Clomipramine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (200-300g)	3-30	ip, 30	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Clomipramine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (200-300g)	30	ip, o.d. for 3 weeks	+	The drug increased the latency to leave the open arm	Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Clomipramine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-300g)	3-30	ip, 30	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Clomipramine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-300g)	30	ip, o.d. for 3 weeks	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Clomipramine	5-HT reuptake inhibitor	Nestlet shredding	NIH Swiss mice (28-32g)	10-30	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Clomipramine	5-HT reuptake inhibitor	Marble burying	NIH Swiss mice (28-32g)	30	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Clomipramine	5-HT reuptake inhibitor	Elevated open-platform	ICR mice (6-8-week-old)	0.1-10	ip, 30	o		Miyata et al., 2007	J. Pharmacol. Sci. 105:272-278
Clomipramine	5-HT reuptake inhibitor	Open-field	Female and male 129S6/SvEv mice (3-3,5-month-old)	20	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207
Clomipramine	5-HT reuptake inhibitor	Elevated plus-maze	Female and male 129S6/SvEv mice (3-3,5-month-old)	20	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Clomipramine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Female and male 129S6/SvEv mice (3-3,5-month-old)	20	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207
Clomipramine	5-HT reuptake inhibitor	Shock escape test	Female and male 129S6/SvEv mice (3-3,5-month-old)	20	ip, between PN 4 and 21, o.d.	-	Shocks of 0.2 mA/10 s were applied	Ansorge et al., 2008	J. Neurosci. 28:199-207
Clomipramine	5-HT reuptake inhibitor	Ultrasound-induced defensive behaviors	Lister hooded rats (250-350g)	10	ip, 30	+	Rats received ultrasound pulse of 65, 72 and 75 dB	Graham et al., 1997	Br. J. Pharmacol. 120 (Suppl. 1):256P
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Geller-Seifter conflict test	Lister Hooded rats (120-140g)	1.25-5	ip, 30	o	VI30	Moore et al., 1994	Behav. Pharmacol. 5:196-202
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (260-320g)	2.5-5	ip, 60	+	FI60/FR1	Wiley et al., 1993	Pharmacol. Biochem. Behav. 45:263-267
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Geller-Seifter conflict test	Lister Hooded rats (120-140g)	1.25-5	ip, 30	+	FR10	Moore et al., 1994	Behav. Pharmacol. 5:196-202
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Conflict test	White Carneau pigeons	0.01-0.1	im, 15	+	FR30/FR30	Benvenga and Leander, 1995	Psychopharmacology 119:133-138
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Light/dark test	Mice			o		Sánchez and Arnt, 1995	Soc. Neurosci. Abstr. 21:2107
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Light/dark test	BKW mice (30-35g)	0.05-5	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Social interaction	Lister hooded rats (250-300g)	0.01-1	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Ultrasonic distress vocalizations	Wistar rats	ED50=1	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Ultrasonic distress vocalizations	Mice			+		Sánchez and Arnt, 1995	Soc. Neurosci. Abstr. 21:2107
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Conditioned fear	Sprague-Dawley rats	10	po, 60	+	Electric footshock-induced freezing	Ohno et al., 1996	Soc. Neurosci. Abstr. 22:480
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Geller-Seifter conflict test	Ovariectomized female Long-Evans CD	6.25-25	po, 60	o	multi VI 2-minute (food) FR1 (food+shock)	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Conflict test	White Carneau pigeons	0.1-10	im, 15	o	1.5 to 5.5 mA, 250 msec	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (220-430g)	ED50=0.7	sc, 30	+	Five shocks of 1.8 mA for 0.3 s, separated by 20 s	Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Open-field	Wistar rats (175-225g)	1-3	ip, 0	+	Latency to eat in the open-field was reduced	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Conditioned fear	Sprague-Dawley rats (175-255g)	10	po, 60	+	Animals were subjected to a 2 mA of scramble footshock, 30 min)	Ishida-Tokuda et al., 1996	Jpn. J. Pharmacol. 72:119-126
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Conflict test	Carneaux pigeons (500-600g)	0.04-2.5	im, 5	o		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Vogel conflict test	Wistar rats (220-240g)	0.63-5	sc, 30	+		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Ultrasonic distress vocalizations	Wistar rats (220-240g)	0.04-10	sc, 30	+		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Elevated plus-maze	Wistar rats (220-240g)	0.01-40	sc, 30	o		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Social interaction	Wistar rats (220-240g)	0.04-2.5	sc, 30	o	Area highly illuminated (300 lux)	Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Isolation-induced aggression	CD1 mice (22-25g)	0.63-10	sc, 30	+		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Distress vocalizations	Female and male Sprague-Dawley rat pups (9-11 day-old)	20-40	ip, 30	+		Kehne et al., 2000	Neuropharmacology 39:1357-67
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Elevated plus-maze	Albino Alderly Park mice (8-10-week-old)	0.1-0.4	ip, 30	-	Slight anxiogenic-like activity was seen	Manzanequ e et al., 2002	Prog. Neuropsychopharmacol. Biol. Psychiatry 26:349-355
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Elevated plus-maze	Isolated albino Alderly Park mice (8-10-week-old)	0.2	ip, 30	-	Slight anxiogenic-like activity was seen	Manzanequ e et al., 2002	Prog. Neuropsychopharmacol. Biol. Psychiatry 26:349-355
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Light/dark test	Mouse	0.015		+		Nic Dhonnchad ha et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S63
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Elevated plus-maze	Mouse	0.125-0.25		+		Nic Dhonnchad ha et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S63
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Holeboard	CF1 mice (30-40g)	0.1	sc, 30	+		Costa-Campos et al., 2004	Pharmacol. Biochem. Behav. 77:481-489
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Light/dark test	CF1 mice (30-40g)	0.1	sc, 30	+		Costa-Campos et al., 2004	Pharmacol. Biochem. Behav. 77:481-489
Clozapine	Non-selective 5-HT_{2A2C} antagonist	Marble burying	NMRI mice (20-22g)	0.16-10	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Passive-avoidance test	Wistar rats (175-220g)	0.125-2	ip, 30	o		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Social interaction	Sprague-Dawley rats (180-200g)	1	ip, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Passive-avoidance test	Sprague-Dawley rats (275-325g)	20	ip, 30	+	Shocks of 0.8 mA/1 s were applied	Mead et al., 2008	Pharmaco. Biochem Behav. 90:551-562
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Conditioned place aversion	Sprague-Dawley rats (275-325g)	20	ip, 30	+	Shocks of 0.8 mA/1 s were applied	Mead et al., 2008	Pharmaco. Biochem Behav. 90:551-562
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Conditioned avoidance	Sprague-Dawley rats (275-325g)	20	ip, for 7 days	+	Shocks of 0.8 mA/5 s were applied	Mead et al., 2008	Pharmaco. Biochem Behav. 90:551-562
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Conditioned fear	Sprague-Dawley rats (225-250g)	5	sc, 30	o	(1) Shocks of 1.5 mA were applied; (2) Ketamine was given before FC; (3) Behavior was measured during test trial	Pietersen et al., 2007	PLoS ONE 12:e1360
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Open-field	Wistar-Kyoto rats (34-day-old)	10	ip, for 2 weeks	-		Mc Fie et al., 2012	Brain Res. 1467:91-103
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Open-field	SHR rats (34-day-old)	10	ip, for 2 weeks	o		Mc Fie et al., 2012	Brain Res. 1467:91-103
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Open-field	Sprague-Dawley rats (34-day-old)	10	ip, for 2 weeks	o		Mc Fie et al., 2012	Brain Res. 1467:91-103
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Wistar-Kyoto rats (34-day-old)	10	ip, for 2 weeks	-		Mc Fie et al., 2012	Brain Res. 1467:91-103
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	SHR rats (34-day-old)	10	ip, for 2 weeks	+		Mc Fie et al., 2012	Brain Res. 1467:91-103
Clozapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Sprague-Dawley rats (34-day-old)	10	ip, for 2 weeks	o		Mc Fie et al., 2012	Brain Res. 1467:91-103
Clozapine+WAY 100635 (0.63 mg/kg)	Non selective 5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar rats (220-240g)	5	sc, 30	+	No antagonism of the effects of clozapine	Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound **10**	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (250-300g)	0.1-0.3	ip, 60	+	Electric shock of 0.5 mA/2 s were delivered	Bojarski et al., 2006	Bioorg. Med. Chem. 14:1391-1402
Compound **12a**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **12b**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>10	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **12c**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED<5	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **12c**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **12d**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED<2.5	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **12d**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED<1	ip, 30	+		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **12e**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED<10	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **13**	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Rats	30	ip	+	Sedation at 30 mg/kg	Abou-Gharbia et al., 1999	J. Biol. Chem. 42:5077-94
Compound **14a**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=20	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **14b**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **14c**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=10	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **14f**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=1	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **14k**	5-HT_{2C} agonist	Schedule-induced	Female RORO rats	MED=10	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		polydipsia							
Compound **14m**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=1	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **15**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=1	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound 15	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2012	Arch. Pharm. Res. 35:1143-1152
Compound **16**	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (250-300g)	5	ip, 60	+	Electric shock of 0.5 mA/2 s were delivered	Bojarski et al., 2006	Bioorg. Med. Chem. 14:1391-1402
Compound 16	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2012	Arch. Pharm. Res. 35:1143-1152
Compound 17	5-HT_{1A} agonist	Four-plate test	Swiss mice (24-28g)	5	ip, 30	+		Chłoń-Rzepa et al., 2007	Bioorg. Med. Chem. 15:5239-5250
Compound 17	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2012	Arch. Pharm. Res. 35:1143-1152
Compound 18	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2012	Arch. Pharm. Res. 35:1143-1152
Compound 19	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2012	Arch. Pharm. Res. 35:1143-1152
Compound 1c	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2009	Bioorg. Med. Chem. 17:1890-1897
Compound 1c+WAY 100635 (0.5 mg/kg)	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	(o)		Khatri et al., 2009	Bioorg. Med. Chem. 17:1890-1897
Compound **2**	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (250-300g)	0.31-2.5	ip, 30	o		Bojarski et al., 2002	Bioorg. Med. Chem. 10:3817-3827
Compound **2**	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Wistar rats (250-300g)	0.31-2.5	ip, 30	+	Electric shock of 0.5 mA	Bojarski et al., 2002	Bioorg. Med. Chem. 10:3817-3827
Compound **20**	5-HT_{1A} partial	Vogel	Rats	5-10	60	+	Shocks of 0.5	Jurczyk et	J. Med. Chem. 47:2659-2666

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	agonist	conflict test					mA were applied	al., 2004	
Compound 20	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2012	Arch. Pharm. Res. 35:1143-1152
Compound **20b**	5-HT_3 agonist	Light/dark test	CD1 mice (20-25g)	0.1-100 µg	po, 45	o		Campiani et al., 1999	J. Biol. Chem. 42:4362-79
Compound **24**	5-HT_{1A} post-synaptic agonist	Vogel conflict test	Wistar rats (250-300g)	0.1-0.3	ip, 60	o	Electric shock of 0.5 mA/2 s were delivered	Bojarski et al., 2006	Bioorg. Med. Chem. 14:1391-1402
Compound **37**	Mixed 5-HT_{1A} agonist/antagonist	Ultrasonic distress vocalizations	Wistar rats	0.1-0.5	sc	+		Peglion, 2002	J. Biol. Chem. 45:165-176
Compound **37**	Mixed 5-HT_{1A} agonist/antagonist	Social interaction	Sprague-Dawley rats	0.1-0.5	sc	+		Peglion, 2002	J. Biol. Chem. 45:165-176
Compound **3b**	5-HT_3 agonist	Light/dark test	CD1 mice (20-25g)	0.1-100 µg	po, 45	o		Campiani et al., 1999	J. Biol. Chem. 42:4362-79
Compound **41**	Mixed 5-HT_{1A} agonist/antagonist	Ultrasonic distress vocalizations	Wistar rats			+		Peglion, 2002	J. Biol. Chem. 45:165-176
Compound **41**	Mixed 5-HT_{1A} agonist/antagonist	Social interaction	Sprague-Dawley rats			+		Peglion, 2002	J. Biol. Chem. 45:165-176
Compound 4c	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	+		Khatri et al., 2009	Bioorg. Med. Chem. 17:1890-1897
Compound 4c+WAY 100635 (0.5 mg/kg)	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	3	ip, 60	(o)		Khatri et al., 2009	Bioorg. Med. Chem. 17:1890-1897
Compound **5**	5-HT_{2C} agonist	Shock-induced aggression	Mice	3-30		+		Ennis et al., 2003	Bioorg. Med. Chem. 13:2369-2372
Compound **5**	5-$HT_{1A/7}$ agonist	Four-plate test	Swiss mice (24-28g)	5-10	ip, 30	+	The drug simultaneously reduced locomotor activity	Paluchowska et al., 2007	Bioorg. Med. Chem. 15:7116-7125

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound **5f**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=3	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **5l**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=10	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **5n**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=3	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **5o**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=3	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **5q**	5-HT_{2C} agonist	Schedule-induced polydipsia	Female RORO rats	MED=3	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Compound **6**	5-$HT_{1A/7}$ agonist	Four-plate test	Swiss mice (24-28g)	1.25-5	ip, 30	o		Paluchowska et al., 2007	Bioorg. Med. Chem. 15:7116-7125
Compound **7**	5-$HT_{1A/7}$ agonist	Four-plate test	Swiss mice (24-28g)	5	ip, 30	+	The drug simultaneously reduced locomotor activity	Paluchowska et al., 2007	Bioorg. Med. Chem. 15:7116-7125
Compound **70**	Mixed 5-HT_{1A} agonist/antagonist	Ultrasonic distress vocalizations	Wistar rats			+		Peglion, 2002	J. Biol. Chem. 45:165-176
Compound **70**	Mixed 5-HT_{1A} agonist/antagonist	Social interaction	Sprague-Dawley rats			+		Peglion, 2002	J. Biol. Chem. 45:165-176
Compound **8**	5-$HT_{1A/7}$ agonist	Four-plate test	Swiss mice (24-28g)	0.3-5	ip, 30	o		Paluchowska et al., 2007	Bioorg. Med. Chem. 15:7116-7125
Compound **8a**	5-HT_3 partial agonist	Light/dark test	Swiss mice (10-week-old)	0.001-1	po, 30	+		Prunier et al., 1997	J. Med. Chem. 40:1808-1819
Compound **9**	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Rats	3-30	ip	+	Sedation at 30 mg/kg	Abou-Gharbia et al., 1999	J. Biol. Chem. 42:5077-94

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound **9**	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (250-300g)	0.3	ip, 60	+	Electric shock of 0.5 mA/2 s were delivered	Bojarski et al., 2006	Bioorg. Med. Chem. 14:1391-1402
Compound **9a**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9a**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED=3	ip, 30	+		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9a´**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9a´**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9b**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9b**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9b´**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9c**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>10	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9c**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9c´**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9c´**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9d**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=10	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9d**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9d´**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9e**	5-HT_7	Vogel	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6	Volk et al.,	J. Med. Chem. 51:2522-2532

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	conflict test					mA/0.6 s were applied	2008	
Compound **9e´**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9e´**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9f**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=10	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9g**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=10	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9g´**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9h**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED<5	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9h**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9h´**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED<5	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9h´**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED<1	ip, 30	+		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9i**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9j**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=10	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9j**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9k**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9l**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound **9m**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9n**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=10	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9n**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED<1	ip, 30	+		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9o**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9p**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9q**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9r**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9s**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=20	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9t**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=20	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9t**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9u**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9u**	5-HT_7 antagonist	Light/dark test	NMRI mice (25-33g)	MED>10	ip, 30	o		Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9v**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9x**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
Compound **9y**	5-HT_7	Vogel	Wistar rats (160-180g)	MED>20	ip, 30	o	Shocks of 0.6	Volk et al.,	J. Med. Chem. 51:2522-2532

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	conflict test					mA/0.6 s were applied	2008	
Compound **9z**	5-HT_7 antagonist	Vogel conflict test	Wistar rats (160-180g)	MED=20	ip, 30	+	Shocks of 0.6 mA/0.6 s were applied	Volk et al., 2008	J. Med. Chem. 51:2522-2532
CP-135,807	5-HT_{1D} agonist	Conflict test	Carneau pigeons	0.01-1	im, 30	o	FR30	Mansbach et al., 1996	Psychopharmacology 128:313-319
CP-809101	5-HT_{2C} receptor agonist	Conditioned fear	Fisher rats (250-300g)	6 mM/1 µl/side	dorsal striatum, 15	-	(1) Shocks of 1.5 mA/5 s were delivered the day before; (2) The drug affected escape behavior	Strong et al., 2011	Neuroscience 197:132-144
CP-809101	5-HT_{2C} receptor agonist	Conditioned fear	Fisher rats (250-300g)	6 mM/0.5 µl/side	basolateral amygdala, 15	-	(1) Shocks of 1.5 mA/5 s were delivered the day before; (2) The drug increased expression of fear	Strong et al., 2011	Neuroscience 197:132-144
CP-809101	5-HT_{2C} receptor agonist	Conditioned fear	Fisher rats (220-280g)	2 mM/1 µl	basolateral amygdala, 15	-	Shocks of 0.6 mA were delivered	Greenwood et al., 2012	PLoS ONE 7:e46118
CP-809101	5-HT_{2C} receptor agonist	Conditioned fear	Fisher rats (220-280g)	2 mM/1 µl	dorsal striatum, 15	o	Shocks of 0.6 mA were delivered	Greenwood et al., 2012	PLoS ONE 7:e46118
CP-809101+wheel running (6 weeks)	5-HT_{2C} receptor agonist	Conditioned fear	Fisher rats (220-280g)	2 mM/1 µl	basolateral amygdala, 15	(o)	Shocks of 0.6 mA were delivered	Greenwood et al., 2012	PLoS ONE 7:e46118
CP-809101+wheel running (6 weeks)	5-HT_{2C} receptor agonist	Conditioned fear	Fisher rats (220-280g)	2 mM/1 µl	dorsal striatum, 15	o	(1) No interaction; (2) Shocks of 0.6 mA were delivered	Greenwood et al., 2012	PLoS ONE 7:e46118
CP-93,393	5-HT_{1A} agonist	Vogel conflict test	Rats	MED=1.78		+		Seymour et al., 1995	Soc. Neurosci. Abstr. 21:2106

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP-94,253	5-HT_{1B} agonist	Agonistic behavior	BKW mice (25-35g)	2.5-10	sc, 30	o		Bell et al., 1995	Pharmacol. Biochem. Behav. 52:7-16
CP-94,253	5-HT_{1B} agonist	Conflict test	Carneau pigeons	1-10	im, 30	o	FR30	Mansbach et al., 1996	Psychopharmacology 128:313-319
CP-94,253	5-HT_{1B} agonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	1-3	sc, 30	+		Fish et al., 2000	Psychopharmacology 149:277-85
CP-94,253	5-HT_{1B} agonist	Elevated plus-maze	Wistar rats (250-300g)	3-5.6	sc, 25	-		Lin and Parsons, 2002	Pharmacol. Biochem. Behav. 71:581-587
CP-94,253	5-HT_{1B} agonist	Vogel conflict test	Wistar rats (250-300g)	1.25-5	ip, 30	+	Shocks of 0.5 mA were applied	Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
CP-94,253	5-HT_{1B} agonist	Elevated plus-maze	Wistar rats (250-300g)	1.25-2.5	ip, 30	+		Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
CP-94,253	5-HT_{1B} agonist	Four-plate test	Swiss mice (24-28g)	5-10	ip, 30	+		Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
CP-94,253	5-HT_{1B} agonist	Vogel conflict test	Wistar rats (240-260g)	2.5	ip, 30	+	Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
CP-94,253	5-HT_{1B} agonist	Open-field	Sprague-Dawley rats (275-350g)	1	ip, 30	o		McDevitt et al., 2011	Biol. Psychiatry 69:780-787
CP-94,253	5-HT_{1B} agonist	Conditioned fear	Sprague-Dawley rats (275-350g)	1	ip, 30	+		McDevitt et al., 2011	Biol. Psychiatry 69:780-787
CP-94,253+flumazenil (10 mg/kg)	5-HT_{1B} agonist	Vogel conflict test	Wistar rats (240-260g)	2.5	ip, 30	+	(1) No antagonism; (2) Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
CP-94,253+GR 127935 (0,1 mg/kg)	5-HT_{1B} agonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	1-3	sc, 30	(o)	Antagonism of the effects of CP-94,253	Fish et al., 2000	Psychopharmacology 149:277-85
CP-94,253+GR 127935 (3-10	5-HT_{1B} agonist	Elevated plus-maze	Wistar rats (250-300g)	3-5.6	sc, 25	(o)	Blockade of the anxiogenic-like	Lin and Parsons,	Pharmacol. Biochem. Behav. 71:581-587

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mg/kg)							effects	2002	
CP-94,253+PCA (10 mg/kg, twice)	5-HT_{1B} agonist	Vogel conflict test	Wistar rats (240-260g)	2.5	ip, 30	+	(1) No antagonism; (2) Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
CSP-2503	5-HT_{1A} agonist/5-$HT_{2A/3}$ antagonist	Light/dark test	Swiss mice	5-20	sc, 30	+		López-Rodríguez et al., 2005	J. Med. Chem. 48:2548-2558
CSP-2503	5-HT_{1A} agonist/5-$HT_{2A/3}$ antagonist	Light/dark test	Swiss mice (24-30g)	2.5-20	sc, 30	+		Delgado et al., 2005	Eur. J. Pharmacol. 511:9-19
CSP-2503	5-HT_{1A} agonist/5-$HT_{2A/3}$ antagonist	Social interaction	Swiss mice (24-30g)	10-20	sc, 30	+		Delgado et al., 2005	Eur. J. Pharmacol. 511:9-19
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Four-plate test	Mice	0.125-1	ip	o		Bourin et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S276
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Light/dark test	Mice	0.375	ip	+	Weak effect	Bourin et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S276
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Mice	0.125-1	ip	o	Weak effect	Bourin et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S276
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Mice	0.25-0.5	ip, for 10 days (b.i.d.)	+		Bourin et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S276
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Light/dark test	Swiss mice (4-week-old)	0.375	ip, 30	+		Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Light/dark test	Swiss mice (4-week-old)	0.125-1	ip, for 10 days (b.i.d.)	o		Bourin et al., 2001	Behav. Brain Res. 124:87-95

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.125-1	ip, 30	o		Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyamemazine	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.25-1	ip, for 10 days (b.i.d.)	+		Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyamemazine+2-Me-5-HT (1 mg/kg)	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.125-0.5	ip, for 10 days (b.i.d.)	+	No alteration of the anxiolytic-like effects of cyamemazine	Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyamemazine+D-Cloza (1 mg/kg)	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.125-0.5	ip, for 10 days (b.i.d.)	(+)	Potentiation of the anxiolytic-like effects of cyamemazine	Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyamemazine+DOI (0.25 mg/kg)	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.125-0.5	ip, for 10 days (b.i.d.)	(o)	Antagonism of the anxiolytic-like effects of cyamemazine	Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyamemazine+mCPP (1 mg/kg)	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.125-0.5	ip, for 10 days (b.i.d.)	(o)	Antagonism of the anxiolytic-like effects of cyamemazine	Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyamemazine+ondansetron (0.01 mg/kg)	Non-selective 5-$HT_{2C/3}$ antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.125-0.5	ip, for 10 days (b.i.d.)	+	No alteration of the anxiolytic-like effects of cyamemazine	Bourin et al., 2001	Behav. Brain Res. 124:87-95
Cyanopindolol	Non selective antagonist	Geller-Seifter conflict test	Rats	6	sc, 30	o		Kennett et al., 1992	Psychopharmacology 107:379-384
Cyanopindolol	Non selective antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	6	sc, 30	o	VI30/FR5 0.75 mA	Kennett et al., 1994	Psychopharmacology 114:90-96
Cyanopindolol	Non selective antagonist	Vogel conflict test	Wistar rats (180-220g)	0.5-2	ip, 60	+	0.5 mA	Przegalinski et al., 1994	Pharmacol. Biochem. Behav. 47:873-878
Cyanopindolol	Non selective antagonist	Vogel conflict test	Wistar rats (230-270g)	0.3-10 µg	dorsal hippocampus, 10	+	0.5 mA	Przegalinski et al., 1995	Neuropharmacology 34:1211-1217

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cyanopindolol	Non selective antagonist	Social interaction	Sprague-Dawley rats (200-250g)	6	sc, 40	o		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Cyanopindolol	Non selective antagonist	Social interaction	Sprague-Dawley rats (250-320g)	3-6	sc, 30	o		Kennett, 1992	Psychopharmacology 107:379-384
Cyanopindolol	Non selective antagonist	Open-field	Rats (180-220g)	0.5 µg	nucleus accumbens, 5	-		Plaznik et al., 1991	Pharmacol. Biochem. Behav. 39:43-48
Cyproheptadine	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	10	po, 25	o		Deacon and Gardner, 1986	Br. J. Pharmacol. 88:330P
Cyproheptadine	5-HT_2 antagonist	Geller-Seifter conflict test	Wistar rats (198-260g)	5.6	ip, 30	+	FI1/FR5	Graeff, 1974	J. Pharmacol. Exp. Ther. 189:344-350
Cyproheptadine	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	5-40	po	+	FR10/FR30	Sepinwall and Cook, 1980	Fed. Proc. 39:3024-3031
Cyproheptadine	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.1-1	ip	+	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
Cyproheptadine	5-HT_2 antagonist	Vogel conflict test	Sprague-Dawley rats (200g)	1-18	ip, 30	o	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
Cyproheptadine	5-HT_2 antagonist	Vogel conflict test	Wistar rats (220g)	1-10	ip, 30	o	Modified Vogel test	Petersen and Lassen, 1981	Psychopharmacology 75:236-239
Cyproheptadine	5-HT_2 antagonist	Vogel conflict test	Rats	3	30	+		Schoenfeld, 1976	Science 192:801-803
Cyproheptadine	5-HT_2 antagonist	Conflict test	White Carneau Pigeons (480-528g)	0.01	im, 0	o	FR30	Witkin et al., 1987	J. Pharmacol. Exp. Ther. 243:970-977
Cyproheptadine	5-HT_2 antagonist	Conflict test	Squirrel monkeys (550-900g)	0.1-1	im	+	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cyproheptadine	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (150-200g)	0.5	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Cyproheptadine	5-HT_2 antagonist	Elevated plus-maze	Lister hooded rats (180-280g)	1-5	ip, 30	o	10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210
Cyproheptadine	5-HT_2 antagonist	Light/dark test	Mice (25-35g)	0.05-10	ip, 40	-	Sedation and Asymmetric compartments	Costall et al., 1988	J. Pharm. Pharmacol. 40:494-500
Cyproheptadine	5-HT_2 antagonist	Light/dark test	Wistar rats (150-200g)	0.5	30	-	Asymmetric compartments and weak effect	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Cyproheptadine	5-HT_2 antagonist	Holeboard	Wistar rats (150-200g)	0.5	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Cyproheptadine	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (200-250g)	2	sc, 40	o		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Cyproheptadine	5-HT_2 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	5	ip, 15	o		Davis et al., 1988	In: The Psychology of Learning and Motivation, pp. 263-305
Cyproheptadine	5-HT_2 antagonist	Shock-probe burying test	Wistar rats (250-280g)	2.5-40	sc, 60	+		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Cyproheptadine	5-HT_2 antagonist	Marble burying	Female MF1 mice (23-35g)	1-5	ip, 30	+		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Cyproheptadine	5-HT_2 antagonist	Stress-induced defecation	Rats			o		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Cyproheptadine	5-HT_2 antagonist	Conditioned emotional response	Rats	10		o		Gardner, 1985	Drug. Dev. Res. 5:185-193
Cyproheptadine	5-HT_2 antagonist	DPAG stimulation	Rats	3	ip, 30	-		Clarke and File, 1982	Prog. Neuropsychopharmacol. Biol. Psychiatry 6:27-35
Cyproheptadine	5-HT_2 antagonist	Elevated plus-maze	CFLP mice (25-28g)	5	ip, 30	o		Telegdy and Schally, 2012	Behav. Brain Res. 233:232-236

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cyproheptadine+MZ-4-71 (0.5 µg/2 µl icv)	5-HT_2 antagonist	Elevated plus-maze	CFLP mice (25-28g)	5	ip, 30	(o)	MZ-4-71 is GH antagonist	Telegdy and Schally, 2012	Behav. Brain Res. 233:232-236
DAIZAC	5-HT_3 antagonist	Elevated plus-maze	ICR mice (30g)	0.5	ip, 20 & 30	+		Zhang et al., 2001	Pharmacol. Biochem. Behav. 69:571-578
DAIZAC	5-HT_3 antagonist	Elevated plus-maze	ICR mice (30g)	0.05-5	ip, 20	+		Zhang et al., 2001	Pharmacol. Biochem. Behav. 69:571-578
d-AP159	5-HT_{1A} agonist	Vogel conflict test	Wistar rats (170-200g)	3-10	po,	+	Modified Vogel test	Nagatani et al., 1991	Psychopharmacology 104:432-438
d-AP159	5-HT_{1A} agonist	Vogel conflict test	Wistar rats (180-200g)	10-60	po, 60	+	Modified Vogel test	Takao et al., 1992	Pharmacol. Biochem. Behav. 43:503-508
DAU 6215	5-HT_3 antagonist	Geller-Seifter conflict test	Wistar rats	0.01-1	po, 60	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Elevated plus-maze	Wistar rats	0.015-0.15	sc, 25	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Elevated plus-maze	Wistar rats	0.015-0.15	sc, 45	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Light/dark test	CD1 mice 20-22g)	0.01-1	ip, 45	+	Asymmetric compartments	Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Open-field	CD rats 175-220g)	0.01-10	po, 30	o		Rizzi et al., 1993	Arzneimittelforschung 43:1033-1041
DAU 6215	5-HT_3 antagonist	Staircase test	NMRI mice	0.001-0.1	ip, 45	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Four-plate test	NMRI mice	0.01-0.1	ip, 45	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Agonistic behavior	Cynomolgus monkeys	0.001-0.01	po, for 5 h	+		Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Stress-induced hyperthermia	CD1 mice	0.001-0.1	ip, 45	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
DAU 6215	5-HT_3 antagonist	Conditioned place aversion	CD-COBS rats	0.015-0.3	sc, 30	+		Borsini et al., 1993	Pharmacol. Res. 27:151-164

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DAU 6215	5-HT_3 antagonist	Stress-suppressed feeding	Wistar rats	0.001-0.1	ip, 30	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
D-Cloza	5-$HT_{2C/1B}$ partial agonist	Elevated plus-maze	Swiss mice (4-week-old)	1	ip, 45	o		Bourin et al., 2001	Behav. Brain Res. 124:87-95
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Vogel conflict test	Rats			+		Gacsályi et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 142
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Vogel conflict test	Long-Evans rats	1 and 10 mg/kg	po, 30	+	Animals received an electric shock of 2.0 mA, 1 s	Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Marble burying	NMRI mice	10	po, 60	+		Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Light/dark test	NMRI mice	3	sc, 20	+		Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Social interaction	Wistar rats	0.7	ip, 30	+	Rats were tested in a HLU condition	Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats	0.5-5	ip, 30	o		Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Light/dark test	Wistar rats (180-220g)	0.5-8	ip, 20	+		Bilkei-Gorzó et al., 1998	Psychopharmacology 136:291-298
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-220g)	0.5-2	ip, 35	o	Rats were handled prior to testing for 3 consecutive days in the experimental room	Kõks et al., 2001	Psychopharmacology 153:365-372
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Elevated plus-maze	Mouse	0.5-4		+		Nic Dhonnchadha et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S63
Deramciclane (EGIS-3886)	5-HT_2 antagonist	Open-field	Alcohol-preferring rats (319-468g)	1-30	po, 120	o	No hyperlocomotion was observed	Ingman et al., 2004	Pharmacol. Biochem. Behav. 77:847-854

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
d-LSD	Non selective ligand	Vogel conflict test	Sprague-Dawley rats (200g)	0.0003-0.1	ip, 1, 10 and 30	o	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
d-LSD	Non selective ligand	Vogel conflict test	Sprague-Dawley rats (200g)	0.001	30	+		Schoenfeld, 1976	Science 192:801-803
d-LSD	Non selective ligand	Vogel conflict test	Sprague-Dawley rats (200-225g)	0.05	ip, 10	+		Commissaris and Rech, 1982	Psychopharmacology 76:282-285
d-LSD	Non selective ligand	Holeboard	Sprague-Dawley rats (200-250g)	0.1	ip, 10	-		Geyer et al., 1980	Behav. Neural. Biol. 30:160-177
d-LSD	Non selective ligand	Shock-probe burying test	Wistar rats (250-280g)	0.01-0.63	ip, 15	o		Meert and Colpaert, 1986	Psychopharmacology 89:S23
DMT	Non selective antagonist	Geller-Seifter conflict test	Female CFN rats	35248	ip	-	VI30	Winter, 1972	Arch. Int. Pharmacodyn. 197:147-159
DOI	5-HT_2 agonist	Elevated plus-maze	Lister rats	0.1	ip	o		Tomkins et al., 1990	Psychopharmacology 101:S57
DOI	5-HT_2 agonist	Elevated plus-maze	Ovariectomized female Wistar rats (8-week-old)	0.25	ip,60	o		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Elevated plus-maze	Ovariectomized female Wistar rats (8-week-old)	0.25	ip,60	o	With testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Elevated plus-maze	Castrated Wistar rats (8-week-old)	0.25	ip,60	o		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Elevated plus-maze	Castrated Wistar rats (8-week-old)	0.25	ip,60	o	With testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Elevated plus-maze	DBA/2 mice (20-30g)	0.1-2	ip, 10	o		Onaivi et al., 1995	Life Sci. 57:2455-2466
DOI	5-HT_2 agonist	Elevated plus-maze	DBA/2 mice (10-13-week-old)	0.25-1	ip, 30	o	Additional measures of anxiety	Rodgers et al., 1995	J. Psychopharmacol. 9:38-42
DOI	5-HT_2 agonist	Elevated plus-maze	Rats			+		Heaton et al., 1988	Br. J. Pharmacol. 91 (Suppl.):388P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Elevated plus-maze	Rats			+		Njung'e, 1990	In: Thesis, Aston University, Birmingham, UK
DOI	5-HT_2 agonist	Elevated plus-maze	Long Evans hooded rats (200-250g)	0.1-1	ip, 10	+		Onaivi et al., 1995	Life Sci. 57:2455-2466
DOI	5-HT_2 agonist	Elevated plus-maze	ICR mice (20-30g)	0.1-0.5	ip, 10	+		Onaivi et al., 1995	Life Sci. 57:2455-2466
DOI	5-HT_2 agonist	Elevated plus-maze	C57/BL6 mice (20-30g)	0.1-2	ip, 10	+		Onaivi et al., 1995	Life Sci. 57:2455-2466
DOI	5-HT_2 agonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	+		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
DOI	5-HT_2 agonist	Light/dark test	Lundbeck mice strain (30-35g)	1.8-7 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
DOI	5-HT_2 agonist	Holeboard	Ovariectomized female Wistar rats (8-week-old)	0.25	ip, 60	o		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Holeboard	Ovariectomized female Wistar rats (8-week-old)	0.25	ip, 60	o	with testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Holeboard	Castrated Wistar rats (8-week-old)	0.25	ip, 60	o		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Holeboard	Castrated Wistar rats (8-week-old)	0.25	ip, 60	o	with testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
DOI	5-HT_2 agonist	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	0.25-0.5	30	-		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487
DOI	5-HT_2 agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	+	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
DOI	5-HT_2 agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
DOI	5-HT_2 agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11 day-old)	0.03-0.3	sc, 30	+	Locomotion decreased	Winslow and Insel, 1991	Psychopharmacology 105:513-520

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=1.4	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
DOI	5-HT_2 agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.1.4	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
DOI	5-HT_2 agonist	Marble burying	Female MF1 mice (23-35g)	0.01-5	ip, 30	+		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
DOI	5-HT_2 agonist	Stress-induced hyperthermia	NMRI mice		po	-		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
DOI	5-HT_2 agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	0.3-3	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
DOI	5-HT_2 agonist	Stress-induced hyperthermia	NMRI mice (12-14g)			+		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
DOI	5-HT_2 agonist	DPAG stimulation	Wistar rats (200-250g)	4-16 nmol	dorsal PAG, 20	+		Nogueira and Graeff, 1995	Pharmacol. Biochem. Behav. 52:1-6
DOI	5-HT_2 agonist	Elevated plus-maze	Wistar rats (16-day-old)	0.25	sc, for 8 days (o.d.)	o		Gonzalez et al., 1996	Brain Res. 732:145-153
DOI	5-HT_2 agonist	Elevated plus-maze	Female wistar rats (16 day-old)	0.25	sc, for 8 days (o.d.)	-		Gonzalez et al., 1996	Brain Res. 732:145-153
DOI	5-HT_2 agonist	Holeboard	Wistar rats (16-day-old)	0.25	sc, for 8 days (o.d.)	o		Gonzalez et al., 1996	Brain Res. 732:145-153
DOI	5-HT_2 agonist	Holeboard	Female wistar rats (16 day-old)	0.25	sc, for 8 days (o.d.)	+		Gonzalez et al., 1996	Brain Res. 732:145-153
DOI	5-$HT_{2A/2C}$ agonist	Defensive rage behavior	Cats	1.5 nM	PAG, 5	+	Rage induced by medial hypothalamic stimulation	Shaikh et al., 1996	Soc. Neurosci. Abstr. 22:1775

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Light/dark test	Wistar rats (200-250g)	0.01-0.31	sc, 30	o	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
DOI	5-HT_2 agonist	Elevated plus-maze	Roman rats (10-12-week-old)	1.5	ip, for 4 days (b.i.d.)	o		Chaouloff et al., 1997	Eur. J. Pharmacol. 334:25-29
DOI	5-HT_2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	0.03-0.3	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
DOI	5-HT_2 agonist	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	0.03-0.3	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
DOI	5-HT_2 agonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	3	ip, 60	+	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
DOI	5-HT_2 agonist	Elevated plus-maze	Long Evans hooded rats (300-350g)	ED50=0.843	ip, 15	-		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
DOI	5-HT_2 agonist	mCPP discrimination	Long Evans hooded rats (300-350g)	ED50=0.762	ip, 15	-		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
DOI	5-HT_2 agonist	PTZ drug discrimination	Long Evans hooded rats (300-350g)	ED50=1.024	ip, 15	-		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
DOI	5-HT_2 agonist	Elevated plus-maze	Swiss mice (4-week-old)	0.125	ip, 45	o		Bourin et al., 2001	Behav. Brain Res. 124:87-95
DOI	5-HT_2 agonist	DPAG stimulation	Female Wistar rats (199-237g)	16 nmol/0.25 µl	dorsal PAG, 20	+	Basal aversive theshold inducing escape was increased	Jacob et al., 2002	Pharmacol. Biochem. Behav. 72:761-766
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	0.5-4	ip, 30	+	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Light/dark test	Swiss mice (20-24g)	0.5-8	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
DOI	5-HT_2 agonist	Elevated plus-maze	Swiss mice (20-24g)	0.5-2	ip, 30	+		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
DOI	5-HT_2 agonist	Open-field	Wistar rats	3-10		-		Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.06-0.25	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	0.5-4	ip, 30	+	Shocks of 0.6 mA/0.5 s were applied	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
DOI	5-HT_2 agonist	Elevated plus-maze	Swiss mice (20-24g)	1	ip, 30	+		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
DOI	5-HT_2 agonist	Elevated plus-maze	ICR mice (18-25g)	1.5	ip, 30	o		Peng et al., 2004	Life Sci. 75:2451-2462
DOI	5-HT_2 agonist	Intra-dlPAG SIN-1-induced escape behavior	Wistar rats (220-240g)	16 nmol/0.2 µl	dorsolateral PAG, 20	+	The drug inhibited partially escape reactions	Moreira and Guimarães, 2004	Psychopharmacology 176:362-368
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	+	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2005	Psychopharmacology 180:73-83
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	+	(1) Animals were exposed to the four-plate test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were	Ripoll et al., 2005	Psychopharmacology 180:73-83

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							delivered		
DOI	5-HT$_2$ agonist	Four-plate test	Swiss mice (20-24g)	0.5-4	ip, 30	+	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
DOI	5-HT$_2$ agonist	Four-plate test	Swiss mice (20-24g)	1-4	ip, 30	+	(1) Animals were exposed to the test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
DOI	5-HT$_2$ agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	+	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI	5-HT$_2$ agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	16 nmol/0.2 µl	dorsal PAG, 20	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
DOI	5-HT$_2$ agonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	16 nmol/0.2 µl	dorsal PAG, 20	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
DOI	5-HT$_2$ agonist	Elevated plus-maze	ICR mice (5-week-old)	0,3-1	ip, 30	o		Komiya et al., 2006	Behav. Brain Res. 172:240-249
DOI	5-HT$_2$ agonist	Four-plate test	Swiss mice (18-22g)	1-2	ip, 30	+	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI	5-HT$_2$ agonist	Four-plate test	Swiss mice (18-22g)	0.06-0.25	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
DOI	5-HT$_2$ agonist	Elevated plus-maze	Swiss mice (18-22g)	0.03-0.125	ip, 45	o		Massé et al., 2007	Behav. Brain Res. 177:214-226
DOI	5-HT$_2$ agonist	Open-field	Sprague-Dawley rats (8-12-week-old)	0.5-1	sc, 30	-	The drug reduced rearing	Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Stress-suppressed feeding	Sprague-Dawley rats (8-12-week-old)	0.5-1	sc, 30	-	Tail-pinch stress. The drug reduced consumption after stress	Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639
DOI	5-HT_2 agonist	DPAG stimulation	Wistar rats (220-240g)	16 nmol/0.2 µl	dorsal PAG, 0	+	The drug increased latency to escape	de Bortoli et al., 2008	Psychopharmacology 198:341-349
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	5 µg/1 µl	hippocampus, 0	+	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2008	Behav. Brain Res. 188:291-297
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	5 µg/0,4 µl	amygdala, 0	-	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2008	Behav. Brain Res. 188:291-297
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	5 µg/0,4 µl	PAG, 0	-	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2008	Behav. Brain Res. 188:291-297
DOI	5-HT_2 agonist	Mouse defense test battery	CD1 mice (10-12-week-old)	5.7µg/0.1 µl	dorsal PAG, 20	+		Pobbe et al., 2011	Eur. Neuropsychopharmacol. 21:306-315
DOI	5-HT_2 agonist	Rat avoidance test	CD1 mice (10-12-week-old)	5.7µg/0.1 µl	dorsal PAG, 10	-		Pobbe et al., 2011	Eur. Neuropsychopharmacol. 21:306-315
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	CA1 hippocampus, 30	o		Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	CA1 hippocampus, 30	o	Test-experienced mice	Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	CA2 hippocampus, 30	+		Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	CA2 hippocampus, 30	+	Test-experienced mice	Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	CA3 hippocampus, 30	o		Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	CA3 hippocampus, 30	o	Test-experienced mice	Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	PAG, 30	o		Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	PAG, 30	o	Test-experienced mice	Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	basolateral amygdala, 30	o		Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	basolateral amygdala, 30	o	Test-experienced mice	Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	lateral amygdala, 30	o		Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	5 µg/0.5 µl	lateral amygdala, 30	o	Test-experienced mice	Petit-Demoulière et al., 2009	Behav. Brain Res. 204:200-205
DOI	5-HT_2 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	8 nmol/0.2 µl	ventromedial hypothalamus, 10	o		da Silva et al., 2011	Behav. Brain Res. 216:692-698
DOI	5-HT_2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	8 nmol/0.2 µl	ventromedial hypothalamus, 10	+		da Silva et al., 2011	Behav. Brain Res. 216:692-698
DOI	5-HT_2 agonist	Elevated plus-maze	Swiss mice (28-35g)	5.6-10 nmol/0.10 µl	dorsal PAG, 0	o		Gomes and Nunes-De-Souza, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1261-1269

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Elevated plus-maze	Swiss mice (28-35g)	8 nmol/0.10 µl	dorsal PAG, 0	+	Maze-experienced mice were used	Gomes and Nunes-De-Souza, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1261-1269
DOI	5-HT_2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	8-16 nmol/0.2 µl	ventrolateral PAG, 10	+		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
DOI	5-HT_2 agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	4-16 nmol/0.2 µl	ventrolateral PAG, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
DOI	5-HT_2 agonist	Open-field	CD1 mice (50-60-day-old)	0.15	ip, 5	o		Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
DOI	5-HT_2 agonist	Elevated plus-maze	CD1 mice (50-60-day-old)	0.15	ip, 5	o		Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
DOI	5-HT_2 agonist	DPAG stimulation	Wistar rats (270-300g)	16 nmol/0.2 µl	dorsal PAG, 20	+		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
DOI	5-HT_2 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	8-16 nmol/0.2 µl	dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55
DOI	5-HT_2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	8-16 nmol/0.2 µl	dorsolateral septum, 10	-		de Paula et al., 2012	Behav. Brain Res. 226:50-55
DOI	5-HT_2 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	8-16 nmol/0.2 µl	outside dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI	5-HT_2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	8-16 nmol/0.2 µl	outside dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55
DOI+adrafinil (0.25-4 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	+	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI+alprazolam (0,03-0,125 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	0,06-0,125	ip, 30	(+)	(1) Potentiation of the anxiolytic-like effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI+alprazolam (0,03-0,125 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	0.06-0.25	ip, 45	(+)	(1) Potentiation of the anxiolytic-like effects of alprazolam; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
DOI+alprazolam (0,03-0.06 mg/kg)	5-HT_2 agonist	Elevated plus-maze	Swiss mice (18-22g)	0.125	ip, 45	(+)	Potentiation of the anxiolytic-like effects of alprazolam	Massé et al., 2007	Behav. Brain Res. 177:214-226
DOI+alprazolam (2 mg/kg for 3-6 days)	5-HT_2 agonist	DPAG stimulation	Wistar rats (220-240g)	16 nmol/0.2 µl	dorsal PAG, 0	+	(1) The drug increased latency to escape; (2) No synergism	de Bortoli et al., 2008	Psychopharmacology 198:341-349
DOI+alprazolam (4 mg/kg for 14-17 days)	5-HT_2 agonist	DPAG stimulation	Wistar rats (220-240g)	16 nmol/0.2 µl	dorsal PAG, 0	(+)	(1) The drug increased latency to escape; (2) Synergistic	de Bortoli et al., 2008	Psychopharmacology 198:341-349

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							effects		
DOI+baclofen (0,25-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1-2	ip, 30	(o)	(1) Blockade of the anxiolytic-like effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI+bicuculline (1-8 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1-2	ip, 30	(o)	(1) Blockade of the anxiolytic-like effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI+bicuculline (5 pmol/0.2 µl)	5-HT_2 agonist	DPAG stimulation	Wistar rats (270-300g)	16 nmol/0.2 µl	dorsal PAG, 20	(o)		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
DOI+CGP 35348 (200 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	0,125	ip, 30	o	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI+clonidine (0.06 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	(o)	(1) Antagonism of the effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI+diazepam (0,03-0.06 mg/kg)	5-HT_2 agonist	Elevated plus-maze	Swiss mice (18-22g)	0.06-0.25	ip, 45	o	No interaction	Massé et al., 2007	Behav. Brain Res. 177:214-226
DOI+diazepam (0,03-0.125 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	0.06-0.25	ip, 45	(+)	(1) Potentiation of the anxiolytic-like effects of diazepam; (2)	Massé et al., 2007	Behav. Brain Res. 177:214-226

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							Electric shock of 0.6 mA/0.5 s were delivered		
DOI+diazepam (0,125 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	0,06-0,125	ip, 30	(+)	(1) Potentiation of the anxiolytic-like effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI+Eplivanserin (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	(o)	(1) Antagonism of the anxiolytic-like effects of DOI; (2) Shocks of 0.6 mA/0.5 s were applied	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
DOI+Eplivanserin (0.1-1 mg/kg)	5-HT_2 agonist	Elevated plus-maze	Swiss mice (20-24g)	1	ip, 30	(o)	Antagonism of the anxiolytic-like effects of DOI	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
DOI+Eplivanserin (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	(o)	(1) Antagonism of the effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
DOI+Eplivanserin (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	(o)	(1) Antagonism of the effects of DOI; (2) Animals were exposed to the test 24 h before; (3) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI+flumazenil (2-8 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	o	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI+guanabenz (0.125-0.5 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	(o)	(1) Antagonism of the effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI+guanfacine (0.06-0.125 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	(o)	(1) Antagonism of the effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI+idazoxan (1-4 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	0.06-0.125	ip, 30	o	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI+imipramine (15 mg/kg, 21-24 days)	5-HT_2 agonist	DPAG stimulation	Female Wistar rats (199-237g)	16 nmol/0.25 µl	dorsal PAG, 20	(+)	Basal aversive theshold inducing escape was increased further by imipramine	Jacob et al., 2002	Pharmacol. Biochem. Behav. 72:761-766
DOI+ketanserin (10 nmol/0.2 µl)	5-HT_2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	8 nmol/0.5 µl	ventrolateral PAG, 10	(o)		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
DOI+ketanserin (10 nmol/0.2 µl)	5-HT_2 agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	8 nmol/0.5 µl	ventrolateral PAG, 10	o	No interaction	de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI+ketanserin (10 nmol/0.2 µl)	5-HT_2 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	8 nmol/0.2 µl	dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55
DOI+ketanserin (10 nmol/0.2 µl)	5-HT_2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	8 nmol/0.2 µl	dorsolateral septum, 10	(o)		de Paula et al., 2012	Behav. Brain Res. 226:50-55
DOI+ketanserin (5 mg/kg)	5-HT_2 agonist	Stress-suppressed feeding	Sprague-Dawley rats (8-12-week-old)	0.5-1	sc, 30	(o)	Tail-pinch stress. Antagonism of the effects of DOI	Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639
DOI+ketanserin (5 mg/kg)	5-HT_2 agonist	Open-field	Sprague-Dawley rats (8-12-week-old)	0.5-1	sc, 30	(o)	Antagonism of the effects of DOI	Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639
DOI+lemon oil vapor	5-HT_2 agonist	Elevated plus-maze	ICR mice (5-week-old)	0,3	ip, 30	o	No interaction	Komiya et al., 2006	Behav. Brain Res. 172:240-249
DOI+muscimol (0,25 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	0,125	ip, 30	(+)	(1) Potentiation of the anxiolytic-like effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491
DOI+PCA (300 mg/kg, for 3 days)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	+	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI+picrotoxin (0,25-0,5 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1-2	ip, 30	(o)	(1) Blockade of the anxiolytic-like effects of DOI; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Eur. Neuropsychopharmacol. 17:483-491

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DOI+prazosin (0.5-2 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 30	+	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481
DOI+RS 102221 (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	+	(1) No antagonism of the anxiolytic-like effects of DOI; (2) Shocks of 0.6 mA/0.5 s were applied	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
DOI+RS 102221 (0.1-1 mg/kg)	5-HT_2 agonist	Elevated plus-maze	Swiss mice (20-24g)	1	ip, 30	+	No antagonism of the anxiolytic-like effects of DOI	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
DOI+RS 102221 (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	(o)	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
DOI+RS 102221 (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	(o)	(1) No interaction; (2) Animals were exposed to the test 24 h before; (3) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
DOI+SB 206553 (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	+	(1) No antagonism of the anxiolytic-like effects of DOI; (2) Shocks of 0.6 mA/0.5 s were applied	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
DOI+SB 206553 (0.1-1 mg/kg)	5-HT_2 agonist	Elevated plus-maze	Swiss mice (20-24g)	1	ip, 30	+	No antagonism of the anxiolytic-like	Nic Dhonnchadha et al.,	Behav. Brain Res. 147:175-184

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							effects of DOI	2003	
DOI+SB 206553 (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	(o)	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
DOI+SB 206553 (0.1-1 mg/kg)	5-HT_2 agonist	Four-plate test	Swiss mice (20-24g)	1	ip, 30	(o)	(1) No interaction; (2) Animals were exposed to the test 24 h before; (3) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
DOI+SDZ SER-082 (1 mg/kg)	5-HT_2 agonist	Stress-suppressed feeding	Sprague-Dawley rats (8-12-week-old)	0.5	sc, 30	-	Tail-pinch stress. No antagonism of the effects of DOI	Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639
DOI+spiperone (1 mg/kg)	5-HT_2 agonist	Stress-suppressed feeding	Sprague-Dawley rats (8-12-week-old)	0.5	sc, 30	-	Tail-pinch stress. No antagonism of the effects of DOI	Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639
DOI+volinanserin (0.25 mg/kg)	5-HT_2 agonist	Elevated plus-maze	CD1 mice (50-60-day-old)	0.15	ip, 5	-	No interaction	Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
DOI+WAY 100635	5-HT_2 agonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	ED50=1,4	sc, 15	(+)	(1) No antagonism of the effects of DOI, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
Dotarizine	Mixed 5-HT_{1A}/5-$HT_{2A/2C}$	Elevated plus-maze	Wistar rats (210-230g)	20	ip, 30	+		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist								
Dotarizine	Mixed 5-HT_{1A}/5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (210-230g)	50	po, for 3 days (o.d.)	+		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
DOV216,303	Triple reuptake inhibitor	Distress vocalizations	Cockerel chicks (*Gallus gallus*, 1-day posthatch)	15-20	im, 15	+		Sufka et al., 2009	Behav. Pharmacol. 20:146-154.
DU 125,530	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Rats	1-10	sc, 30	+		Joordens et al., 1997	Soc. Neurosci. Abstr. 23:2150
DU 125,530	5-HT_{1A} antagonist	Stress-induced hyperthermia	NMRI mice (12-14g)	1-10	po, 60	o		Olivier et al., 1998	Eur. J. Pharmacol. 342:177-182
DU 125,530	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	1-10	sc, 30	+		Joordens et al., 1998	Psychopharmacology 139:383-390
Duloxetine	NA/5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	1-30	ip, 30	o		Troelsen et al., 2005	Psychopharmacology 181:741-750
Duloxetine	NA/5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	10	po, for 21 days, b.i.d. daily	+		Troelsen et al., 2005	Psychopharmacology 181:741-750
Duloxetine	NA/5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	10	po, b.i.d. for 28 days	+		Mirza et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:858-866
E-4424 (lesopitron)	5-HT_{1A} full agonist	Elevated plus-maze	Rats	0.0001-0.5	ip	+		Costall et al., 1992	J. Pharmacol. Exp. Ther. 262:90-98
E-4424 (lesopitron)	5-HT_{1A} full agonist	Light/dark test	Mice	0.0001-0.5	ip	+	Asymmetric compartments	Costall et al., 1992	J. Pharmacol. Exp. Ther. 262:90-98
E-4424 (lesopitron)	5-HT_{1A} full agonist	Light/dark test	BKW mice (25-30g)	0.0001-0.5	ip, between 25 and 24 h	+	Asymmetric compartments	Costall et al., 1992	Pharmacol. Toxicol. 70:157-162

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
E-4424 (lesopitron)	5-HT_{1A} full agonist	Light/dark test	BKW mice (25-30g)	0.0001-0.5	ip, for 3, 7 or 14 days (b.i.d.)	+	Asymmetric compartments	Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
E-4424 (lesopitron)	5-HT_{1A} full agonist	Social interaction	Rats	0.0001-0.5	ip	+		Costall et al., 1992	J. Pharmacol. Exp. Ther. 262:90-98
E-4424 (lesopitron)	5-HT_{1A} full agonist	Social interaction	Lister rats (250-300g)	0.001-0.5	ip, 40	+	HLU	Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
E-4424 (lesopitron)	5-HT_{1A} full agonist	Human threat	Marmoset Callithrix jacchus (295-335g)	0.0001-0.001	sc, between 40 and 96 h	+		Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
E-4424 (lesopitron)	5-HT_{1A} full agonist	Stress-induced depletion of gastric mucus	Sprague-Dawley rats (190-210g)	5-20	po, 30	+	Cold stress	Glavin et al., 1995	Dig. Dis. Sci. 40:2317-2320
E-4424 (lesopitron)	5-HT_{1A} full agonist	Stress-induced depletion of gastric mucus	Sprague-Dawley rats (190-210g)	10-20	ip, for 10 days (o.d.)	+	Cold stress	Glavin et al., 1995	Dig. Dis. Sci. 40:2317-2320
E-4424 (lesopitron)	5-HT_{1A} full agonist	Stress-induced depletion of gastric mucus	Sprague-Dawley rats (190-210g)	5-20	ip, for 10 days (o.d.)	+	Cold stress	Glavin et al., 1995	Dig. Dis. Sci. 40:2317-2320
E-4424 (lesopitron)	5-HT_{1A} full agonist	Light/dark test	BKW mice (30-35g)	0.005-0.01	ip, 40	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
E-4424 (lesopitron)	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-650g)	1	im, 5	+		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
EF-7412	5-HT_{1A} antagonist	Light/dark test	Mice			o		Beneytez et al., 1997	Soc. Neurosci. Abstr. 23:129
EGIS-9933	5-HT_{2C} antagonist	Elevated plus-maze	Rats	MED=1		+		Gacsályi et al., 1997b	Soc. Neurosci. Abstr. 23:2150
EGIS-9933	5-HT_{2C} antagonist	Vogel conflict test	Rats	MED=20		+		Gacsályi et al., 1997b	Soc. Neurosci. Abstr. 23:2150

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
EGIS-9933	5-HT_{2C} antagonist	Social interaction	Rats	MED=1		+		Gacsályi et al., 1997b	Soc. Neurosci. Abstr. 23:2150
Electrolytic lesion	Dorsal raphe and septal lesions	Elevated plus-maze	Sprague-Dawley rats (250-350g)			+		Treit et al., 1993	Behav. Brain Res. 54:23-34
Electrolytic lesion	Dorsal raphe and septal lesions	Shock-probe burying test	Sprague-Dawley rats (250-350g)			+		Treit et al., 1993	Behav. Brain Res. 54:23-34
Electrolytic lesion	Median raphe lesion	Elevated plus-maze	Wistar rats (200g)			+	Animals had restraint stress prior to testing	Andrade and Graeff, 2001	Pharmacol. Biochem. Behav. 70:1-14
Electrolytic lesion	Median raphe lesion	Light/dark test	Wistar rats (200g)			+	Animals had restraint stress prior to testing	Andrade and Graeff, 2001	Pharmacol. Biochem. Behav. 70:1-14
Electrolytic lesion	Median raphe lesion	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)			+	The drug impaired inhibitory avoidance	Andrade et al., 2004	Behav. Brain Res. 153:55-60
Electrolytic lesion	Median raphe lesion	Escape behavior in the elevated T-maze	Wistar rats (250-300g)			+	The drug impaired one-way escape	Andrade et al., 2004	Behav. Brain Res. 153:55-60
Eltoprazine	Non selective ligand	Elevated plus-maze	DBA/2 mice (6-8-week-old)	1.25-2.5	ip, 30	-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
Eltoprazine	Non selective ligand	Elevated plus-maze	DBA/2 mice (10-12-week-old)	1.25-10	ip, 30	-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
Eltoprazine	Non selective ligand	Elevated plus-maze	Wistar rats (150-220g)	10	ip, 30	-		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
Eltoprazine	Non selective ligand	Elevated plus-maze	Long-Evans rats (280-300g)	10	ip, 10	-		Rocha et al., 1994	Eur. J. Pharmacol. 262:125-131
Eltoprazine	Non selective ligand	Elevated plus-maze	Long-Evans rats (280-300g)	10	ip, for 14 days (o.d.)	-		Rocha et al., 1994	Eur. J. Pharmacol. 262:125-131

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Eltoprazine	Non selective ligand	Light/dark test	Swiss mice (12-week-old)	10	ip, 30	-		Griebel et al., 1990	Psychopharmacology 102:498-502
Eltoprazine	Non selective ligand	Light/dark test	DBA/2 mice (10-12-week-old)	1.25-10	ip, 30	+	Asymmetric compartments	Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
Eltoprazine	Non selective ligand	Light/dark test	Lundbeck mice strain (30-35g)	1.9-31 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Eltoprazine	Non selective ligand	Free-exploration test	Swiss mice (12-week-old)	5-15	ip, 30	-		Griebel et al., 1990	Psychopharmacology 102:498-502
Eltoprazine	Non selective ligand	Open-field	CD1 mice (21.1-41.1g)	1-4	ip, 30	+		Kemble et al., 1991	Pharmacol. Biochem. Behav. 38:759-762
Eltoprazine	Non selective ligand	Stress-induced hyperthermia	DAP mice (22-30g)	1-20	po, 60	-	Isolated mice	Olivier et al., 1989	Psychopharmacology 97:154-156
Eltoprazine	Non selective ligand	Social attraction	CD1 mice (21.1-41.1g)	1-4	ip, 30	-		Kemble et al., 1991	Pharmacol. Biochem. Behav. 38:759-762
Eltoprazine	Non selective ligand	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Eltoprazine	Non selective ligand	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	1-3	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Eltoprazine	Non selective ligand	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.8	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Eltoprazine	Non selective ligand	Stress-induced hyperthermia	NMRI mice (12-14g)	1-10	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Eltoprazine	Non selective ligand	Conditioned place aversion	Long-Evans rats (250-300g)	1-10	ip	-		Rocha et al., 1993	Behav. Pharmacol. 4:101-106
Eltoprazine	Non-selective ligand	Light/dark test	Wistar rats (200-250g)	0.01-2.5	sc, 30	o	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
EMD 386088	5-HT_6 antagonist	Vogel conflict test	Sprague-Dawley rats (250-280g)	5-20 µg/1 µl	hippocampus, 10	+	Shocks of 0.2 mA/2 s were applied	Nikiforuk et al., 2011	Psychopharmacology 217:411-418
EMD 386088	5-HT_6 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-280g)	10-20 µg/1 µl	hippocampus, 10	+		Nikiforuk et al., 2011	Psychopharmacology 217:411-418
EMD 67478	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=5.2	po, 30	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
EMD 67478	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.22	sc, 30	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
EMD 67478	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=1.6	po, 120	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
EMD 67478	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.07	sc, 120	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
EMD 67478	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=1.1	po, 120	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
EMD 67478	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	ED50=0.07	sc, 210	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
EMD 67478	5-HT_{1A} full agonist	Four-plate test	Mice	ED50=2.4	po	+		Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
EMD 68843+WAY 100635 (1 mg/kg)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Wistar rats (173-287g)	55	po, 120-210	(o)	(1) Antagonism of the effects of EMD68843; (2) Scrambled shock of 1.8 mA/0.3 s	Bartoszyk et al., 1997	Eur. J. Pharmacol. 322:147-153
EMD 86006	Mixed 5-HT reuptake inhibitor/D_2	Ultrasonic distress vocalizati	Rats	ED50>30	po, 30	o		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	ons							
EMD 86006	Mixed 5-HT reuptake inhibitor/D_2 antagonist	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 30	o		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
EMD 86006	Mixed 5-HT reuptake inhibitor/D_2 antagonist	Marble burying	Mice	ED50=1	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
EMD 86006	Mixed 5-HT reuptake inhibitor/D_2 antagonist	Marble burying	Mice	ED50=4	sc, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
EMD 95750	Mixed 5-HT reuptake inhibitor/5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Rats	3	sc	+		Böttcher et al., 1998	Soc. Neurosci. Abstr. 24:1108
Eplivanserin	5-HT_{2A} antagonist	Elevated plus-maze	Roman rats (10-12-week-old)	7.5	ip, for 4 days (b.i.d.)	o		Chaouloff et al., 1997	Eur. J. Pharmacol. 334:25-29
Eplivanserin	5-HT_{2A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	1-10	ip, 25	+		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
Eplivanserin	5-HT_{2A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	1-10	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
Eplivanserin	5-HT_{2A} antagonist	Elevated plus-maze	Wistar rats (190-240g)	1-10	ip, 30	-		Setem et al., 1999	Pharmacol. Biochem. Behav. 62:515-521
Eplivanserin	5-HT_{2A} antagonist	Four-plate test	Swiss mice (20-24g)	0.015-1	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Eplivanserin	5-HT_{2A} antagonist	Light/dark test	Swiss mice (20-24g)	0.03-2	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
Eplivanserin	5-HT_{2A} antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.03-2	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
Eplivanserin	5-HT_{2A} antagonist	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.1-1	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Eplivanserin	5-HT_{2A} antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	Shocks of 0.6 mA/0.5 s were applied	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
Eplivanserin	5-HT_{2A} antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.1-1	ip, 45	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
Eplivanserin	5-HT_{2A} antagonist	Four-plate test	Swiss mice (4-week-old)	0.1-1	ip, 45	o	Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Eplivanserin	5-HT_{2A} antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
Eplivanserin	5-HT_{2A} antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	(1) Animals were exposed to the test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
Eplivanserin	5-HT_{2A} antagonist	Four-plate test	Swiss mice (18-22g)	0.1-1	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
Eplivanserin	5-HT_{2A} antagonist	Elevated plus-maze	Swiss mice (18-22g)	0.125-0.5	ip, 45	o		Massé et al., 2007	Behav. Brain Res. 177:214-226
Eplivanserin+diazepam (1 mg/kg)	5-HT_{2A} antagonist	Four-plate test	Swiss mice (18-22g)	0.1-1	ip, 45	o	(1) No interaction; (2)	Massé et al., 2007	Behav. Brain Res. 177:214-226

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Eplivanserin+diazepam (1 mg/kg)	5-HT_{2A} antagonist	Elevated plus-maze	Swiss mice (18-22g)	0.125-0.5	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered No interaction	Massé et al., 2007	Behav. Brain Res. 177:214-226
Escitalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats			+	Four footshocks were delivered	Sanchez, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S66
Escitalopram	5-HT reuptake inhibitor	DPAG stimulation	Sprague-Dawley rats	ED50=3.1	ip, 30	+		Hogg and Jessa, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S151
Escitalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	0.19-3.9	sc, 30	+	Four footshocks of 1 mA were delivered	Sánchez et al., 2003	Psychopharmacology 167:353-362
Escitalopram	5-HT reuptake inhibitor	Light/dark test	Mice derived from Bradford strain (30-35g)	0.49-2	sc, 30	+		Sánchez et al., 2003	Psychopharmacology 167:353-362
Escitalopram	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (200-230g)	1-3.9	ip, 30	+	Electric shock of 0.5 mA/200 ms was applied on day 1	Sánchez et al., 2003	Pharmacol. Biochem. Behav. 75:903-907
Escitalopram	5-HT reuptake inhibitor	Elevated plus-maze	Rats	2.5		+		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37
Escitalopram	5-HT reuptake inhibitor	Vogel conflict test	Rats	2.5		+		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37
Escitalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	ED50=0.05	sc, 45	+	To elicit ultrasonic vocalizations, pups were placed on a 19°C surface for 4 min	Fish et al., 2004	J. Pharmacol. Exp. Ther. 308:474-480
Escitalopram	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (260-280g)	ED50=3.1	ip, 30	+		Hogg et al., 2006	Neuropharmacology 51:141-145

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Escitalopram	5-HT reuptake inhibitor	Light/dark test	BALB/c mice (7-8-week-old, 23-35g)	5	sc, 60	o		David et al., 2007	J. Pharmacol. Exp. Ther. 321:237-248
Escitalopram	5-HT reuptake inhibitor	Light/dark test	BALB/c mice (7-8-week-old, 23-35g)	5	po, o.d. for 28 days	o		David et al., 2007	J. Pharmacol. Exp. Ther. 321:237-248
Escitalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (180-220g)	1	sc, 30	-	The drug was given before the acquisition	Montezinho et al., 2010	Psychopharmacology 212:131-143
Escitalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (180-220g)	1	sc, 30	+	The drug was given before the recall test	Montezinho et al., 2010	Psychopharmacology 212:131-143
Escitalopram	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (180-220g)	5	sc, 30	-	The drug was given during memory consolidation	Montezinho et al., 2010	Psychopharmacology 212:131-143
Escitalopram	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-330g)	2-8	po, 120	+		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Escitalopram	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-330g)	2-8	po, for 21 days	+		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Escitalopram	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-330g)	2-8	po, 120	o		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Escitalopram	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-330g)	8	po, for 21 days	+		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Escitalopram	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-330g)	2-8	po, for 14 days	o		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Escitalopram	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-330g)	8	po, for 14 days	o		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Escitalopram	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (300-350g)	10	sc, for 20 days	+		Lim et al., 2011	Behav. Brain Res. 218:301-307
Escitalopram+Atomoxetine (3 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (180-220g)	1	sc, 30 ip, 30	(o)	The drug was given before the acquisition	Montezinho et al., 2010	Psychopharmacology 212:131-143
Escitalopram+Atomoxetine (3 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (180-220g)	1	sc, 30 ip, 30	(o)	The drug was given before the recall test	Montezinho et al., 2010	Psychopharmacology 212:131-143
Escitalopram+Atomoxetine (3 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (180-220g)	5	sc, 30 ip, 30	(o)	The drug was given during memory consolidation	Montezinho et al., 2010	Psychopharmacology 212:131-143
Escitalopram+R-citalopram (10 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Rats	2.5		o		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37
Escitalopram+R-citalopram (10 mg/kg)	5-HT reuptake inhibitor	Vogel conflict test	Rats	2.5		o		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37
Escitalopram+R-citalopram (7.8 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (200-230g)	1-3.9	ip, 30	+	(1) The anxiolytic-like activity was reduced; (2) Electric shock of 0.5 mA/200 ms was applied on day 1	Sánchez et al., 2003	Pharmacol. Biochem. Behav. 75:903-907
F 11440	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-650g)	0.01-0.1	im, 5	+		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
F-98214-TA	NA/5-HT reuptake inhibitor	Social interaction	Wistar rats (200-275g)	10	ip, 30	+	HLU conditions were used	Artaiz et al., 2005	Psychopharmacology 182:400-413
F-98214-TA	NA/5-HT reuptake inhibitor	Social interaction	Wistar rats (200-275g)	30	po, for 14 days, o.d.	+	HLU conditions were used	Artaiz et al., 2005	Psychopharmacology 182:400-413

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fenfluramine	5-HT stimulant	Open-field	Female Fischer 344 rats (4 month)	0.6	po, for 30-38 days	o		Handa et al., 1996	Pharmacol. Biochem. Behav. 53:641-647
Fenfluramine	5-HT stimulant	Open-field	Female Fischer 344 rats (21 month)	0.6	po, for 30-38 days	o		Handa et al., 1996	Pharmacol. Biochem. Behav. 53:641-647
Fenfluramine	5-HT stimulant	Elevated T-maze	Rats	0.3 mg/kg	ip, 25	-	Effect on inhibitory avoidance	Graeff et al., 1996	Pharmacol. Biochem. Behav. 53:171-177
Fenfluramine	5-HT stimulant	Vogel conflict test	Sprague-Dawley rats (200g)	0.25-1	ip, 60	o	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
Fenfluramine	5-HT stimulant	Elevated plus-maze	Lister hooded rats (180-280g)	35186	ip, 30	-	10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210
Fenfluramine	5-HT stimulant	Light/dark test	Lundbeck mice strain (30-35g)	0.15-19 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Fenfluramine	5-HT stimulant	Marble burying	Female MF1 mice (23-35g)		ip, 30	+		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Fenfluramine	5-HT stimulant	Elevated T-maze		0.03-0.3	ip, 25	-		Graeff et al., 1996	Pharmacol. Biochem. Behav. 53:171-177
Fenfluramine	5-HT stimulant	Stress-induced hyperthermia	NMRI mice		po	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Fenfluramine	5-HT stimulant	Stress-induced hyperthermia	NMRI mice (12-14g)	3-30	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Fenfluramine	5-HT stimulant	Elevated zero-maze	Rats	30	po	o	Sedation	Weiss et al., 1998	Soc. Neurosci. Abstr. 24:943
Fenfluramine	5-HT stimulant	Ultrasonic distress vocalizations	Rats	ED50=4	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fenfluramine	5-HT stimulant	Ultrasonic distress vocalizations	Rats	ED50=3.4	sc, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fenfluramine	5-HT stimulant	Marble burying	Mice	ED50=1	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fenfluramine	5-HT stimulant	Marble burying	Mice	ED50=2	sc, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fenfluramine	5-HT stimulant	Social interaction	Rats		iv	-		Keim and Shekhar, 1999	Soc. Neurosci. Abstr. 25:2139
Fenfluramine	5-HT stimulant	Tonic immobility	Dunkin Hartley guinea-pigs (600-800g)	2.2-8.7	sc, 30	+		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
Fenfluramine	5-HT stimulant	Elevated open-platform	ICR mice (6-8-week-old)	1-10	ip, 30	+		Miyata et al., 2007	J. Pharmacol. Sci. 105:272-278
Fenfluramine	5-HT stimulant	Light/dark test	Juvenile Sprague-Dawley rats (PN21)	2	ip, 30	-		Arrant et al., 2012	Neuropharmacology doi: 10.1016/j.Neuropharmacology2012.10.010
Fenfluramine	5-HT stimulant	Light/dark test	Sprague-Dawley rats (PN60-63)	2	ip, 30	-		Arrant et al., 2012	Neuropharmacology doi: 10.1016/j.Neuropharmacology2012.10.010
Fenfluramine	5-HT stimulant	Elevated plus-maze	Juvenile Sprague-Dawley rats (PN21)	2	ip, 30	o		Arrant et al., 2012	Neuropharmacology doi: 10.1016/j.Neuropharmacology2012.10.010
Fenfluramine	5-HT stimulant	Elevated plus-maze	Sprague-Dawley rats (PN60-63)	2	ip, 30	-		Arrant et al., 2012	Neuropharmacology doi: 10.1016/j.Neuropharmacology2012.10.010
Fenfluramine+Ketanserin	5-HT stimulant	Social interaction	Rats		iv	(o)	Partial antagonism of anxiogenic-like effects	Keim and Shekhar, 1999	Soc. Neurosci. Abstr. 25:2139
Fenfluramine+Tropisetron	5-HT stimulant	Social interaction	Rats		iv	(o)	Partial antagonism of anxiogenic-like effects	Keim and Shekhar, 1999	Soc. Neurosci. Abstr. 25:2139
FG5893	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Ultrasonic distress vocalizations	Rats	0.05		+		Andersson et al., 1994	Eur. J. Pharmacol. 1994 261:285-294

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
FG5893	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (11 day-old)	0.3-1	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
FG5893	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Passive-avoidance test	Rats	0.1		+		Andersson et al., 1994	Eur. J. Pharmacol. 1994 261:285-294
FG5893	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Passive-avoidance test	Sprague-Dawley rats (200g)	0.1-1	sc, 30	+		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294
FG5974	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau Pigeons (500-650g)	0.63	im, 5	+	FR30:FR30	Kleven and Koek, 1996	J. Pharmacol. Exp. Ther. 276:388-397
Flesinoxan	5-HT_{1A} full agonist	Conflict test	Squirrel monkeys (800-1050g)		im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337
Flesinoxan	5-HT_{1A} full agonist	Conflict test	White Carneau Pigeons (450-600g)	0.03-0.3	iv	+		Barrett et al., 1989	J. Psychopharmacol. 3:64-69
Flesinoxan	5-HT_{1A} full agonist	Conflict test	White Carneau Pigeons	0.001-3	im,0	+	FR30	Barrett, 1992	Drug Dev. Res. 26:299-317
Flesinoxan	5-HT_{1A} full agonist	Conflict test	Pigeons	0.04	im, 5	+	FR30	Colpaert et al., 1992	Drug Dev. Res. 26:21-48
Flesinoxan	5-HT_{1A} full agonist	Conflict test	Pigeons	0.003-1		+		Barrett et al., 1994	Psychopharmacology 116:73-78
Flesinoxan	5-HT_{1A} full agonist	Elevated plus-maze	DBA/2 mice (10-14-week-old)	0.1-0.5	ip	+	Additional measures of anxiety	Rodgers et al., 1993	Soc. Neurosci. Abstr. 19:756
Flesinoxan	5-HT_{1A} full agonist	Elevated plus-maze	DBA/2 mice (10-14-week-old)	0.1-0.5	ip, chonic	+	Additional measures of anxiety	Rodgers et al., 1993	Soc. Neurosci. Abstr. 19:756
Flesinoxan	5-HT_{1A} full agonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	0.1-1	ip, 20	+	Additional measures of anxiety	Rodgers et al., 1994	Pharmacol. Biochem. Behav. 48:959-963
Flesinoxan	5-HT_{1A} full agonist	Light/dark test	Mice			+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Flesinoxan	5-HT_{1A} full agonist	Light/dark test	Swiss mice (10-week-old)	0.02-0.1	ip, 30	+		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
Flesinoxan	5-HT_{1A} full agonist	Open-field	Sprague-Dawley rats (280-320g)	0.2-3.2	sc	-		Ahlenius et al., 1991	Eur. J. Pharmacol. 200:259-266
Flesinoxan	5-HT_{1A} full agonist	Four-plate test	Mice			+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61
Flesinoxan	5-HT_{1A} full agonist	Shock-probe burying test	Wistar rats (300g)	1-3	sc, 30	+	2 mA shocks	Groenink et al., 1995	Eur. J. Pharmacol. 280:185-193
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	+	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Rats	0.3-3	ip	+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Adult rats	LED=0.3	ip	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.48	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (180-280g)	0.3-1	ip, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
Flesinoxan	5-HT_{1A} full agonist	Stress-induced	Mice	>1	po	+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		hyperthermia							
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	ED50=0.3	po	+		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	NMRI mice	ED50=0.59	po	+		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	3	po, 60	+		Zethof et al., 1994	Physiol. Behav. 55:109-115
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	1-3	po, 60	+		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Flesinoxan	5-HT_{1A} full agonist	Stress-induced freezing	Wistar rats (250-300g)	0.3-3	ip, 30	+		Van Dijken et al., 1992	Psychopharmacology 109:395-402
Flesinoxan	5-HT_{1A} full agonist	Stress-induced freezing	Wistar rats (250-300g)	0.3-3	ip, for 14 days (o.d.)	+		Van Dijken et al., 1992	Psychopharmacology 109:395-402
Flesinoxan	5-HT_{1A} full agonist	Stress-induced stretched approach posture	Wistar rats (180-220g)	0.3-1	ip, 30	+	Elicited by electrified prod	Molewijk et al., 1995	Psychopharmacology 121:81-90
Flesinoxan	5-HT_{1A} full agonist	Partition test behavior	Mice	0.5	ip, 30	+		Kudryavtseva et al., 1996	Zh. Vyss. Nerv. Deyat. Pavl. 46:370-377
Flesinoxan	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (150-200g)	1-10	po, 60	+	Experiment performed in Utrecht	Joordens et al., 1996	Psychopharmacology 126:104-109
Flesinoxan	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (150-200g)	1-10	po, 60	+	Experiment performed in Oss	Joordens et al., 1996	Psychopharmacology 126:104-109

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Flesinoxan	5-HT$_{1A}$ full agonist	Stress-induced hypothermia	NMRI mice (12-14g)	1-10	po, 60	+		Groenink et al., 1996	Pharmacol. Biochem. Behav. 54:249-254
Flesinoxan	5-HT$_{1A}$ full agonist	Distress vocalizations	Guinea pig pups (5 day-old)	ED50=0.22	ip	+		Molewijk et al., 1996	Psychopharmacology 128:31-38
Flesinoxan	5-HT$_{1A}$ full agonist	Geller-Seifter conflict test	Wistar rats (200-250g)	3-10	sc, 30	+	VI30: food; FR10: food+shock	King et al., 1997	Eur. J. Pharmacol. 325:121-128
Flesinoxan	5-HT$_{1A}$ full agonist	Shock-probe burying test	Wistar rats (200g)	3	sc, 30	+	Rats received a 2 mA shock	Groenink et al., 1997	Psychopharmacology 131:93-100
Flesinoxan	5-HT$_{1A}$ full agonist	Shock-probe burying test	Wistar rats (200g)	3	sc, for 1 week (o.d.)	+	Rats received a 2 mA shock	Groenink et al., 1997	Psychopharmacology 131:93-100
Flesinoxan	5-HT$_{1A}$ full agonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.1	sc, 30	+		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Flesinoxan	5-HT$_{1A}$ full agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	0.1-10	po, 60	+	The stressor was repeated temperature measurement	Van der Heyden et al., 1997	Physiol. Behav. 62:463-470
Flesinoxan	5-HT$_{1A}$ full agonist	Stress-induced hyperthermia	129/Sv mice	1-3	sc, 60	+		Bouwknecht et al., 1997	Behav. Pharmacol. 8:644
Flesinoxan	5-HT$_{1A}$ full agonist	Fear-potentiated startle reflex	Rats	10	po, 30	+		Joordens et al., 1997	Soc. Neurosci. Abstr. 23:2150
Flesinoxan	5-HT$_{1A}$ full agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	1	po, 60	+		Olivier et al., 1998	Eur. J. Pharmacol. 342:177-182
Flesinoxan	5-HT$_{1A}$ full agonist	Holeboard	ICR mice (25-30g)	0.3-3	ip, 30	+	The active doses also reduced spontaneous	Takeda et al., 1998	Eur. J. Pharmacol. 350:21-29

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							activity		
Flesinoxan	5-HT_{1A} full agonist	Holeboard	ICR mice (25-30g)	0.3-3	ip, 30	+	Following restraint stress	Takeda et al., 1998	Eur. J. Pharmacol. 350:21-29
Flesinoxan	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	10-30	po, 60	+		Joordens et al., 1998	Psychopharmacology 139:383-390
Flesinoxan	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-650g)	0.001-10	im, 5	o		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT_{1B} knock out mice	3	po, 60	+		Bouwknecht et al., 1998	Soc. Neurosci. Abstr. 24:601
Flesinoxan	5-HT_{1A} full agonist	DPAG stimulation	Wistar rats (300g)	1-10	ip, 30	-		Jenck et al., 1999	J. Psychopharmacol. 13:166-170
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT_{1A} KO 129/Sv mice	0,3-30	sc	o		Pattij et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S71
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	129/Sv mice	0,3-30	sc	+		Pattij et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S71
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	0,3-1	sc, 15	+		Fish et al., 2000	Psychopharmacology 149:277-85
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT_{1B} knockout mice	1	sc, for 2 days (o.d.)	+		Bouwknecht et al., 1999	Soc. Neurosci. Abstr. 25:1464
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT_{1B} wild-type mice	1	sc, for 2 days (o.d.)	+		Bouwknecht et al., 1999	Soc. Neurosci. Abstr. 25:1464
Flesinoxan	5-HT_{1A} full agonist	Holeboard	ICR mice (25-30g)	1	ip, 24 h	+	Holeboard testing was	Tsuji et al., 2000	Psychopharmacology 152:157-66

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							preceded by 60 min restraint		
Flesinoxan	5-HT_{1A} full agonist	Holeboard	ICR mice (25-30g)	1	ip, 30	+	Holeboard testing was preceded by 60 min restraint	Tsuji et al., 2000	Psychopharmacology 152:157-66
Flesinoxan	5-HT_{1A} full agonist	Holeboard	ICR mice (25-30g)	0.1	ip, 30	+	All behavioral parameters were reduced (sedation?)	Tsuji et al., 2000	Psychopharmacology 152:157-66
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	129/Sv-Ola mice (25.3-26.1g)	1-3	sc, 60	+	Radiotelemetry system was used	Bouwknecht et al., 2000	Eur. J. Pharmacol. 400:59-66
Flesinoxan	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (275-300g)	5-20 µg/1 µl	dorsal raphe, 0	o		Groenink et al., 2000	Neuroreport 11:2285-2288
Flesinoxan	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (275-300g)	5-20 µg/1 µl	median raphe, 0	o		Groenink et al., 2000	Neuroreport 11:2285-2288
Flesinoxan	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Wistar rats (275-300g)	5-20 µg/1 µl/side	amygdala, 0	+		Groenink et al., 2000	Neuroreport 11:2285-2288
Flesinoxan	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (200-250g)	2.5-10	sc, 30	+	Shock of 0.3 mA/0.5 sec, every 20th lick	Millan et al., 2001	Neuropsychopharmacology 25:585-600
Flesinoxan	5-HT_{1A} full agonist	Social interaction	Wistar rats (200-250g)	2.5-10	sc, 30	+	Unfamiliar cage	Millan et al., 2001	Neuropsychopharmacology 25:585-600
Flesinoxan	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	0.31-0.63	sc, 30	+		Millan et al., 2001	Neuropsychopharmacology 25:585-600
Flesinoxan	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats (200-250g)	0.01-10	sc, 30	o		Millan et al., 2001	Neuropsychopharmacology 25:585-600
Flesinoxan	5-HT_{1A} full agonist	Stress-induced	129/Sv mice (25-30g)	0.3-3	sc, 60	+		Pattij et al., 2001	Biol. Psychiatry 49:569-574

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		hyperthermia							
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT_{1A} 129/Sv-Swiss KO mice (25-30g)	0.3-3	sc, 60	o		Pattij et al., 2001	Biol. Psychiatry 49:569-574
Flesinoxan	5-HT_{1A} full agonist	Conditioned fear	Sprague-Dawley rats (230-250g)	1-3	ip, 30	+	Rats received 5 footshocks of 0.2 mA 24h prior testing	Li et al., 2001	Eur. J. Pharmacol. 425:43-50
Flesinoxan	5-HT_{1A} full agonist	Conditioned fear	Sprague-Dawley rats (230-250g)	0.3	sc, o.d. for 13 days	+	Rats received 5 footshocks of 0.2 mA 24h prior testing	Li et al., 2001	Eur. J. Pharmacol. 425:43-50
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	Wild-type 129/Sv mice (13-week-old)	1-3	sc, 60	+	Radiotelemetry system was used	Bouwknecht et al., 2002	Brain Res. Bull. 57:93-102
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT1B KO 129/Sv mice (13-week-old)	1-3	sc, 60	+	Radiotelemetry system was used	Bouwknecht et al., 2002	Brain Res. Bull. 57:93-102
Flesinoxan	5-HT_{1A} full agonist	Light-enhanced startle	Wistar rats (200-250g)	10	po, 60	+	Baseline startle was not affected	De Jongh et al., 2002	Psychopharmacology 159:176-180
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	129/Sv background (12-week-old)	0.3-3	sc, 60	+		Pattij et al., 2002	Neuropsychopharmacology 27:380-390
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	129/Sv background (12-week-old)	0.3-3	sc, 60	(o)	Anxiolytic-like activity was lost in 5-HT_{1A} KO mice	Pattij et al., 2002	Neuropsychopharmacology 27:380-390
Flesinoxan	5-HT_{1A} full agonist	Open-field	C57BL/6J mice (8-9-week-old)	1-3	sc, 70	-	(1) Mice were tested 4 times with 1-week intervals; (2) Activity was strongly reduced	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:35-44

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Flesinoxan	5-HT_{1A} full agonist	Open-field	129SvEvTac mice (8-9-week-old)	0.3-3	sc, 70	o	Mice were tested 4 times with 1-week intervals	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:35-44
Flesinoxan	5-HT_{1A} full agonist	Light/dark test	C57BL/6J mice (8-9-week-old)	1-3	sc, 60	-	(1) Mice were tested 4 times with 1-week intervals; (2) Activity was strongly reduced	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:35-44
Flesinoxan	5-HT_{1A} full agonist	Light/dark test	129SvEvTac mice (8-9-week-old)	0.3-3	sc, 60	o	Mice were tested 4 times with 1-week intervals	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:35-44
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	C57BL/6J mice (8-9-week-old)	1-3	sc, 60	+	Mice were tested 4 times with 1-week intervals	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:35-44
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	129SvEvTac mice (8-9-week-old)	1-3	sc, 60	+	Mice were tested 4 times with 1-week intervals	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:35-44
Flesinoxan	5-HT_{1A} full agonist	Open-field	C57BL/6J mice (8-9-week-old)	3	sc, 60	-	(1) Mice were tested repeatedly at each dose with 1-week intervals; (2) Activity was strongly reduced	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:45-53
Flesinoxan	5-HT_{1A} full agonist	Open-field	129SvEvTac mice (8-9-week-old)	0.3-3	sc, 60	o	Mice were tested repeatedly at each dose with 1-week intervals	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:45-53
Flesinoxan	5-HT_{1A} full agonist	Light/dark test	C57BL/6J mice (8-9-week-old)	1-3	sc, 60	-	(1) Mice were tested repeatedly at each dose with 1-week intervals; (2) Activity was strongly reduced	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:45-53
Flesinoxan	5-HT_{1A} full agonist	Light/dark test	129SvEvTac mice (8-9-week-old)	0.3-3	sc, 60	o	Mice were tested repeatedly at	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:45-53

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							each dose with 1-week intervals		
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	C57BL/6J mice (8-9-week-old)	0.3-3	sc, 60	+	Mice were tested repeatedly at each dose with 1-week intervals	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:45-53
Flesinoxan	5-HT_{1A} full agonist	Stress-induced hyperthermia	129SvEvTac mice (8-9-week-old)	1-3	sc, 60	+	Mice were tested repeatedly at each dose with 1-week intervals	Bouwknecht et al., 2004	Eur. J. Pharmacol. 494:45-53
Flesinoxan	5-HT_{1A} full agonist	Conditioned fear	Sprague-Dawley rats (290-320g)	3 µg/0.5 µl/side	hippocampus, 10	+	Scrambled electric shocks of 2.5 mA/30 s were applied	Li et al., 2006	Eur. J. Pharmacol. 532:74-80
Flesinoxan	5-HT_{1A} full agonist	Conditioned fear	Sprague-Dawley rats (290-320g)	3 µg/0.5 µl/side	amygdala, 10	+	Scrambled electric shocks of 2.5 mA/30 s were applied	Li et al., 2006	Eur. J. Pharmacol. 532:74-80
Flesinoxan	5-HT_{1A} full agonist	Conditioned fear	Sprague-Dawley rats (290-320g)	3 µg/0.5 µl/side	medial prefrontal cortex, 10	o	Scrambled electric shocks of 2.5 mA/30 s were applied	Li et al., 2006	Eur. J. Pharmacol. 532:74-80
Flesinoxan	5-HT_{1A} full agonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	1200 nmol/1 µl	basolateral amygdala, 10	+	Empty cage of a resident aggressor	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600
Flesinoxan	5-HT_{1A} full agonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	800-1200 nmol/1 µl	basolateral amygdala, 10	+	(1) Following 15 min social defeat training; (2) expression of conditioned defeat	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600
Flesinoxan	5-HT_{1A} full agonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	1200 nmol/1 µl	basolateral amygdala, 10	+	Empty cage of a resident aggressor	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600
Flesinoxan	5-HT_{1A} full agonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	1200 nmol/1 µl	basolateral amygdala, 10	+	(1) Following 15 min social defeat training; (2) acquisition of	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							conditioned defeat		
Flesinoxan+(±)-Pindolol	5-HT_{1A} full agonist+antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	30	sc, 10	+	No antagonism of the effects of 8-OH-DPAT	Joordens et al., 1998	Psychopharmacology 139:383-390
Flesinoxan+DU 125,530	5-HT_{1A} full agonist+antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	30	sc, 10	+	No antagonism of the effects of 8-OH-DPAT	Joordens et al., 1998	Psychopharmacology 139:383-390
Flesinoxan+fluvoxamine (30-60 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	30	sc, o.d. for 13 days	(+)	(1) Additive effects between both drugs; (2) Rats received 5 footshocks of 0.2 mA 24h prior testing	Li et al., 2001	Eur. J. Pharmacol. 425:43-50
Flesinoxan+WAY 100635	5-HT_{1A} full agonist+antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	30	sc, 10	+	No antagonism of the effects of 8-OH-DPAT	Joordens et al., 1998	Psychopharmacology 139:383-390
Flesinoxan+WAY 100635 (0,1 mg/kg)	5-HT_{1A} full agonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	0,3-1	sc, 15	(o)	Antagonism of the effects of flesinoxan	Fish et al., 2000	Psychopharmacology 149:277-85
Flesinoxan+WAY 100635 (1 mg/kg)	5-HT_{1A} full agonist	Stress-induced hyperthermia	129/Sv mice (25-30g)	0.3-3	sc, 60	(o)	Antagonism of the effects of flesinoxan	Pattij et al., 2001	Biol. Psychiatry 49:569-574
Flesinoxan+WAY 100635 (1 mg/kg)	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT_{1A} 129/Sv-Swiss KO mice (25-30g)	0.3-3	sc, 60	o	No interaction	Pattij et al., 2001	Biol. Psychiatry 49:569-574
Flesinoxan+WAY 100635 (1 mg/kg)	5-HT_{1A} full agonist	Stress-induced hyperthermia	Wild-type 129/Sv mice (13-week-old)	1	sc, 60	(o)	(1) Antagonism of the effects of flesinoxan; (2) Radiotelemetry system was used	Bouwknecht et al., 2002	Brain Res. Bull. 57:93-102

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Flesinoxan+WAY 100635 (1 mg/kg)	5-HT_{1A} full agonist	Stress-induced hyperthermia	5-HT1B KO 129/Sv mice (13-week-old)	1	sc, 60	(o)	(1) Antagonism of the effects of flesinoxan; (2) Radiotelemetry system was used	Bouwknecht et al., 2002	Brain Res. Bull. 57:93-102
Flibanserin	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Light/dark test	CD1 mice (20-24g)	8	ip, 30	+		Borsini et al., 1999	Pharmacol. Biochem. Behav. 64:137-146
Flibanserin	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Stress-induced hyperthermia	CD1 mice (20-24g)	8-16	ip, 30	+		Borsini et al., 1999	Pharmacol. Biochem. Behav. 64:137-146
Flibanserin	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	CD1 mice (20-24g)	2-16	ip, 30	o		Borsini et al., 1999	Pharmacol. Biochem. Behav. 64:137-146
Flibanserin	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Ultrasonic distress vocalizations	Long Evans rat pups (7-8-day-old)	5-50	sc, 30	+	ultrasonic vocalizations was recorded in both low- and high-vocalizing pups	Podhorna and Brown, 2000	Br. J. Pharmacol. 130:739-746
Fluovoxamine	5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups (7-day-old)		ip, 30	+		Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
Fluovoxamine	5-HT reuptake inhibitor	Marble burying	ICR mice (24-33g)	3-30	sc, 30	+		Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
Fluoxetine	5-HT reuptake inhibitor	Vogel conflict test	Maudsley rats	2.5-20		o		Lewis et al., 1995	Soc. Neurosci. Abstr. 21:1131
Fluoxetine	5-HT reuptake inhibitor	Vogel conflict test	Rats	5-10	ip, 30	+		Handley and McBlane, 1992	Br. J. Pharmacol. 107:446P
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (150-200g)	10	30	-		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Rats	1.25-10	ip, 30	-		Handley and McBlane, 1992	Br. J. Pharmacol. 107:446P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	-		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (210-230g)	10	po, for 3 days (o.d.)	o		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (150-200g)	10	30	-	Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Fluoxetine	5-HT reuptake inhibitor	Holeboard	Wistar rats (150-200g)	10	30	-		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	5-20	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats	10-30	po, 30	o		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	20	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats	30	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (7-12-day-old)	0.1-10	ip	+		Salter et al., 1995	Neuropharmacology 34:217-227
Fluoxetine	5-HT reuptake inhibitor	Mouse defense test battery	Swiss-Webster mice (60-75-day-old)	5-15	ip, 30	-		Griebel et al., 1995	Psychopharmacology 120:57-66
Fluoxetine	5-HT reuptake inhibitor	Mouse defense test battery	Swiss-Webster mice (60-75-day-old)	5-15	ip, for 3 weeks (o.d.)	+		Griebel et al., 1995	Psychopharmacology 120:57-66
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppresse	Long-Evans rats (300-325g)	10	ip, 60	-		Bodnoff et al., 1989	Psychopharmacology 97:277-279

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		d feeding							
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Long-Evans rats (300-325g)	10	for 21 days (o.d.)	+		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Wistar-King rats (200-250g)	10	ip, for 4 days (b.i.d.)	o	Inescapable electric footshock of 2.5 mA	Tsuchiya et al., 1996	Pharmacol. Biochem. Behav. 54:687-691
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Female CD1 mice (22-24g)	10-20	ip, 30	+		De Angelis, 1996	Naunyn Schmied. Arch. Pharmacol. 354:379-383
Fluoxetine	5-HT reuptake inhibitor	Open-field	Female CD1 mice (22-24g)	5	ip, 30	+		De Angelis, 1996	Naunyn Schmied. Arch. Pharmacol. 354:379-383
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 30	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>100	po, 30	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 120	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>100	po, 120	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 210	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>100	po, 210	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (200-250g)	0.029-2.9 µmol/kg	sc, 30	o		Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50>58	sc, 30	o	Four 1.0 mV inescapable footshocks, each 10 s.	Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Mice	1-16	ip, 30	o	Asymmetric compartments	Bourin et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:1389-1402
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar mice (25-30g)	10	ip, 30	o		Bhattacharya and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	1-10	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Fluoxetine	5-HT reuptake inhibitor	Schedule-induced polydipsia	Female RORO rats	MED=30	ip, 30	+		Bös et al., 1997	J. Med. Chem. 40:2762-2769
Fluoxetine	5-HT reuptake inhibitor	Geller-Seifter conflict test	Rats	1-8	ip, 40 h	o		Beaufour et al., 1997	Behav. Pharmacol. 8:641
Fluoxetine	5-HT reuptake inhibitor	Geller-Seifter conflict test	Rats	8	ip, for 7 weeks (o.d.)	o		Beaufour et al., 1997	Behav. Pharmacol. 8:641
Fluoxetine	5-HT reuptake inhibitor	Safety signal withdrawal conflict test	Rats	1-8	ip, 17 h	o		Beaufour et al., 1997	Behav. Pharmacol. 8:641
Fluoxetine	5-HT reuptake inhibitor	Safety signal withdrawal conflict test	Rats	8	ip, for 7 weeks (o.d.)	o		Beaufour et al., 1997	Behav. Pharmacol. 8:641
Fluoxetine	5-HT reuptake inhibitor	Mirrored chamber	Mice	5		-		Fundarò and Ricci-Gamalero,	Behav. Pharmacol. 8:647

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1997	
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (180-200g)	30	ip, 60	+	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
Fluoxetine	5-HT reuptake inhibitor	Pinch-induced catalepsy	Female and male Swiss mice (25-30g)	20	ip, 30	+	The drug shortened the duration of catalepsy	Fundaro, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:147-158
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Swiss mice (20-25g)	10	ip, 30	-	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
Fluoxetine	5-HT reuptake inhibitor	Marble burying	ICR mice (25-35g)	40-160	po, 60	+		Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Fluoxetine	5-HT reuptake inhibitor	Stress-suppressed feeding	Rats		po, 60	+	Tail-pinch stress	Yamada et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S9
Fluoxetine	5-HT reuptake inhibitor	Marble burying	Mice		po, 60	+		Yamada et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S9
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (300g)	10-30	ip, 30	+		Jenck et al., 1998	Eur. Neuropsychopharmacol. 8:161-168
Fluoxetine	5-HT reuptake inhibitor	Schedule-induced polydipsia	Adult female RORO rats	60	po, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Fluoxetine	5-HT reuptake inhibitor	8-OH-DPAT-induced scratching	Adult squirrel monkeys	10	po, 0	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Fluoxetine	5-HT reuptake inhibitor	8-OH-DPAT-induced scratching	Adult squirrel monkeys	10	po, for 15 days (o.d.)	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Marble burying	Adult Swiss mice	10	sc, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Fluoxetine	5-HT reuptake inhibitor	Excessive eating of palatable food	Adult female RORO rats	60	po, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (110-200g)	5	ip, 30	-		Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (110-200g)	5	ip, for 5 days (o.d.)	-		Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	5-10	ip, 60	-	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10, once for 7 days	ip	-	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10, once for 28 days	ip	o	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>30	po, 30	o		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 30	o		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fluoxetine	5-HT reuptake inhibitor	Marble burying	Mice	ED50=7	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fluoxetine	5-HT reuptake inhibitor	Marble burying	Mice	ED50=9	sc, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (290-340g)	5	ip, 20	-		To et al., 1999	Neuroreport 10:553-555
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (290-340g)	5	ip, o.d. for 21 days	o		To et al., 1999	Neuroreport 10:553-555

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (300-340g)	5	ip, 20	-	Low light condition	To and Bagdy, 1999	Neuropharmacology 38:279-282
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (300-340g)	5	ip, o.d. for 21 days	o	Low light condition	To and Bagdy, 1999	Neuropharmacology 38:279-282
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300g)	5	ip, 60	-		Silva et al., 1999	Braz. J. Med. Biol. Res. 32:333-339
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300g)	5	ip, 60	-	Animals were food deprivated	Silva et al., 1999	Braz. J. Med. Biol. Res. 32:333-339
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300g)	5	ip, o.d. for 22 days	-		Silva et al., 1999	Braz. J. Med. Biol. Res. 32:333-339
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (300g)	5	ip, o.d. for 22 days	-	Animals were food deprivated	Silva et al., 1999	Braz. J. Med. Biol. Res. 32:333-339
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-280g)	3	sc, 60	o	During training rats were subjected to one daily unescapable footshock (2,5 mA) for 4 days	Cavazzuti et al., 1999	Psychopharmacology 143:20-23
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-280g)	3	sc, o.d. for 5 days	o	During training rats were subjected to one daily unescapable footshock (2,5 mA) for 4 days	Cavazzuti et al., 1999	Psychopharmacology 143:20-23
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-280g)	3	sc, o.d. for 12 days	o	During training rats were subjected to one daily unescapable footshock (2,5 mA) for 4 days	Cavazzuti et al., 1999	Psychopharmacology 143:20-23
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-280g)	3	sc, o.d. for 26 days	+	During training rats were subjected to one	Cavazzuti et al., 1999	Psychopharmacology 143:20-23

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							daily unescapable footshock (2,5 mA) for 4 days		
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Lewis rats (210-230g)	7,5	ip, o.d. for 21 days	o		Berton et al., 1999	Neuroscience 92:327-341
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Lewis rats (210-230g)	7,5	ip, o.d. for 21 days	+	Following social defeat	Berton et al., 1999	Neuroscience 92:327-341
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	SHR rats (4-5-week-old)	5-10	ip, o.d. for 13 days	o	Washout period of 24-27 h	Durand et al., 1999	Neuropharmacology 38:893-907
Fluoxetine	5-HT reuptake inhibitor	Open-field	SHR rats (4-5-week-old)	5-10	ip, o.d. for 21 days	o	Washout period of 48-51 h	Durand et al., 1999	Neuropharmacology 38:893-907
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (4-5-week-old)	5-10	ip, o.d. for 13 days	o	Washout period of 24-27 h	Durand et al., 1999	Neuropharmacology 38:893-907
Fluoxetine	5-HT reuptake inhibitor	Open-field	Wistar-Kyoto rats (4-5-week-old)	5-10	ip, o.d. for 21 days	o	Washout period of 48-51 h	Durand et al., 1999	Neuropharmacology 38:893-907
Fluoxetine	5-HT reuptake inhibitor	Safety signal withdrawal conflict test	Wistar AF rats (350-425g)	8	ip, o.d. for 7 weeks	+	Anxiolytic-like effects appeared 3 days after the end of treatment	Beaufour et al., 1999	Pharmacol. Biochem. Behav. 62:591-599
Fluoxetine	5-HT reuptake inhibitor	Social interaction	HDS rats	10	ip	-	(1) HLU condition; (2) HDS have high level of anxiety	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
Fluoxetine	5-HT reuptake inhibitor	Social interaction	HDS rats	10	ip, o.d. for 14 days	o	(1) HLU condition; (2) HDS have high level of anxiety	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
Fluoxetine	5-HT reuptake inhibitor	Social interaction	LDS rats	10	ip	-	(1) Low light unfamiliar condition; (2) LDS have low level of anxiety	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
Fluoxetine	5-HT reuptake inhibitor	Social interaction	LDS rats	10	ip, o.d. for 14 days	o	(1) Low light unfamiliar condition; (2) LDS have low	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							level of anxiety		
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Wild-type 5-HT_{1A} KO 129/Sv mice	10	ip, for 30 days	+		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	5-HT_{1A} KO 129/Sv mice	10	ip, for 30 days	o		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wild-type 5-HT_{1A} KO 129/Sv mice	10	ip, for 30 days	o		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	5-HT_{1A} KO 129/Sv mice	10	ip, for 30 days	o		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (225-275g)	2	for 14 days	+	Animals were subjected to inescapable footshocks (0.8 mA/10 s)	Zhang et al., 1999	Soc. Neurosci. Abstr. 25:437
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (180-280g)	5-20	ip, 30	o		Griebel et al., 1999	Physiol. Behav. 67:315-320
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (180-280g)	20	ip, 24 h	+		Griebel et al., 1999	Physiol. Behav. 67:315-320
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (180-280g)	5-20	ip, for 23-24 days (o.d.), ip, 30	o		Griebel et al., 1999	Physiol. Behav. 67:315-320
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (180-280g)	5-20	ip, for 23-24 days (o.d.), ip, 24 h	o		Griebel et al., 1999	Physiol. Behav. 67:315-320
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (225-275g)	10	ip, for 14 days (o.d.)	+	Stress responses were elicited by inescapable footshock (0.8 mA/10 s)	Zhang et al., 2000	Brain Res. 855:58-66
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (180-220g)	5	po, 60	+		Nowakowska et al., 2000	Arzneimittelforschung 50:5-10

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (180-220g)	5	po, for 7 days (o.d.)	+		Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (180-220g)	5	po, for 14 days (o.d.)	+		Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (230-300g)	5.6-10	ip, 30	-	Elevated plus-maze with transparent walls	Silva and Brandão, 2000	Pharmacol. Biochem. Behav. 65:209-16
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (230-300g)	10	po, for 2 weeks (o.d.)	o	Elevated plus-maze with transparent walls	Silva and Brandão, 2000	Pharmacol. Biochem. Behav. 65:209-16
Fluoxetine	5-HT reuptake inhibitor	Elevated zero-maze	Wistar rats (240-320g)	10	ip, 30	-	Sedative rather than anxiogenic-like effects were suggested	Pähkla et al., 2000	Pharmacol. Biochem. Behav. 65:737-42
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10, once for 14 days	ip	-	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10, once for 4 days	ip	-	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine	5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}=2.7	ip, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
Fluoxetine	5-HT reuptake inhibitor	Distress vocalizations	Mice (8-day-old)	30	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
Fluoxetine	5-HT reuptake inhibitor	Shock-induced foot tapping	Female and male Mongolian gerbils (40-70g)	30	ip, 30	-	Six 1 s electrical stimuli, at 60s, 2 mA were delivered	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (173-287g)	100	po, 30-210	o	Scrambled shock of 1.8 mA/0.3 s	Bartoszyk et al., 1997	Eur. J. Pharmacol. 322:147-153
Fluoxetine	5-HT reuptake inhibitor	Open-field	Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Fluoxetine	5-HT reuptake inhibitor	Acoustic startle reflex	Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Fluoxetine	5-HT reuptake inhibitor	Open-field	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	o		Mar et al., 2000	Psychopharmacology 150:52-60
Fluoxetine	5-HT reuptake inhibitor	Acoustic startle reflex	Olfactory bulbectomized Sprague-Dawley rats (325-375g)	10	ip, for 21 days (o.d.)	+		Mar et al., 2000	Psychopharmacology 150:52-60
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	SHR rats (4-5-week-old)	10	po, 60	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (4-5-week-old)	10	po, 60	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	SHR rats (4-5-week-old)	10	po, for 21 days (o.d.)	-	Totam arm entries were decreased	Durand et al., 2000	Neuropharmacology 39:2464-2477
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (4-5-week-old)	10	po, for 21 days (o.d.)	-	Totam arm entries were decreased	Durand et al., 2000	Neuropharmacology 39:2464-2477
Fluoxetine	5-HT reuptake inhibitor	Open-field	SHR rats (4-5-week-old)	10	po, for 21 days (o.d.)	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Fluoxetine	5-HT reuptake inhibitor	Open-field	Wistar-Kyoto rats (4-5-week-old)	10	po, for 21 days (o.d.)	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Fluoxetine	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	1-32	ip, 30	o	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-330g)	5-10	ip, 30	-	LLF conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
Fluoxetine	5-HT reuptake inhibitor	Free-exploration test	Swiss mice (9-week-old)	5-20	ip, b.i.d. for 5 days	+	The exploration cage contained cat feces	Belzung et al., 2001	Neuropharmacology 41:400-408
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (200-250g)	1	ip, for 21 days (o.d.)	+	Defensive reactions were abolished by fluoxetine	Vargas and Schenberg, 2001	Psychopharmacology 155:260-268
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Female Mongolian gerbils (30-50g)	1-30	po, 60	o	High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:357-370
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Gerbils	10		-		Cheeta et al., 2001	Behav. Pharmacol. 12 (Suppl. 1):Suppl. 19
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats		ip	+		De Vry et al., 2001	Behav. Pharmacol. 12 (Suppl. 1):S29
Fluoxetine	5-HT reuptake inhibitor	Tonic immobility	Dunkin Hartley guinea-pigs (600-800g)	1.2-18	sc, 30	o		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
Fluoxetine	5-HT reuptake inhibitor	Acral lick dermatisis	Female and male dogs	20	po, for 6 weeks	+		Wynchank and Berk, 1998	Depress. Anxiety 8:21-23
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	5-15	ip, 30	o		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	5-15	ip, 30	o		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated	Wistar rats (250-300g)	5-15	ip, o.d. for 3 weeks	+		Viana et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		T-maze							
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats			+	(1) Weak effects; (2) Four footshocks were delivered	Sanchez, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S66
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Sprague-Dawley rats	ED50=13.6	ip, 30	+		Hogg and Jessa, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S151
Fluoxetine	5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups	1-10	sc, 15	o		Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
Fluoxetine	5-HT reuptake inhibitor	Conflict test	Pigeons	3-78	im	o	VI30 (food)/FR5 (shock) schedule was in use	Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
Fluoxetine	5-HT reuptake inhibitor	Conflict test	Squirrel monkeys	0.3-10	im	o	VI30 (food)/FR5 (shock) schedule was in use	Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
Fluoxetine	5-HT reuptake inhibitor	Schedule-induced polydipsia	Sprague-Dawley rats (250-300 g)	3-30	sc, 10	+	VI60 operant was used	Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
Fluoxetine	5-HT reuptake inhibitor	Seed finding	Syrian Golden hamsters (120-130g)	0.001-1	ip, 90	+	Fasting and isolation were used as stressors	King et al., 2002	Neuropsychobiology 45:150-155
Fluoxetine	5-HT reuptake inhibitor	Marble burying	BALB/c mice (18-20g)	30	ip, 30	+		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Fluoxetine	5-HT reuptake inhibitor	Stress-induced gastric lesion	Sprague-Dawley rats (200-250g)	5	ip, b.i.d., -2 and +2 h	+	Rats were subjected to 4 h of immobilization stress	Gabry et al., 2002	Mol. Psychiatry 7:474-483
Fluoxetine	5-HT reuptake inhibitor	Marble burying	ICR mice (28-40g)	15	ip, 20	+		Takeuchi et al., 2002	Jpn. J. Pharmacol. 90:197-200

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Brown Norway rats (10-week-old, 176-260g)	1-10	po, 30	o	Unstable elevated plus-maze	Jones et al., 2002	Behav. Pharmacol. 13:525-535
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Brown Norway rats (10-week-old, 176-260g)	10	po, for 21 days (in food)	+	Unstable elevated plus-maze	Jones et al., 2002	Behav. Pharmacol. 13:525-535
Fluoxetine	5-HT reuptake inhibitor	Balance control and posture	BALB/c mice (3-month-old)	10	sc, o.d. for 3 weeks	+	The drug reduced imbalances	Venault et al., 2001	Neuroreport 12:3091-3094
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Mongolian gerbils	3	ip, 30	-		Pozzato et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S23
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Mongolian gerbils	3	ip, o.d. for 3 weeks	+		Pozzato et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S23
Fluoxetine	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		-		Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		-		Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-12-day-old)	10	ip, 30	+		Dawson et al., 2006	Neuropharmacology 50:975-983
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Dunkin Hartley guinea pig pups (7-10-day-old)	3-10	ip, 4 h	+		Dawson et al., 2006	Neuropharmacology 50:975-983
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	ED50=4.3	sc, 45	+	To elicit ultrasonic vocalizations, pups were placed on a 19°C surface for 4 min	Fish et al., 2004	J. Pharmacol. Exp. Ther. 308:474-480
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-250g)	5-20	ip, 15	o		Borelli et al., 2004	Pharmacol. Biochem. Behav. 77:557-566
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulatio	Wistar rats (220-250g)	5-20	ip, for 14 days (o.d.)	+	Theshold of freezing was	Borelli et al., 2004	Pharmacol. Biochem. Behav. 77:557-566

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		n					increased		
Fluoxetine	5-HT reuptake inhibitor	Schedule-induced polydipsia	Wistar WU rats (150-175g)	27	po, o.d. for 18 days	+	The drug reduced polydipsia 6 days after the beginning of treatment	Hogg and Dalvi, 2004	Pharmacol. Biochem. Behav. 77:69-75
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (200-300g)	5-15	ip, 2 h	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (200-300g)	5-15	ip, o.d. for 3 weeks	+	The drug increased the latency to leave the open arm	Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-300g)	5-15	ip, 2 h	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-300g)	5-15	ip, o.d. for 3 weeks	o		Poltronieri et al., 2003	Behav. Brain Res. 147:185-192
Fluoxetine	5-HT reuptake inhibitor	Open-field	BALB/c mice (25-30g)	10-18	drinking water, for one day	o		Dulawa et al., 2004	Neuropsychopharmacology 29:1321-1330
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	BALB/c mice (25-30g)	10-18	drinking water, for 5 day	o		Dulawa et al., 2004	Neuropsychopharmacology 29:1321-1330
Fluoxetine	5-HT reuptake inhibitor	Open-field	BALB/c mice (25-30g)	18-25	drinking water, for 19 or 20 days	+		Dulawa et al., 2004	Neuropsychopharmacology 29:1321-1330

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	BALB/c mice (25-30g)	18-25	drinking water, for 29 days	+		Dulawa et al., 2004	Neuropsychopharmacology 29:1321-1330
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6 mice (8-week-old)	10	ip, o.d. for 14 days	-	No effect of the drug was seen after the first injection	Uz et al., 2004	Neuroreport 15:691-694
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Pinealectomized C57BL/6 mice (8-week-old)	10	ip, o.d. for 14 days	o	No effect of the drug was seen after the first injection	Uz et al., 2004	Neuroreport 15:691-694
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C3H mice (8-week-old)	10	ip, o.d. for 14 days	o	No effect of the drug was seen after the first injection	Uz et al., 2004	Neuroreport 15:691-694
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Pinealectomized C3H mice (8-week-old)	10	ip, o.d. for 14 days	o	No effect of the drug was seen after the first injection	Uz et al., 2004	Neuroreport 15:691-694
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	5-20	ip, 30	o		Holmes and Rodgers, 2003	Eur. J. Pharmacol. 459:221-230
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	10-20	ip, 30	-	Maze-experienced mice were used	Holmes and Rodgers, 2003	Eur. J. Pharmacol. 459:221-230
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Transgenic mice overexpressing glucocorticoid receptor in forebrain	10	ip, o.d. for 10 days	o	The drug did not reverse increased anxiety in transgenic mice	Wei et al., 2004	Proc. Natl. Acad. Sci. U.S.A. 101:11851-11856
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6J background mice	10	ip, o.d. for 10 days	-		Wei et al., 2004	Proc. Natl. Acad. Sci. U.S.A. 101:11851-11856
Fluoxetine	5-HT reuptake inhibitor	Distress vocalizations	Dunkin Hartley guinea pig pups (12-16-day-old)	10	ip, 30	+	Isolation-induced distress vocalizations	Lamberty and Gower, 2004	Pharmacol. Biochem. Behav. 79:119-124
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (200g)	30	ip, 30	+	Electric shocks of 0.6 mA/2 s were applied	De Vry et al., 2004	Eur. Neuropsychopharmacol. 14:487-495

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Shock-probe burying test	Sprague-Dawley rats (250-300g)	15	ip, 60	+		Degroot and Nomikos, 2005	Neuropsychopharmacology 30:391-400
Fluoxetine	5-HT reuptake inhibitor	Open-field	5-HTT+/+ mice (12-week-old)	10	ip, between PN 4 and 21	+	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Open-field	5-HTT+/- mice (12-week-old)	10	ip, between PN 4 and 21	+	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Open-field	5-HTT-/- mice (12-week-old)	10	ip, between PN 4 and 21	o	(1) Mice were tested 9 weeks after fluoxetine injection; (2) The behavioral phenotype of 5-HTT-/- mice mimicked the effects of fluoxetine	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	5-HTT+/+ mice (12-week-old)	10	ip, between PN 4 and 21	+	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	5-HTT+/- mice (12-week-old)	10	ip, between PN 4 and 21	+	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	5-HTT-/- mice (12-week-old)	10	ip, between PN 4 and 21	o	(1) Mice were tested 9 weeks after fluoxetine injection; (2) The behavioral phenotype of 5-HTT-/- mice mimicked the effects of fluoxetine	Ansorge et al., 2004	Science 306:879-881

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	5-HTT+/+ mice (12-week-old)	10	ip, between PN 4 and 21	o	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	5-HTT+/- mice (12-week-old)	10	ip, between PN 4 and 21	+	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	5-HTT-/- mice (12-week-old)	10	ip, between PN 4 and 21	o	(1) Mice were tested 9 weeks after fluoxetine injection; (2) The behavioral phenotype of 5-HTT-/- mice mimicked the effects of fluoxetine	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Conditioned avoidance	5-HTT+/+ mice (12-week-old)	10	ip, between PN 4 and 21	+	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Conditioned avoidance	5-HTT+/- mice (12-week-old)	10	ip, between PN 4 and 21	+	Mice were tested 9 weeks after fluoxetine injection	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Conditioned avoidance	5-HTT-/- mice (12-week-old)	10	ip, between PN 4 and 21	o	(1) Mice were tested 9 weeks after fluoxetine injection; (2) The behavioral phenotype of 5-HTT-/- mice mimicked the effects of fluoxetine	Ansorge et al., 2004	Science 306:879-881
Fluoxetine	5-HT reuptake inhibitor	Vogel conflict test	Outbred rats			-		Molodavkin et al., 2005	Eksp. Klin. Farmakol. 68:10-12

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	1-30	ip, 30	o		Troelsen et al., 2005	Psychopharmacology 181:741-750
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 3-6 days	o	The drug did not change the escape theshold	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 21-24 days	o	The drug did not change the escape theshold	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Fluoxetine	5-HT reuptake inhibitor	Nestlet shredding	NIH Swiss mice (28-32g)	10	sc, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Fluoxetine	5-HT reuptake inhibitor	Marble burying	NIH Swiss mice (28-32g)	10-30	sc, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Fluoxetine	5-HT reuptake inhibitor	Marble burying	NIH Swiss mice (28-32g)	10	sc, for 5 days, o.d.	+		Li et al., 2006	Life Sci. 78:1933-1939
Fluoxetine	5-HT reuptake inhibitor	Nestlet shredding	NIH Swiss mice (28-32g)	10	sc, for 5 days, o.d.	+		Li et al., 2006	Life Sci. 78:1933-1939
Fluoxetine	5-HT reuptake inhibitor	Shock-induced social avoidance	Wistar rats (250-300g)	5	ip, 30	+	Electric shocks of 3 mA/0.01 s were applied one day prior to testing	Leveleki et al., 2006	Brain Res. Bull. 69:153-160
Fluoxetine	5-HT reuptake inhibitor	Airjet-induced escape responses	Sprague-Dawley rats (270-300g)	5	ip, 60	-	The drug exacerbated the airjet escape responses	Salchner and Singewald, 2006	Psychopharmacology 185:282-288
Fluoxetine	5-HT reuptake inhibitor	Airjet-induced escape responses	Sprague-Dawley rats (270-300g)	5	ip, for 21 days, o.d.	o		Salchner and Singewald, 2006	Psychopharmacology 185:282-288
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (260-280g)	ED50=13.6	ip, 30	+		Hogg et al., 2006	Neuropharmacology 51:141-145
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Mongolian gerbils (*Meriones unguiculatus*) (7-week-old, 50-60g)	1-3	po, 60	o		Salomé et al., 2006	Pharmacol. Biochem. Behav. 83:533-539
Fluoxetine	5-HT reuptake inhibitor	Social interaction	FSL rats (70-75-day-old, 350-370g)	5	ip, for 14 days, o.d.	+		Overstreet and Griebel,	Eur. J.Pharmacol. 497:49-53

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								2004	
Fluoxetine	5-HT reuptake inhibitor	Holeboard	Female and male WSC-1 and WSC-2 mice (55-90-day-old)	ip, 30		o	The drug decreased head-dippings in a non-specific manner	Kliethermes and Crabbe, 2006	Pharmacol. Biochem. Behav. 85:57-65
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	ICR mice (5-week-old)	1,8-3,5	ip, 120	+		Komiya et al., 2006	Behav. Brain Res. 172:240-249
Fluoxetine	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	15	po, b.i.d. for 28 days	+		Mirza et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:858-866
Fluoxetine	5-HT reuptake inhibitor	Airjet-induced escape responses	Sprague-Dawley rats (240-300g)	1-5	ip, 60	-		Salchner and Singewald, 2002	Neuropharmacology 43:1238-1248
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-300g)	5	ip, 45	-		Salchner and Singewald, 2002	Neuropharmacology 43:1238-1248
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	NIH Swiss mice (18-22g)	10	ip, 30	o		Emmanouil et al., 2006	Pharmacol. Biochem. Behav. 84:313-320
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-12-day-old)	10	ip, 30	+		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	10	ip, for 21 days, o.d.	o		Zanoveli et al., 2007	Neuropharmacology 52:1188-1195
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	10	ip, for 21 days, o.d.	+	The drug increased latency to escape	Zanoveli et al., 2007	Neuropharmacology 52:1188-1195
Fluoxetine	5-HT reuptake inhibitor	Stress-induced	C57BL/6J (21-30g)	10	po, 60	o	Hyperthermia was produced by	Grundmann et al., 2006	Planta Med. 72:1366-1371

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		hyperthermia					exposure to an open-field		
Fluoxetine	5-HT reuptake inhibitor	Stress-induced hyperthermia	Swiss-Webster mice (30-50g)	20	po, 60	o		Conley and Hutson, 2007	Eur. J. Pharmacol. 564:138-145
Fluoxetine	5-HT reuptake inhibitor	Stress-induced hyperthermia	Swiss-Webster mice (30-50g)	15	po, for 21 days, o.d.	+		Conley and Hutson, 2007	Eur. J. Pharmacol. 564:138-145
Fluoxetine	5-HT reuptake inhibitor	Stress-induced hyperthermia	CD rats (350-400g)	20	ip, 60	o	The drug produced hypothermia	Conley and Hutson, 2007	Eur. J. Pharmacol. 564:138-145
Fluoxetine	5-HT reuptake inhibitor	Stress-induced hyperthermia	CD rats (350-400g)	10	po, for 21 days, o.d.	+		Conley and Hutson, 2007	Eur. J. Pharmacol. 564:138-145
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (350-400g)	10	ip, 60	-	Footshocks of 0.7 mA/0.5 s were delivered during conditioning	Burghardt et al., 2007	Biol. Psychiatry 62:1111-1118
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-300g)	5-15	ip, 30	-		Drapier et al., 2007	Behav. Brain Res. 176:202-209
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (325-375g)	10	ip, 60	o		Knoll et al., 2007	J. Pharmacol. Exp. Ther. 323:838-845
Fluoxetine	5-HT reuptake inhibitor	Open-field	Sprague-Dawley rats (325-375g)	10	ip, 60	-		Knoll et al., 2007	J. Pharmacol. Exp. Ther. 323:838-845
Fluoxetine	5-HT reuptake inhibitor	Open-field	BALB/c mice (8-12-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6J mice (8-12-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	BALB/c mice (8-12-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6J mice (8-12-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	BALB/c mice (8-12-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	(1) Animals were tested after a washout period of 3 weeks; (2) Shock of 0.6 mA/2 s was applied + tone of 80 dB, 30 s; (3) Extinction was not affected	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	C57BL/6J mice (8-12-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	(1) Animals were tested after a washout period of 3 weeks; (2) Shock of 0.6 mA/2 s was applied + tone of 80 dB, 30 s; (3) Extinction was not affected	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Open-field	BALB/c mice (3-7-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6J mice (3-7-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	BALB/c mice (3-7-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6J mice (3-7-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	Animals were tested after a washout period of 3 weeks	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	C57BL/6J mice (3-7-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	(1) Animals were tested after a washout period of 3 weeks; (2) Shock of 0.6 mA/2 s was applied + tone of 80 dB, 30 s; (3) Extinction was not affected	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	C57BL/6J mice (3-7-week-old)	80 mg/l	drinking fluid, for 4 weeks	o	(1) Animals were tested after a washout period of 3 weeks; (2) Shock of 0.6 mA/2 s was applied + tone of 80 dB, 30 s; (3) Extinction was not affected	Norcross et al., 2008	Psychopharmacology 200:413-424
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Fisher rats (247±5.89)	10-20	ip, 60	-	Shocks of 1.5 mA/5 s were delivered the day before	Greenwood et al., 2008	Psychopharmacology 199:209-222
Fluoxetine	5-HT reuptake inhibitor	Operant conditioning	Fisher rats (247±5.89)	10-20	ip, 60	-	(1) Fluoxetine increased escape latency; (2) Shocks of 0.6 mA were delivered and an FR1/FR2 schedule was used	Greenwood et al., 2008	Psychopharmacology 199:209-222
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Fisher rats (247±5.89)	10	ip, 60	o	(1) Animals were allowed to 6 weeks of	Greenwood et al., 2008	Psychopharmacology 199:209-222

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							voluntary exercice; (2) Shocks of 1.5 mA/5 s were delivered the day before		
Fluoxetine	5-HT reuptake inhibitor	Operant conditioning	Fisher rats (247±5.89)	10-20	ip, 60	o	(1) (1) Animals were allowed to 6 weeks of voluntary exercice; (2) Shocks of 0.6 mA were delivered and an FR1/FR2 schedule was used	Greenwood et al., 2008	Psychopharmacology 199:209-222
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Sprague-Dawley rats (225-250g)	5-20	osmotic pump for 28 days	+		Bechtholt et al., 2008	Neuropsychopharmacology 33:2117-2130
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Sprague-Dawley rats (225-250g)	5-20	osmotic pump for 3 days	o		Bechtholt et al., 2008	Neuropsychopharmacology 33:2117-2130
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Female and male CD rat pups (8-10-day-old, 17-30g)	3-30	ip, 30	+		Hodgson et al., 2008	Pharmacol. Biochem. Behav. 88:341-348
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (280g)	7	ip, for 3 weeks, o.d.	o	Freezing was measured during fear conditioning, which consisted 100-µs pulses of 3.5 mA at 5 Hz on the eyelid	Spennato et al., 2007	Psychopharmacology 196:583-589
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (280g)	7	ip, for 3 weeks, o.d.	+	Freezing was measured 24 h after fear conditioning, which consisted	Spennato et al., 2007	Psychopharmacology 196:583-589

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							100-µs pulses of 3.5 mA at 5 Hz on the eyelid		
Fluoxetine	5-HT reuptake inhibitor	Elevated open-platform	ICR mice (6-8-week-old)	1-10	ip, 30	+		Miyata et al., 2007	J. Pharmacol. Sci. 105:272-278
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Sprague-Dawley rats	10	for 14 days, o.d.	o		Lucas et al., 2007	Neuron 55:712-725
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (250-300g)	1.75-3.5 nmol/0.2 µl	basolateral amygdala, 20	+		Martinez et al., 2007	Eur. Neuropsychopharmacol. 17:717-724
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (250-300g)	3.5 nmol/0.2 µl	lateral amygdala, 20	+		Martinez et al., 2007	Eur. Neuropsychopharmacol. 17:717-724
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (250-300g)	3.5 nmol/0.2 µl	basolateral amygdala, 20	-	Contextual freezing was measured 24 h after dorsal PAG stimulation	Martinez et al., 2007	Eur. Neuropsychopharmacol. 17:717-724
Fluoxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (250-300g)	3.5 nmol/0.2 µl	lateral amygdala, 20	-	Contextual freezing was measured 24 h after dorsal PAG stimulation	Martinez et al., 2007	Eur. Neuropsychopharmacol. 17:717-724
Fluoxetine	5-HT reuptake inhibitor	Stress-induced grooming	Wistar rats (320-370g, 6-8-month-old)	5-10	ip, 25	-	The drug modified the behavioral microstructure of grooming activity	Enginar et al., 2008	Pharmacol. Biochem. Behav. 89:450:455
Fluoxetine	5-HT reuptake inhibitor	Holeboard	Wistar rats (320-370g, 6-8-month-old)	10	ip, 25	+		Enginar et al., 2008	Pharmacol. Biochem. Behav. 89:450:455
Fluoxetine	5-HT reuptake inhibitor	Open-field	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-	Effect was evident up to 16 months of age	Ansorge et al., 2008	J. Neurosci. 28:199-207

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-		Ansorge et al., 2008	J. Neurosci. 28:199-207
Fluoxetine	5-HT reuptake inhibitor	Shock escape test	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 4 and 21, o.d.	-	Shocks of 0.2 mA/10 s were applied	Ansorge et al., 2008	J. Neurosci. 28:199-207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 90 and 108, o.d.	o	The test was performed 2,5 month after cessation of treatment	Ansorge et al., 2008	J. Neurosci. 28:199-207
Fluoxetine	5-HT reuptake inhibitor	Shock escape test	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 90 and 108, o.d.	o	The test was performed 2,5 month after cessation of treatment	Ansorge et al., 2008	J. Neurosci. 28:199-207
Fluoxetine	5-HT reuptake inhibitor	Open-field	Female and male 129S6/SvEv mice (3-3,5-month-old)	10	ip, between PN 90 and 108, o.d.	o	The test was performed 2,5 month after cessation of treatment	Ansorge et al., 2008	J. Neurosci. 28:199-207
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Sprague-Dawley rats (3-4-day-old)	10	sc, 30	+		Louis et al., 2008	Pharmacol. Biochem. Behav. 89:36-45
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (7-8-week-old, 200-220g)	3-10	ip, 30	o		Louis et al., 2008	Pharmacol. Biochem. Behav. 89:36-45
Fluoxetine	5-HT reuptake inhibitor	Marble burying	NMRI mice (6-7-week-old)	10-20	ip, 30	+		Bespalov et al., 2008	Eur. J. Pharmacol. 592:96-102
Fluoxetine	5-HT reuptake inhibitor	Marble burying	NMRI mice (20-22g)	2.5-10	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the	Swiss mice (25-35g)	40	ip, for 15 days, o.d.	+	The drug impaired inhibitory	Gomes et al., 2009	Brain Res. Bull. 78:323-327

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		elevated T-maze					avoidance		
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Swiss mice (25-35g)	20-40	ip, 30	-	The drug facilitated inhibitory avoidance	Gomes et al., 2009	Brain Res. Bull. 78:323-327
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Swiss mice (25-35g)	40	ip, for 15 days, o.d.	+	The drug increased latency to escape	Gomes et al., 2009	Brain Res. Bull. 78:323-327
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Swiss mice (25-35g)	20-40	ip, 30	-	The drug impaired latency to escape	Gomes et al., 2009	Brain Res. Bull. 78:323-327
Fluoxetine	5-HT reuptake inhibitor	elevated plus-maze	BTBR T+tf/J mice (8-15-week-old)	10-30	ip, 60	o		Chadman, 2011	Pharmacol. Biochem. Behav. 97:586-594
Fluoxetine	5-HT reuptake inhibitor	elevated plus-maze	C57BL/6J mice (8-15-week-old)	10-30	ip, 60	o		Chadman, 2011	Pharmacol. Biochem. Behav. 97:586-594
Fluoxetine	5-HT reuptake inhibitor	Stress-induced cognitive impairment	Swiss mice (28-32g)	10	ip, 30	+	Object recognition test following rat exposure	Urani et al., 2011	Pharmacol. Biochem. Behav. 98:425-431
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (280-350g)	7	ip, 16 times over 21 days	+	The drug was administered before the initial fear conditioning	Deschaux et al., 2011	Psychopharmacology 215:231-237
Fluoxetine	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (280-350g)	7	ip, 16 times over 21 days	o	The drug was administered before training	Deschaux et al., 2011	Psychopharmacology 215:231-237
Fluoxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Sprague-Dawley rats (180-200g)	30	ip, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Open-field	BALB/c mice (20-30g, 2-3-month-old)	10	ip, 30	-		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	BALB/c mice (20-30g, 2-3-month-old)	30	ip, 30	-		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (180-210g, 8-week-old)	10	po for 4 weeks	+		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine	5-HT reuptake inhibitor	Elevated T-maze	Wistar rats (180-210g, 8-week-old)	10	po for 4 weeks	+		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine	5-HT reuptake inhibitor	Open-field	Wistar rats (180-210g, 8-week-old)	10	po for 4 weeks	o		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Ovariectomized female Wistar rats (170-190g, 8-week-old)	10	po for 4 weeks	o		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine	5-HT reuptake inhibitor	Elevated T-maze	Ovariectomized female Wistar rats (170-190g, 8-week-old)	10	po for 4 weeks	o		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine	5-HT reuptake inhibitor	Open-field	Ovariectomized female Wistar rats (170-190g, 8-week-old)	10	po for 4 weeks	o		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-300g)	10	ip, o.d. for 21 days	o		Roncon et al., 2012	J. Psychopharmacology 26:525-531
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-300g)	10	ip, o.d. for 21 days	+		Roncon et al., 2012	J. Psychopharmacology 26:525-531
Fluoxetine	5-HT reuptake inhibitor	Marble burying	CD1 mice (25-30g)	20-40	po, 60	+		Kobayashi et al., 2008	Psychopharmacology 197:567-580
Fluoxetine	5-HT reuptake inhibitor	Stress-induced foot-	Mongolian gerbils (50-70g)	20-40	ip, 30	-	(1) Shocks of 1.75 mA/0.5 s were delivered	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		tapping							
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	C57BL/6J (21- to 110-day-old)	10	ip and drinking water, between P4 and P90	o	Animals were tested at P90	Karpova et al., 2009	Eur. Neuropsychopharmacol. 19:97-108
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	C57BL/6J (21- to 110-day-old)	10	ip between P4 and P21	-	Animals were tested at P90	Karpova et al., 2009	Eur. Neuropsychopharmacol. 19:97-108
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	C57BL/6J (21- to 110-day-old)	10	drinking water, between P21 and P90	+	Animals were tested at P90	Karpova et al., 2009	Eur. Neuropsychopharmacol. 19:97-108
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6J (21- to 110-day-old)	10	ip and drinking water, between P4 and P90	o	Animals were tested at P90	Karpova et al., 2009	Eur. Neuropsychopharmacol. 19:97-108
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6J (21- to 110-day-old)	10	ip between P4 and P21	-	Animals were tested at P90	Karpova et al., 2009	Eur. Neuropsychopharmacol. 19:97-108
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6J (21- to 110-day-old)	10	drinking water, between P21 and P90	+	Animals were tested at P90	Karpova et al., 2009	Eur. Neuropsychopharmacol. 19:97-108
Fluoxetine	5-HT reuptake inhibitor	Novel tank diving	Zebrafish (3-5-month-old)	100 µg	immersion for 2 weeks	+		Egan et al., 2010	Behav. Brain Res. 208:371-376
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Swiss mice (6-week-old)	3	drinking water for 4 weeks	-		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6 mice (6-week-old)	3	drinking water for 4 weeks	-		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Swiss mice (6-week-old)	3	drinking water for 4 weeks	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6 mice (6-week-old)	3	drinking water for 4 weeks	-		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Open-field	Swiss mice (6-week-old)	3	drinking water for 4 weeks	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6 mice (6-week-old)	3	drinking water for 4 weeks	-		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Swiss mice (12-week-old)	18	drinking water for 4 weeks	+		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Swiss mice (12-week-old)	3	drinking water between 2 and 6 weeks of age	-		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6 mice (12-week-old)	3	drinking water between 2 and 6 weeks of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Swiss mice (12-week-old)	3	drinking water between 2 and 6 weeks of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6 mice (12-week-old)	3	drinking water between 2 and 6 weeks of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Open-field	Swiss mice (12-week-old)	3	drinking water between 2 and 6 weeks of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6 mice (12-week-old)	3	drinking water between 2 and 6 weeks of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Swiss mice (12-week-old)	3	drinking water between 2-6 weeks, and 12-16 of age	+		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6 mice (12-week-old)	12	drinking water between 2-6 weeks, and 12-16 of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6 mice (12-week-old)	12	drinking water between 2-6 weeks, and 12-16 of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6 mice (12-week-old)	12	drinking water between 2-6 weeks, and 12-16 of age	o		Oh et al., 2009	Neuropsychopharmacology 34:2197-2207
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6Ntac mice (7-8-week-old)	18	po, for 3 weeks	o		David et al., 2009	Neuron 62:479-493

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6Ntac mice (7-8-week-old)	18	po, for 3 weeks	+	Treatment started after 4 weeks of corticosterone (35 µg/ml/day)	David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6Ntac mice (7-8-week-old)	18	po, for 3 weeks	o		David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6Ntac mice (7-8-week-old)	18	po, for 3 weeks	+	Treatment started after 4 weeks of corticosterone (35 µg/ml/day)	David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6Ntac mice (7-8-week-old)	18	po, for 3 weeks	+	Treatment started after 4 weeks of corticosterone (35 µg/ml/day)	David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6Ntac mice (7-8-week-old)	18	po, for 3 weeks	+	(1) Treatment started after 4 weeks of corticosterone (35 µg/ml/day); (2) hippocampus X-irradiated mice	David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6Ntac mice (7-8-week-old)	18	po, for 3 weeks	(o)	(1) Treatment started after 4 weeks of corticosterone (35 µg/ml/day); (2) hippocampus X-irradiated mice	David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Open-field	β-arrestin knockout mice (S129SvxC57BL/6, 4-6-month-old)	18	po, for 3 weeks	-		David et al., 2009	Neuron 62:479-493

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	β-arrestin knockout mice (S129SvxC57BL/6, 4-6-month-old)	18	po, for 3 weeks	-		David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	β-arrestin knockout mice (S129SvxC57BL/6, 4-6-month-old)	18	po, for 3 weeks	o		David et al., 2009	Neuron 62:479-493
Fluoxetine	5-HT reuptake inhibitor	Conditioned avoidance	Wistar rats (300-340g)	2 µg/1 µl	icv, for 7 days	o	Shocks of 0.4 mA were applied	León et al., 2009	Behav. Brain Res. 205:259-264
Fluoxetine	5-HT reuptake inhibitor	Conditioned avoidance	Wistar rats (300-340g)	2 µg/1 µl	icv, for 7 days	o	(1) Shocks of 0.4 mA were applied; (2) Animals were subjected to mild chonic stress	León et al., 2009	Behav. Brain Res. 205:259-264
Fluoxetine	5-HT reuptake inhibitor	Social interaction	ICR mice (3-7-week-old)	10	ip, for 2 weeks	o		Koike et al., 2009	Behav. Brain Res. 202:114-121
Fluoxetine	5-HT reuptake inhibitor	Social interaction	ICR mice (3-7-week-old)	10	ip, for 2 weeks	+	Isolation-reared mice were used	Koike et al., 2009	Behav. Brain Res. 202:114-121
Fluoxetine	5-HT reuptake inhibitor	Social interaction	C57BL/6J (8-week-old)	10	ip, 30	+		Liu et al., 2010	Psychopharmacology 207:535-545
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6J (8-week-old)	10	ip, 30	+		Liu et al., 2010	Psychopharmacology 207:535-545
Fluoxetine	5-HT reuptake inhibitor	Open-field	C57BL/6J (8-week-old)	10	ip, 30	o		Liu et al., 2010	Psychopharmacology 207:535-545
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	10	ip, for 28 days	+		Zhang et al., 2010	J. Neurosci. 30:2433-2441
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	NOS KO (B6x129-NOS1^{tm1plh}, 6-7-week-old)	10	ip, for 28 days	o		Zhang et al., 2010	J. Neurosci. 30:2433-2441

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (at least 65-day-old)	12	po, from gestational day 11 until birth	-		Olivier et al., 2011	Psychopharmacology 217:419-432
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	Wistar rats (at least 65-day-old)	12	po, from gestational day 11 until birth	-		Olivier et al., 2011	Psychopharmacology 217:419-432
Fluoxetine	5-HT reuptake inhibitor	Conditioned place aversion	Wistar rats (at least 65-day-old)	12	po, from gestational day 11 until birth	-	Shocks of 0.4 mA/1 s were applied	Olivier et al., 2011	Psychopharmacology 217:419-432
Fluoxetine	5-HT reuptake inhibitor	Social interaction	Wistar rats (at least 28-35-day-old)	12	po, from gestational day 11 until birth	-		Olivier et al., 2011	Psychopharmacology 217:419-432
Fluoxetine	5-HT reuptake inhibitor	Open-field	Wistar rats (21- and 63-day-old)	12	po, between P25 and P46	o		Homberg et al., 2011	PLoS ONE 6:e16646
Fluoxetine	5-HT reuptake inhibitor	Open-field	Wistar rats (21- and 63-day-old)	12	po, between P67 and P88	o		Homberg et al., 2011	PLoS ONE 6:e16646
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (21- and 63-day-old)	12	po, between P25 and P46	o		Homberg et al., 2011	PLoS ONE 6:e16646
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (21- and 63-day-old)	12	po, between P67 and P88	o		Homberg et al., 2011	PLoS ONE 6:e16646
Fluoxetine	5-HT reuptake inhibitor	Acoustic startle reflex	Wistar rats (21- and 63-day-old)	12	po, between P25 and P46	o		Homberg et al., 2011	PLoS ONE 6:e16646
Fluoxetine	5-HT reuptake inhibitor	Acoustic startle reflex	Wistar rats (21- and 63-day-old)	12	po, between P67 and P88	+		Homberg et al., 2011	PLoS ONE 6:e16646
Fluoxetine	5-HT reuptake inhibitor	Fear-potentiated startle	F344 rats (8-10-week-old)	3-30	po, 45	o		Steiner et al., 2012	Psychopharmacology 223:465-475

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		reflex							
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	5-HT_{3A} KO C57BL/6J mice (450-day-old)	0.6	ip, between ED8 and ED18 pregnant	(o)		Smit-Rigter et al., 2012	Neuropharmacology 62:865-870
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6J mice (450-day-old)	0.6	ip, between ED8 and ED18 pregnant	-		Smit-Rigter et al., 2012	Neuropharmacology 62:865-870
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	CD1 mice (25-35g)	10	ip, for 21 days, o.d.	o		Pulga et al., 2012	Eur. J. Neurosci. 36:3531-3537
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	CD1 mice (25-35g)	10	ip, for 21 days, o.d.	+		Pulga et al., 2012	Eur. J. Neurosci. 36:3531-3537
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	Syrian hamsters (M. auratus, 77-day-old)	5-20	ip, 60	+	Animals received anabolic/androgenic steroid between P27-P56, and were tested 21 days later	Ricci et al., 2012	Horm. Behav. 62:569-578
Fluoxetine	5-HT reuptake inhibitor	Marble burying	Swiss mice (26-30g, 5-6-week-old)	10	sc, 60	+		Sławińska et al., 2013	Neuropharmacology 66:225-235
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (PN54)	10	ip, between PN 44 and 54	-		Yoo et al., 2012	Psychoneuroendocrinology doi: 10.1016/j.psyneuen.2012.08.013

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (PN54)	10	ip, between PN 44 and 54	-	Animals have been maternally separated between PN 1 and 14	Yoo et al., 2012	Psychoneuroendocrinology doi: 10.1016/j.psyneuen.2012.08.013
Fluoxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	10	ip, for 21 days	o		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-è
Fluoxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	10	ip, for 21 days	+		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-è
Fluoxetine	5-HT reuptake inhibitor	Dark/light preference tank test	Zebrafish (*D. rerio*)	0.035	immersion, 0	o		Del Valle-Mojica and Ortiz, 2012	Planta Med. 78:1719-1724
Fluoxetine	5-HT reuptake inhibitor	Marble burying	C57BL6x129SvPas-F1 mice (3-5-month-old)	10	drinking fluid for 5 weeks	+		Fournet et al., 2012	J. Neurochem. 123:982-296
Fluoxetine	5-HT reuptake inhibitor	Marble burying	STOP KO mice (C57BL6x129SvPas-F1, 3-5-month-old)	10	drinking fluid for 5 weeks	+		Fournet et al., 2012	J. Neurochem. 123:982-296
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	C57BL6x129SvPas-F1 mice (3-5-month-old)	10	drinking fluid for 5 weeks	-		Fournet et al., 2012	J. Neurochem. 123:982-296
Fluoxetine	5-HT reuptake inhibitor	Light/dark test	STOP KO mice (C57BL6x129SvPas-F1, 3-5-month-old)	10	drinking fluid for 5 weeks	-		Fournet et al., 2012	J. Neurochem. 123:982-296
Fluoxetine	5-HT reuptake inhibitor	Four-plate test	Swiss-Webster mice (17-22g)	3-10	po, 60	o		Hughes et al., 2012	Neuropharmacology doi: 10.1016/j.Neuropharmacology2012.04.007
Fluoxetine	5-HT reuptake inhibitor	Marble burying	Swiss mice (22-25g)	10	ip, 30	+		Dixit et al., 2012	Behav. Pharmacol. 23:716-721
Fluoxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (3-5-month-old, 220-310g)	1 and 10	ip, 24, 5 and 1 h	o		Santos et al., 2012	Neuropsychiatr. Dis. Treat. 8:413-422

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine	5-HT reuptake inhibitor	Open-field	Wistar rats (3-5-month-old, 220-310g)	1 and 10	ip, 24, 5 and 1 h	o		Santos et al., 2012	Neuropsychiatr. Dis. Treat. 8:413-422
Fluoxetine	5-HT reuptake inhibitor	Open-field	BALB/c ByJ mice (7-8-week-old)	15	ip, for 5 weeks	o		Mutlu et al., 2012	Life Sci. 91:1252-1262
Fluoxetine	5-HT reuptake inhibitor	Open-field	BALB/c ByJ mice (7-8-week-old)	15	ip, for 5 weeks	o	Mice were subjected to unpredictable chonic mild stress for 7 weeks	Mutlu et al., 2012	Life Sci. 91:1252-1262
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	BALB/c ByJ mice (7-8-week-old)	15	ip, for 5 weeks	o		Mutlu et al., 2012	Life Sci. 91:1252-1262
Fluoxetine	5-HT reuptake inhibitor	Novelty-suppressed feeding	BALB/c ByJ mice (7-8-week-old)	15	ip, for 5 weeks	+	Mice were subjected to unpredictable chonic mild stress for 7 weeks	Mutlu et al., 2012	Life Sci. 91:1252-1262
Fluoxetine	5-HT reuptake inhibitor	Ultrasound-induced defensive behaviors	Lister hooded rats (250-350g)	5-10	ip, 30	+	Rats received ultrasound pulse of 65, 72 and 75 dB	Graham et al., 1997	Br. J. Pharmacol. 120 (Suppl. 1):256P
Fluoxetine+17β-estradiol (10 µg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Ovariectomized female Wistar rats (170-190g, 8-week-old)	10	po for 4 weeks	+		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine+17β-estradiol (10 µg/kg)	5-HT reuptake inhibitor	Elevated T-maze	Ovariectomized female Wistar rats (170-190g, 8-week-old)	10	po for 4 weeks	+		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine+17β-estradiol (10 µg/kg)	5-HT reuptake inhibitor	Open-field	Ovariectomized female Wistar rats (170-190g, 8-week-old)	10	po for 4 weeks	+		Charoenphandhu et al., 2011	Pharmacol. Biochem. Behav. 98:503-510
Fluoxetine+5-HT (20 nmol)	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 3-6 days	+	(1) No interaction, but the escape theshold was increased; (2) 5-	de Bortoli et al., 2006	Psychopharmacology 183:422-428

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							HT was infused into the dorsal PAG		
Fluoxetine+5-HT (20 nmol)	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 21-24 days	(+)	(1) The combination increased further the escape theshold; (2) 5-HT was infused into the dorsal PAG	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Fluoxetine+8-OH-DPAT (0.03-1 mg/kg)	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+8-OH-DPAT (0.03-1 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+8-OH-DPAT (0.4 nmol)	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	10	ip, for 21 days, o.d.	(+)	The combination impaired inhibitory avoidance	Zanoveli et al., 2007	Neuropharmacology 52:1188-1195
Fluoxetine+8-OH-DPAT (0.4 nmol)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	10	ip, for 21 days, o.d.	(+)	The combination increased latency to escape further	Zanoveli et al., 2007	Neuropharmacology 52:1188-1195
Fluoxetine+8-OH-DPAT (8 nmol)	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 3-6 days	+	(1) No interaction, but the escape theshold was increased; (2) 8-OH-DPAT was infused into the dorsal PAG	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Fluoxetine+8-OH-DPAT (8 nmol)	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 21-24 days	(+)	(1) The combination increased further the escape theshold; (2) 8-	de Bortoli et al., 2006	Psychopharmacology 183:422-428

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							OH-DPAT was infused into the dorsal PAG		
Fluoxetine+8-OH-DPAT 100 ng)	5-HT reuptake inhibitor	Social interaction	LDS rats	10	ip, o.d. for 14 days	(-)	(1) Low light unfamiliar condition; (2) LDS have low level of anxiety; (3) no interaction; (4) DPAT was infused into dorsal hippocampus	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
Fluoxetine+8-OH-DPAT 100 ng)	5-HT reuptake inhibitor	Social interaction	HDS rats	10	ip, o.d. for 14 days	(o)	(1) Low light unfamiliar condition; (2) HDS have high level of anxiety; (3) no interaction; (4) DPAT was infused into dorsal hippocampus	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
Fluoxetine+8-OH-DPAT 100 ng)	5-HT reuptake inhibitor	Elevated plus-maze	LDS rats	10	ip, o.d. for 14 days	(o)	(1) LDS have low level of anxiety; (2) no interaction; (3) DPAT was infused into dorsal hippocampus	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701
Fluoxetine+8-OH-DPAT 100 ng)	5-HT reuptake inhibitor	Elevated plus-maze	HDS rats	10	ip, o.d. for 14 days	o	(1) HDS have high level of anxiety; (2) no interaction; (3) DPAT was infused into dorsal	File et al., 1999	Pharmacol. Biochem. Behav. 62:695-701

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							hippocampus		
Fluoxetine+berberine (2 mg/kg)	5-HT reuptake inhibitor	Marble burying	Swiss mice (22-25g)	10	ip, 30	(+)		Dixit et al., 2012	Behav. Pharmacol. 23:716-721
Fluoxetine+bicuculline	5-HT reuptake inhibitor	Vogel conflict test	Outbred rats			-	Potentiation of the effects of fluoxetine	Molodavkin et al., 2005	Eksp. Klin. Farmakol. 68:10-12
Fluoxetine+buspirone (12.5 mg/kg)	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+buspirone (12.5 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(o)	Blockade of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+buspirone (1-4 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+CCK-8 (1 nmol/rat)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (300-340g)	5	ip, o.d. for 21 days	(o)	(1) Antagonism of the anxiogenic-like effects of CCK-8; (2) LLF	To and Bagdy, 1999	Neuropharmacology 38:279-282
Fluoxetine+CP-154,526 (5-10 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+CRF (100 ng)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (290-340g)	5	ip, 20	-		To et al., 1999	Neuroreport 10:553-555
Fluoxetine+CRF (100 ng)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (290-340g)	5	ip, o.d. for 21 days	o		To et al., 1999	Neuroreport 10:553-555
Fluoxetine+diazepam (3-10 mg/kg)	5-HT reuptake inhibitor	Open-field	BALB/c mice (20-30g, 2-3-month-old)	18	ip, 30	(o)		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551
Fluoxetine+diazepam (3-10 mg/kg)	5-HT reuptake inhibitor	Light/dark test	BALB/c mice (20-30g, 2-3-month-old)	18	ip, 30	(o)		Birkett et al., 2011	Pharmacol. Biochem. Behav. 98:544-551

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine+DOI	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+DOI	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+DOI (16 nmol)	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 3-6 days	+	(1) No interaction, but the escape theshold was increased; (2) DOI was infused into the dorsal PAG	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Fluoxetine+DOI (16 nmol)	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (220-240g)	10	ip, o.d., for 21-24 days	(+)	(1) The combination increased further the escape theshold; (2) DOI was infused into the dorsal PAG	de Bortoli et al., 2006	Psychopharmacology 183:422-428
Fluoxetine+ethanol (1 g/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (250-280g)	5	ip, for 4 days, o.d.	(o)	The drug blocked the anxiolytic-like effects of ethanol in diazepam withdrawn rats	Martijena et al., 2005	Eur. Neuropsychopharmacol. 15:119-130
Fluoxetine+GR 127935 (4.5 mg/kg)	5-HT reuptake inhibitor	Schedule-induced polydipsia	Wistar WU rats (150-175g)	27	po, o.d. for 3 days	+	The combination reduced polydipsia after one day of treatment	Hogg and Dalvi, 2004	Pharmacol. Biochem. Behav. 77:69-75
Fluoxetine+GR7363 2 (3 pmol/5 µl)	5-HT reuptake inhibitor	Drug-induced foot tapping	Female and male Mongolian gerbils (40-70g)	30	ip	-	No interaction	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
Fluoxetine+haloperidol (0.03-0.1 mg/kg)	5-HT reuptake inhibitor	Free-exploratio	BALB/c mice (8-week-old)	20	ip, 30	(o)	Weak antagonism of	Belzung et al., 2001	Behav. Pharmacol. 12:151-162

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		n test					the anxiogenic-like effects of fluoxetine		
Fluoxetine+lemon oil vapor	5-HT reuptake inhibitor	Elevated plus-maze	ICR mice (5-week-old)	3,5	ip, 120	+	No blockade of the anxiolytic-like effects of lemon oil vapor	Komiya et al., 2006	Behav. Brain Res. 172:240-249
Fluoxetine+LY2885 13 (3-10 mg/kg)	5-HT reuptake inhibitor	Free-exploratio n test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+m-CPBG	5-HT reuptake inhibitor	Open-field	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+m-CPBG	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats	1-20		(+)	Potentiation of the anxiogenic-like effects	Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
Fluoxetine+methioth epin (0.03-0.1 mg/kg)	5-HT reuptake inhibitor	Free-exploratio n test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+mianseri n (0.03-0.3 mg/kg)	5-HT reuptake inhibitor	Free-exploratio n test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+N_2O	5-HT reuptake inhibitor	Light/dark test	NIH Swiss mice (18-22g)	10	ip, 30	+	No interaction	Emmanouil et al., 2006	Pharmacol. Biochem. Behav. 84:313-320
Fluoxetine+naloxon e (0.2 µg/0.5 µl in DPAG)	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-300g)	10	ip, o.d. for 21 days	o	No interaction	Roncon et al., 2012	J. Psychopharmacology 26:525-531
Fluoxetine+naloxon e (0.2 µg/0.5 µl in DPAG)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-300g)	10	ip, o.d. for 21 days	(o)		Roncon et al., 2012	J. Psychopharmacology 26:525-531

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine+naloxone (1 mg/kg)	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-300g)	10	ip, o.d. for 21 days	o	No interaction	Roncon et al., 2012	J. Psychopharmacology 26:525-531
Fluoxetine+naloxone (1 mg/kg)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-300g)	10	ip, o.d. for 21 days	(o)		Roncon et al., 2012	J. Psychopharmacology 26:525-531
Fluoxetine+PCPA (300 mg/kg for 3 days)	5-HT reuptake inhibitor	Marble burying	Swiss mice (22-25g)	10	ip, 30	(o)		Dixit et al., 2012	Behav. Pharmacol. 23:716-721
Fluoxetine+pindolol (1-10 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+quinelorane (0.03-0.3 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	(o)	Antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+raclopride (0.03-0.1 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+ritanserin (3-10 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+SB 200646A (40 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10	ip, 60	(+)	(1) Antagonism of the effects of fluoxetine; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine+SB 206553 (0.6 mg/kg)	5-HT reuptake inhibitor	Airjet-induced escape responses	Sprague-Dawley rats (270-300g)	5	ip, 60	(o)	(1) Antagonism of the effects of fluoxetine; (2) The drug	Salchner and Singewald, 2006	Psychopharmacology 185:282-288

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							exacerbated the airjet escape responses		
Fluoxetine+SB 221284 (1 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10	ip, 60	(+)	(1) Antagonism of the effects of fluoxetine; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine+SB 224289 (1 mg/kg)	5-HT reuptake inhibitor	Airjet-induced escape responses	Sprague-Dawley rats (270-300g)	5	ip, 60	-	(1) No interaction; (2) The drug exacerbated the airjet escape responses	Salchner and Singewald, 2006	Psychopharmacology 185:282-288
Fluoxetine+SB 242084 (0.05-0.2 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-330g)	5-10	ip, 30	(o)	(1) Antagonism of the anxiogenic-like effects of fluoxetine; (2) LLF conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
Fluoxetine+SB 242084 (0.3 mg/kg)	5-HT reuptake inhibitor	Schedule-induced polydipsia	Sprague-Dawley rats (250-300 g)	15	sc, 10	(o)	(1) Antagonism of the effects of fluoxetine; (2) VI60 operant was used	Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
Fluoxetine+SB 242084 (1 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Fisher rats (247±5.89)	10	ip, 60	(o)	(1) Antagonism of the effects of fluoxetine; (2) Shocks of 1.5 mA/5 s were delivered the day before	Greenwood et al., 2008	Psychopharmacology 199:209-222
Fluoxetine+SB 242084 (1 mg/kg)	5-HT reuptake inhibitor	Operant conditioning	Fisher rats (247±5.89)	10	ip, 60	(o)	(1) Antagonism of the effects of fluoxetine; (2) Shocks of 0.6 mA were delivered and an FR1/FR2 was used	Greenwood et al., 2008	Psychopharmacology 199:209-222

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluoxetine+SCH23390 (0.01-0.03 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+simvastatin (10 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (3-5-month-old, 220-310g)	10	ip, 24, 5 and 1 h	(+)		Santos et al., 2012	Neuropsychiatr. Dis. Treat. 8:413-422
Fluoxetine+simvastatin (10 mg/kg)	5-HT reuptake inhibitor	Open-field	Wistar rats (3-5-month-old, 220-310g)	10	ip, 24, 5 and 1 h	(+)		Santos et al., 2012	Neuropsychiatr. Dis. Treat. 8:413-422
Fluoxetine+Substance P	5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups		ip, 30	+		Kramer et al., 1998	Science 281:1640-1645
Fluoxetine+WAY 100,635 (0.03-0.3 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10	ip, 60	-	(1) No antagonism; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine+WAY 100,635 (0.3 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	2.5	ip, 60	(-)	(1) Negative interaction; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine+WAY 100,635 (1 mg/kg/day)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10, once for 7 days	ip	(+)	(1) Antagonism of the effects of fluoxetine; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine+WAY 100,635 (1 mg/kg/day)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10, once for 4 days	ip	-	(1) No antagonism; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine+WAY 100,635 (1)+mCPP (1)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-380g)	10, once for 7 days	ip	(+)	(1) Antagonism of the effects of fluoxetine; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
Fluoxetine+WAY 100635 (0.03-0.3 mg/kg)	5-HT reuptake inhibitor	Free-exploration test	BALB/c mice (8-week-old)	20	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Fluoxetine+WAY 100635 (0.05-0.2 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-330g)	5-10	ip, 30	-	(1) No antagonism of the anxiogenic-like effects of fluoxetine; (2)	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							LLF conditions		
Fluoxetine+WAY 100635 (0.2 mg/kg)	5-HT reuptake inhibitor	Airjet-induced escape responses	Sprague-Dawley rats (270-300g)	5	ip, 60	-	(1) No interaction; (2) The drug exacerbated the airjet escape responses	Salchner and Singewald, 2006	Psychopharmacology 185:282-288
Fluoxetine+WAY 100635 (0.52 mg/kg)	5-HT reuptake inhibitor	Schedule-induced polydipsia	Wistar WU rats (150-175g)	27	po, o.d. for 3 days	+	The combination reduced polydipsia after one day of treatment	Hogg and Dalvi, 2004	Pharmacol. Biochem. Behav. 77:69-75
Fluoxetine+WAY 100635 (1 mg/kg)	5-HT reuptake inhibitor	Novelty-suppressed feeding	Wild-type 5-HT_{1A} KO 129/Sv mice	10	ip, for 30 days	(o)	Blockade of the effects of fluoxetine	Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Fluoxetine+WAY 100635 (1 mg/kg)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Wistar rats (173-287g)	100	po, 30-120	o	(1) No interaction; (2) Scrambled shock of 1.8 mA/0.3 s	Bartoszyk et al., 1997	Eur. J. Pharmacol. 322:147-153
Fluoxetine+WAY 100635 (1 mg/kg)	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (200g)	30	ip, 30	+	(1) No blockade of the anxiolytic-like effects; (2) Electric shocks of 0.6 mA/2 s were applied	De Vry et al., 2004	Eur. Neuropsychopharmacol. 14:487-495
Fluoxetine+Y-25130 (0.2 mg/kg)	5-HT reuptake inhibitor	Airjet-induced escape responses	Sprague-Dawley rats (270-300g)	5	ip, 60	-	(1) No interaction; (2) The drug exacerbated the airjet escape responses	Salchner and Singewald, 2006	Psychopharmacology 185:282-288
Fluprazine	Non selective ligand	Elevated plus-maze	DBA/2 mice (6-8-week-old)	1.25-2.5	ip, 30	-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
Fluprazine	Non selective ligand	Elevated plus-maze	DBA/2 mice (10-12-week-old)	1.25-10	ip, 30	+	Asymmetric compartments	Rodgers et al., 1992	Behav. Pharmacol. 3:621-634

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluprazine	Non selective ligand	Light/dark test	Swiss mice (12-week-old)	5-7.5	ip, 30	-		Griebel et al., 1990	Psychopharmacology 102:498-502
Fluprazine	Non selective ligand	Free-exploration test	Swiss mice (12-week-old)	2.5-10	ip, 30	-		Griebel et al., 1990	Psychopharmacology 102:498-502
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	30	sc, 60	+	Inescapable electric footshock of 2.5 mA	Hashimoto et al., 1996	Psychopharmacology 123:182-186
Fluvoxamine	5-HT reuptake inhibitor	Social interaction	DAP mice 22-30g)	1	ip	-	Isolated mice	Olivier et al., 1989	Psychopharmacology 97:154-156
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	Female MF1 mice (23-35g)	1-20	ip, 30	+		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Fluvoxamine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	5-20	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Fluvoxamine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	5-20	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Fluvoxamine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Adult rats	LED=3	ip	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
Fluvoxamine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (180-280g)	3	ip, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
Fluvoxamine	5-HT reuptake inhibitor	Stress-induced stretched approach posture	Wistar rats (180-220g)	15-20	ip, 30	o	Elicited by electrified prod	Molewijk et al., 1995	Psychopharmacology 117:32-40
Fluvoxamine	5-HT reuptake inhibitor	Stress-induced freezing	Wistar rats (250-300g)	3-30	ip, 30	o		Van Dijken et al., 1992	Psychopharmacology 109:395-402

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluvoxamine	5-HT reuptake inhibitor	Stress-induced freezing	Wistar rats (250-300g)	3-30	ip, for 14 days (o.d.)	o		Van Dijken et al., 1992	Psychopharmacology 109:395-402
Fluvoxamine	5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice (12-14g)			o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Fluvoxamine	5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice (12-14g)	3-30	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Fluvoxamine	5-HT reuptake inhibitor	Fear-potentiated startle reflex	Wistar rats (150-200g)	5-20	po, 60	o	Experiment performed in Utrecht	Joordens et al., 1996	Psychopharmacology 126:104-109
Fluvoxamine	5-HT reuptake inhibitor	Fear-potentiated startle reflex	Wistar rats (150-200g)	5-20	po, 60	o	Experiment performed in Oss	Joordens et al., 1996	Psychopharmacology 126:104-109
Fluvoxamine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (200-250g)	0.0023-2.3 µmol/kg	sc, 30	o		Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Fluvoxamine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=25	sc, 30	+	Four 1.0 mV inescapable footshocks, each 10 s.	Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Fluvoxamine	5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups (5 day-old)	ED50=8	ip	+		Molewijk et al., 1996	Psychopharmacology 128:31-38
Fluvoxamine	5-HT reuptake inhibitor	Social interaction	CD1 mice (23-45g)	3-8	ip, for 21 days (o.d.)	o		Cutler et al., 1997	Pharmacol. Biochem. Behav. 56:287-293
Fluvoxamine	5-HT reuptake inhibitor	Elevated plus-maze	CD1 mice (23-45g)	2-8	ip, for 21 days (o.d.)	o		Rodgers et al., 1997	Pharmacol. Biochem. Behav. 57:127-136
Fluvoxamine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	1-10	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Fluvoxamine	5-HT reuptake inhibitor	Ultrasonic distress vocalizati	Wistar rats (180-200g)	3-30	ip, 60	+	Animals received an electric shock of	Schreiber et al., 1998	Psychopharmacology 135:383-391

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		ons					0.6 mA, 2 s		
Fluvoxamine	5-HT reuptake inhibitor	Pinch-induced catalepsy	Female and male Swiss mice (25-30g)	20	ip, 30	+	The drug shortened the duration of catalepsy	Fundaro, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:147-158
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	ICR mice (20-30g)	30-60	po, 60	+		Ichimaru et al., 1998	Jpn. J. Pharmacol. 68:65-70
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	ICR mice (20-30g)	60	po, for 14 days (o.d.)	+		Ichimaru et al., 1998	Jpn. J. Pharmacol. 68:65-70
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	Mice	ED50=12	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	ddY mice (30-40g)	10-20	ip, 30	+	Shock of 1.2 mA for 1 s the day before	Miyamoto et al., 2000	Eur. J. Pharmacol. 409:81-84
Fluvoxamine	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	8-32	ip, 30	+	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	NMRI mice (20-25g)	2.5-40	ip, 30	+		Millan et al., 2002	Neuropharmacology 42:677-684
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	60	ip, 30	+	Rats received 5 footshocks of 0.2 mA 24h prior testing	Li et al., 2001	Eur. J. Pharmacol. 425:43-50
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	30-60	ip, o.d. for 13 days	+	Rats received 5 footshocks of 0.2 mA 24h prior testing	Li et al., 2001	Eur. J. Pharmacol. 425:43-50
Fluvoxamine	5-HT reuptake inhibitor	Light-enhanced startle	Wistar rats (200-250g)	5-20	po, 60	o	Baseline startle was not affected	De Jongh et al., 2002	Psychopharmacology 159:176-180
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	ICR mice (20-30g)	10-30	sc, 30	+		Chaki et al., 2003	J. Pharmacol. Exp. Ther. 304:818-826
Fluvoxamine	5-HT reuptake inhibitor	Compulsive lever-pressing	Wistar rats (400-500g)	15-20	ip, 30	+	The drug reduced the number of compulsive lever-presses	Joel et al., 2004	Behav. Pharmacol. 15:241-252

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	ICR mice (30-35g)	2.5-10	ip, 30	+	Electric shocks of 1.2 mA/10 s were applied on day 1	Miyamoto et al., 2004	Eur. J. Pharmacol. 504:97-103
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	ICR mice (25-35g)	10-30	ip, 30	+		Shimazaki et al., 2004	Eur. J. Pharmacol. 501:121-125
Fluvoxamine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Female and male Sprague-Dawley rat pups (9- to 11-day-old, 21-30g)	1-3	ip, 30	+		Iijima and Chaki, 2005	Pharmacol. Biochem. Behav. 82:652-657
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-280g)	30	po, 60	+	Electric shocks of 1 mA, 30 s were applied	Yoshimizu et al., 2006	Psychopharmacology 186:587-593
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	ICR mice (6-week-old)	30	ip, 30	+		Harasawa et al., 2006	Behav. Pharmacol. 17:637-640
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-350g)	60	ip, 30	+	(1) The drug reduced freezing when tested one but not 14 days after footshock; (2) Shocks of 2.5 mA/30 s were applied	Nishikawa et al., 2007	Eur. Neuropsychopharmacol. 17:643-450
Fluvoxamine	5-HT reuptake inhibitor	Marble burying	CD1 mice (25-30g)	15-60	po, 60	+		Kobayashi et al., 2008	Psychopharmacology 197:567-580
Fluvoxamine	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (200-250g)	60	po, 60	+	Shocks of 1 mA/30 s were applied	Yokoyama et al., 2009	Psychopharmacology 205:177-187
Fluvoxamine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	30	ip, 30	o		Iijima et al., 2012	Behav. Brain. Res. 235:287-292
Fluvoxamine	5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	30	ip, for 28 days	+		Iijima et al., 2012	Behav. Brain. Res. 235:287-292
Fluvoxamine+diazepam (0.5-1 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	ddY mice (30-40g)	20	ip, 30	(o)	(1) Antagonism of the effects of fluvoxamine; (2) Shock of 1.2 mA	Miyamoto et al., 2000	Eur. J. Pharmacol. 409:81-84

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							for 1 s the day before		
Fluvoxamine+flesinoxan (0.3 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	30	ip, 30	(+)	(1) Additive effects between both drugs; (2) Rats received 5 footshocks of 0.2 mA 24h prior testing	Li et al., 2001	Eur. J. Pharmacol. 425:43-50
Fluvoxamine+flesinoxan (0.3 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-250g)	30	ip, o.d. for 13 days	(+)	(1) Additive effects between both drugs; (2) Rats received 5 footshocks of 0.2 mA 24h prior testing	Li et al., 2001	Eur. J. Pharmacol. 425:43-50
Fluvoxamine+risperidone (0.005-0.01 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	ICR mice (30-35g)	1.25	ip, 30	o	(1) No interaction; (2) Electric shocks of 1.2 mA/10 s were applied on day 1	Miyamoto et al., 2004	Eur. J. Pharmacol. 504:97-103
Fluvoxamine+risperidone (0.01 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	ICR mice (30-35g)	1.25-5	ip, 30	(o)	(1) Fluvoxamine antagonized the effects of risperidone; (2) Electric shocks of 1.2 mA/10 s were applied on day 1	Miyamoto et al., 2004	Eur. J. Pharmacol. 504:97-103
Fluvoxamine+tandospirone (0,3 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-350g)	30	ip, 4 h	(+)	(1) The combination reduced freezing when tested 14 days after footshock; (2) Shocks of 2.5 mA/30 s were applied	Nishikawa et al., 2007	Eur. Neuropsychopharmacol. 17:643-450

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Fluvoxamine+WAY 100635 (0,1-1 mg/kg)	5-HT reuptake inhibitor	Marble burying	ICR mice (6-week-old)	30	ip, 30	(o)/(+)	Antagonism at 0.1 and potentiation at 1 mg/kg of the effects of fluvoxamine	Harasawa et al., 2006	Behav. Pharmacol. 17:637-640
FR260010	5-HT_{2C} antagonist	Elevated plus-maze	Fisher rats (10-week-old)	0.1-0.32	po, 60	+		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
FR260010	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (7-week-old)	3.2	po, 60	+		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
FR260010	5-HT_{2C} antagonist	Light/dark test	BALB/c mice (7-week-old)	3.2	po, 60	+		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
FR260010	5-HT_{2C} antagonist	Holeboard	ICR mice (6-week-old)	1	po, 60	+		Harada et al., 2006	Eur. J. Pharmacol. 553:171-184
FR260010	5-HT_{2C} antagonist	Conditioned fear	Sprague-Dawley rats (8-week-old)	1-10	sc, 24 h	+	(1) Rats were subjected to single prolonged stress 7 days prior testing; (2) Shocks of 0.3 mA/30 s were applied	Harada et al., 2008	Pharmacol. Bicohem. Behav. 89:11-16
Gepirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (420-480g)	20-80	po, 30	+		Young et al., 1987	Eur. J. Pharmacol. 143:361-371
Gepirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.3-10	sc	+	FR30/FR10 and weak effect	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
Gepirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	0.125-1	sc	+	Modified Geller-Seifter test	Thiébot et al., 1990	Psychopharmacology 101:S57
Gepirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats	10	ip, 15	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Gepirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (250-350g)	0.125-1	sc, 15	+	Modified Geller-Seifter test	Thiébot et al., 1991	Psychopharmacology 103:415-424
Gepirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (250-300g)	0.125-2	ip, 30	+	Modified test and FR1/FR8	Hascoët et al., 1994	J. Psychopharmacol. 8:227-237
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Female Long-Evans rats (225-249g)	1.25-5	sc, 15	-	Unpredictable shocks	Costello et al., 1991	Pharmacol. Biochem. Behav. 40:795-800
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (250-350g)	10	ip, 15	+	Modified Vogel test	Eison et al., 1986	Pharmacol. Biochem. Behav. 24:701-707
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	2.5-10	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Female Long-Evans rats (225-249g)	1.25	sc, 15	+	Shocks moderate predictible	Costello et al., 1991	Pharmacol. Biochem. Behav. 40:795-800
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Lister rats (200-280g)	0.001	dorsal raphe, 5	+		Higgins et al., 1992	Psychopharmacology 106:261-267
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-220g)	0.3-1.25	ip, 30	+	Modified Vogel test	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	0.3-0.62		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (200-250g)	3-5	ip, 30	+	Modified Vogel test	Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (230-270g)	3-30µg	hippocampus,10	+		Przegalinski et al., 1994	Neuropharmacology 33:1109-1115
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats			+		Seymour et al., 1995	Soc. Neurosci. Abstr. 21:2106

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	1-10	ip, 30	+		Yamashita et al., 1995	Pharmacol. Biochem. Behav. 50:477-479
Gepirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	5-10	ip, for 7 days (o.d.)	+		Yamashita et al., 1995	Pharmacol. Biochem. Behav. 50:477-479
Gepirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.1-1	im, 0	+	FR30	Mansbach et al., 1988	J. Pharmacol. Exp. Ther. 246:114-120
Gepirone	5-HT_{1A} partial agonist	Conditioned emotional response	Wistar rats (400-500g)	7427	ip, 30	+		Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (220-250g)	3-10	ip, 30	-		Motta et al., 1992	Psychopharmacology 107:135-139
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	PVG rats (180-260g)	0.1-5	ip, 30	o	Observations during 10-min	Critchley et al., 1992	Psychopharmacology 106:484-490
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (220-250g)	10	ip, 30	o	Isolated rats	Motta et al., 1992	Psychopharmacology 107:135-139
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	BALB/cByJ (8-week-old)		ip, 30	o		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (220-250g)	1-10	ip, 30	o	After a 2-h period of isolation	Maisonnette et al., 1993	Physiol. Behav. 54:753-758
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (220-250g)	10	ip, 30	o	After a 2-week period of isolation	Maisonnette et al., 1993	Physiol. Behav. 54:753-758
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (225-250g)	1-2.5	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	8-2048 nmol	sc, 10	+		Söderpalm et al., 1989	Pharmacol. Biochem. Behav. 32:259-265
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	CD rats (160-200g)	0.001-3	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (220-250g)	10	ip, for 2 weeks (o.d.)	+	Isolated rats	Motta et al., 1992	Psychopharmacology 107:135-139

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (220-250g)	10	Added to drinking water for 14 days	+	After a 2-weeks period of isolation	Maisonnette et al., 1993	Physiol. Behav. 54:753-758
Gepirone	5-HT_{1A} partial agonist	Light/dark test	Female T/O mice (22-30g)		sc, 30	o	Asymmetric compartments	Bill et al., 1989	Br. J. Pharmacol. 98 (Suppl.):679P
Gepirone	5-HT_{1A} partial agonist	Open-field	Sprague-Dawley rats (441g)	2.3-4.6	ip, 30	-		Knapp et al., 1992	Pharmacol. Biochem. Behav. 41:847-850
Gepirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (180-220g)	0.16-0.62	ip, 30	+	65 dB noise	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Gepirone	5-HT_{1A} partial agonist	Open-field	Rats	0.3-0.62		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Gepirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats	2.5-5	ip, 15	-	LLF	De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Gepirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-280g)	0.0002-0.001	dorsal raphe, 5	o	LLF	Higgins et al., 1992	Psychopharmacology 106:261-267
Gepirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (225-250g)	5-10	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
Gepirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats	1.25	ip, 15	+	HLU	De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Gepirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-280g)	0.0002-0.001	dorsal raphe, 5	+	HLU	Higgins et al., 1992	Psychopharmacology 106:261-267
Gepirone	5-HT_{1A} partial agonist	Defense test battery	Female and male Rattus rattus (100-250g)	5-20	ip, 30	+		Blanchard et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 145-147
Gepirone	5-HT_{1A} partial agonist	Mouse defense test battery	Swiss-Webster mice (60-75-day-old)	2.5-10	ip, 30	+		Griebel et al., 1995	Pharmacol. Biochem. Behav. 51:235-244
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	1-10	ip, 15	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	2.5-5	40	+		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Female and male Long-Evans rats (120 day-old)	1-10		+	Females only	Blanchard et al., 1993	Pharmacol. Biochem. Behav. 44:313-319
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.65	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=1.4	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=5.4	po, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Adult rats	0.1-1	ip	+		Vivian and Miczek, 1993	Psychopharmacology 112:66-73
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Long-Evans (300-360g)	0.1-1	ip, 10	+		Vivian et al., 1994	Psychopharmacology 114:101-108
Gepirone	5-HT_{1A} partial agonist	Face-to-face test	CF-1 mice (18-29g)	30	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
Gepirone	5-HT_{1A} partial agonist	Marble burying	Female MF1 mice (23-35g)	5-20	ip, 30	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Gepirone	5-HT_{1A} partial agonist	Mirrored chamber	BALB/cByJ (8-week-old)		ip, 30	+		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Gepirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	Long-Evans rats (300-325g)	4	ip, 60	o		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Gepirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	Long-Evans rats (300-325g)	4	for 21 days (o.d.)	+		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Gepirone	5-HT_{1A} partial agonist	Fear-potentiate	Sprague-Dawley rats (300-400g)	1.25-10	sc, 0	+		Kehne et al., 1988	Psychopharmacology 94:8-13

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		d startle reflex							
Gepirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats	3-10	ip, 10	+		Mansbach and Geyer, 1988	Eur. J. Pharmacol. 156:375-383
Gepirone	5-HT_{1A} partial agonist	Conditioned avoidance	Wistar rats (220-240g)	5-20	ip, 30	+		Sanger et al., 1989	Behav. Pharmacol. 1:153-160
Gepirone	5-HT_{1A} partial agonist	Passive-avoidance test	Wistar rats (220-240g)	2.5-10	ip, 30	+		Sanger et al., 1989	Behav. Pharmacol. 1:153-160
Gepirone	5-HT_{1A} partial agonist	Agonistic behavior	NMRI mice	20-30	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Gepirone	5-HT_{1A} partial agonist	Center test (thigmotaxis)	Rats	10	sc	o		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
Gepirone	5-HT_{1A} partial agonist	Center test (thigmotaxis)	Rats	67	sc, for 16 days (o.d.)	+		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
Gepirone	5-HT_{1A} partial agonist	Center test (thigmotaxis)	Sprague-Dawley rats (170-190g)	30	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
Gepirone	5-HT_{1A} partial agonist	Cork gnawing	Long-Evans rats (435-640g)	10-32	po, 30	+		Pollard and Howard, 1991	Drug Dev. Res. 22:179-187
Gepirone	5-HT_{1A} partial agonist	Hot-plate	Wistar rats (200-250g)	5-10	ip, 30	+		Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
Gepirone	5-HT_{1A} partial agonist	IC-Stimulation	Rats	40 nmol	inferior colliculus	+		Brandão et al., 1993	Behav. Brain Res. 58:49-55
Gepirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (150-250g)	0.3	ip	+	Electric footshock of 0.20-0.25 mA	Lopez and Frazer, 1996	Soc. Neurosci. Abstr. 22:477
Gepirone	5-HT_{1A} partial agonist	Isolation-induced	CDY mice (18-22g)	ED50=3.23	ip, 20	+		Chamberlain, 1996	Soc. Neurosci. Abstr. 22:1584

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		aggression							
Gepirone	5-HT_{1A} partial agonist	Conditioned emotional response	Lister hooded rats (264g)	3	sc, 30	+		Stanhope and Dourish, 1996	Psychopharmacology 128:293-303.
Gepirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	BALB/c mice (35-45g)	5-10	ip, 30	+	Hyperthermia was induced by territorial aggression	Lopez-Mendoza et al., 1998	Pharmacol. Biochem. Behav. 61:1-8
Gepirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (500-650g)	0.1-10	im, 5	o		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	BALB/c mice (35-45g)	7,5	ip, 30	+	Weak effects	Lopez-Mendoza et al., 1999	Pharmacol. Biochem. Behav. 62:499-509
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (230-300g)	1-10	ip, 30	-	Elevated plus-maze with transparent walls	Silva and Brandão, 2000	Pharmacol. Biochem. Behav. 65:209-16
Gepirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (230-300g)	10	po, for 2 weeks (o.d.)	+	Elevated plus-maze with transparent walls	Silva and Brandão, 2000	Pharmacol. Biochem. Behav. 65:209-16
Gepirone+WAY 100135	5-HT_{1A} partial agonist	Stress-induced hyperthermia	BALB/c mice (35-45g)	5-10	ip, 30	o	Hyperthermia was induced by territorial aggression	Lopez-Mendoza et al., 1998	Pharmacol. Biochem. Behav. 61:1-8
Gepirone+WAY 100635 (1,5-5 mg)	5-HT_{1A} partial agonist	Elevated plus-maze	BALB/c mice (35-45g)	7,5	ip, 30	(o)	Antagonism of the effects of gepirone	Lopez-Mendoza et al., 1999	Pharmacol. Biochem. Behav. 62:499-509
GR 113808	5-HT_4 antagonist	Elevated plus-maze	Sprague-Dawley rats (230-234g)	1	sc, 10	+		Silvestre et al., 1996	Eur. J. Pharmacol. 309:219-222
GR 113808	5-HT_4 antagonist	Light/dark test	BKW mice (30-35g)	0.001-10 µg	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
GR 113808	5-HT_4 antagonist	Light/dark test	BKW mice (25-30g)	0.01	ip, 40	o	The latency to enter the dark compartment was not affected	Costall and Naylor, 1998	Br. J. Pharmacol. 123:243P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GR 125487D	5-HT_4 antagonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	3	sc, 30	o	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
GR 127935	5-HT_{1B} antagonist	Elevated plus-maze	Female guinea-pigs (400-500g)	0.3	ip, 40	o		Rex et al., 1996	Pharmacol. Biochem. Behav. 54:107-111
GR 127935	5-HT_{1B} antagonist	Conflict test	Carneau pigeons	3-17	im, 60	+	FR30	Mansbach et al., 1996	Psychopharmacology 128:313-319
GR 127935	5-HT_{1B} antagonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	30	ip, 30	o	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
GR 127935	5-HT_{1B} antagonist	Light/dark test	NMRI mice (30-32g)	ip	MED=0.04 mg/kg	+		Chopin et al., 1998	Soc. Neurosci. Abstr. 24:601
GR 127935	5-HT_{1B} antagonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	0,1	sc, 45	o		Fish et al., 2000	Psychopharmacology 149:277-85
GR 127935	5-HT_{1B} antagonist	Distress vocalizations	Guinea pig pups	10	sc, 15	+		Hudzik et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S100
GR 127935	5-HT_{1B} antagonist	Elevated plus-maze	Wistar rats (250-300g)	3-10	sc, 40	o		Lin and Parsons, 2002	Pharmacol. Biochem. Behav. 71:581-587
GR 127935	5-HT_{1B} antagonist	Schedule-induced polydipsia	Wistar WU rats (150-175g)	4.5	sc, o.d. for 3 days	o		Hogg and Dalvi, 2004	Pharmacol. Biochem. Behav. 77:69-75
GR 127935	5-HT_{1B} antagonist	Vogel conflict test	Wistar rats (250-300g)	5-10	ip, 60	+	Shocks of 0.5 mA were applied	Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
GR 127935	5-HT_{1B} antagonist	Elevated plus-maze	Wistar rats (250-300g)	10-20	ip, 60	+		Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
GR 127935	5-HT_{1B} antagonist	Four-plate test	Swiss mice (24-28g)	5-10	ip, 60	+		Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
GR 127935	5-HT_{1B} antagonist	Vogel conflict	Wistar rats (240-260g)	10	ip, 60	+	Shocks of 0.5 mA were	Chojnacka-Wójcik et	J. Pharm. Pharmacol. 57:253-257

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test					applied	al., 2005	
GR 127935	5-HT_{1B} antagonist	Conditioned fear	Sprague-Dawley rats (230-270g)	4	sc, 5h	o	Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178
GR 127935+diazepam (0.01 mg/kg)	5-HT_{1B} antagonist	Light/dark test	NMRI mice (30-32g)	ip	0.0025	+	Positive interaction	Chopin et al., 1998	Soc. Neurosci. Abstr. 24:601
GR 127935+flumazenil (10 mg/kg)	5-HT_{1B} antagonist	Light/dark test	NMRI mice (30-32g)	ip	0.16	(o)	Antagonism of the effects of GR 127935	Chopin et al., 1998	Soc. Neurosci. Abstr. 24:601
GR 127935+flumazenil (10 mg/kg)	5-HT_{1B} antagonist	Vogel conflict test	Wistar rats (240-260g)	10	ip, 60	(o)	(1) Antagonism; (2) Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
GR 127935+GR 46611 (10 mg/kg)	5-HT_{1B} antagonist	Light/dark test	NMRI mice (30-32g)	ip	0.16	(o)	Antagonism of the effects of GR 127935	Chopin et al., 1998	Soc. Neurosci. Abstr. 24:601
GR 127935+PCA (10 mg/kg, twice)	5-HT_{1B} antagonist	Vogel conflict test	Wistar rats (240-260g)	10	ip, 60	+	(1) No antagonism; (2) Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
GR 46611	5-HT_{1B} agonist	Light/dark test	NMRI mice (30-32g)	ip	0.01-10	o		Chopin et al., 1998	Soc. Neurosci. Abstr. 24:601
GR 46611+diazepam (0.63 mg/kg)	5-HT_{1B} agonist	Light/dark test	NMRI mice (30-32g)	ip	10	(o)	Antagonism of the effects of diazepam	Chopin et al., 1998	Soc. Neurosci. Abstr. 24:601
GR68755	5-HT_3 antagonist	Light/dark test	BKW mice	0.0000001-1	ip	+	Asymmetric compartments	Costall et al., 1991	Therapie 46:437-444
GR68755	5-HT_3 antagonist	Social interaction	Lister rats	0.0001-5	po	+	HLU	Hagan et al. , 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 145
Granisetron	5-HT_3 antagonist	Geller-Seifter conflict	Lister rats 200-250g)	0.0005-50	po	o		Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Granisetron	5-HT_3 antagonist	Vogel conflict test	Lister rats 200-250g)	0.0005-50	po	o		Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P
Granisetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats 180-220g)	0.1	ip, 45	+	0.1 mA, 2 s	Artaiz et al., 1995	Psychopharmacology 117:137-148
Granisetron	5-HT_3 antagonist	Elevated plus-maze	Rats	0.01-1	po, 60	o		Johnston and File, 1988	Psychiatry Res. 25:81-90
Granisetron	5-HT_3 antagonist	Elevated plus-maze	Lister rats	1E-07	amygdala	+	Observartions during 10 min	Tomkins et al., 1990	J. Psychopharmacol. 4: 262P
Granisetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats 180-220g)	0.1-1	ip, 30	+		Artaiz et al., 1995	Psychopharmacology 117:137-148
Granisetron	5-HT_3 antagonist	Light/dark test	Wistar rats (21-day-old)	0.001-1	ip, 50	o		Morinan, 1989	Br. J. Pharmacol. 97 (Suppl.):457P
Granisetron	5-HT_3 antagonist	Light/dark test	Mice	0.00001-0.001	ip	+	Asymmetric compartments	Costall et al., 1988	Rev. Neurosci. 2:41-65
Granisetron	5-HT_3 antagonist	Light/dark test	BKW mice (20-30g)	0.00001-0.001	ip, 45	+	Asymmetric compartments and rears	Costall et al., 1989	Br. J. Pharmacol. 96:325-332
Granisetron	5-HT_3 antagonist	Light/dark test	BKW mice (20-30g)	0.00001-0.001	ip, 45	+	Asymmetric compartments	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Granisetron	5-HT_3 antagonist	Light/dark test	Gerbils	0.1 2	po, for 12-16 days (o.d.)	+	Asymmetric compartments	Cutler, 1990	Neuropharmacology 29:515-520
Granisetron	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.001-0.1	ip, 45	+	Asymmetric compartments	Barnes et al., 1992	Eur. J. Pharmacol. 218:15-25
Granisetron	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	1	ip, 45	+	Asymmetric compartments	Artaiz et al., 1995	Psychopharmacology 117:137-148
Granisetron	5-HT_3 antagonist	Social interaction	Lister rats (250g)	0.1-1	po, 60	o		File and Johnston, 1989	Psychopharmacology 99:248-251
Granisetron	5-HT_3 antagonist	Social interaction	Rats	0.1-1	po, 60	o	HLU	File, 1990	In: Neurobiology of Panic Disorder, pp. 31-48

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Granisetron	5-HT_3 antagonist	Social interaction	Rats	0.1-1	po, 60	o	LLF	File, 1990	In: Neurobiology of Panic Disorder, pp. 31-48
Granisetron	5-HT_3 antagonist	Social interaction	Wistar rats (210-280g)	0.00001-0.001	amygdala, 5	o	LLF	Higgins et al., 1991	Psychopharmacology 104:545-551
Granisetron	5-HT_3 antagonist	Social interaction	Rats	1	po, 60	+	HLU	Johnston and File, 1988	Psychiatry Res. 25:81-90
Granisetron	5-HT_3 antagonist	Social interaction	Lister rats (200-250g)	0.1-10	po	+	HLU	Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P
Granisetron	5-HT_3 antagonist	Social interaction	Lister rats (200-250g)	0.0001-0.1	po, 45	+	HLU	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Granisetron	5-HT_3 antagonist	Social interaction	Rats	0.0001-0.01	po, 45	+	HLU	Tyers, 1989	In: Behavioural Pharmacology of 5-HT, pp. 353-359
Granisetron	5-HT_3 antagonist	Social interaction	Gerbils	0.1 2	po, for 3 weeks (o.d.)	+	HLU	Cutler, 1990	Neuropharmacology 29:515-520
Granisetron	5-HT_3 antagonist	Social interaction	Gerbils	0.1 2	po, for 3 weeks (o.d.)	+	LLF	Cutler, 1990	Neuropharmacology 29:515-520
Granisetron	5-HT_3 antagonist	Social interaction	Gerbils	0.0015-0.15	po, for 11 days (o.d.)	+	HLU	Cutler and Piper, 1990	Psychopharmacology 101:244-249
Granisetron	5-HT_3 antagonist	Social interaction	Female and male DBA/2 mice (24-36g)	0.01	po, for 5-10 days (o.d.)	+	HLU	Cutler, 1991	Neuropharmacology 30:299-306
Granisetron	5-HT_3 antagonist	Social interaction	Female and male DBA/2 mice	0.01	po, for 7-10 days (in drinking fluid)	+		Cutler, 1991	Neuropharmacology 30:299-306
Granisetron	5-HT_3 antagonist	Social interaction	Wistar rats (210-280g)	0.00001-0.0001	amygdala, 5	+	HLU	Higgins et al., 1991	Psychopharmacology 104:545-551
Granisetron	5-HT_3 antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	0.001-1	ip, 45	o	0.5 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254
Granisetron	5-HT_3 antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	0.01-1	ip, 45	+	0.25 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Granisetron	5-HT_3 antagonist	Human threat	Marmoset	0.000001-0.1		+		Costall et al., 1988	Rev. Neurosci. 2:41-65
Granisetron	5-HT_3 antagonist	Human threat	Marmoset Callithrix jacchus (295-335g)	0.001-0.1	sc, 45	+		Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Granisetron	5-HT_3 antagonist	Free observation	Cynomolgus monkeys	0.01-0.1	po	+	Weak effect	Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P
Granisetron	5-HT_3 antagonist	Stress-induced colonic motor alterations	Wistar rats (250-300g)	0.1-1	ip, 30	o		Gué et al., 1993	Eur. J. Pharmacol. 233:193-199
Granisetron	5-HT_3 antagonist	Stress-induced hyperthermia	NMRI mice		ip	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Granisetron	5-HT_3 agonist	Elevated plus-maze	Sprague-Dawley rats (230-234g)	0.1	sc, 30	+		Silvestre et al., 1996	Eur. J. Pharmacol. 309:219-222
HG1	5-HT-moduline antagonist	Four-plate test	Swiss mice (18-20g)	8-64	ip, 30	+	Electric shocks of 0.6 mA/0.5 s were applied	Clénet et al., 2004	Eur. Neuropsychopharmacol. 14:449-456
HG1	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (18-20g)	32-64	ip, 30	+		Clénet et al., 2004	Eur. Neuropsychopharmacol. 14:449-456
HG1	5-HT-moduline antagonist	Light/dark test	Swiss mice (18-20g)	32-64	ip, 30	+		Clénet et al., 2004	Eur. Neuropsychopharmacol. 14:449-456
HG1	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	64	ip, 30	+		Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+8-OH-DPAT (0.25 and 1 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	8 and 16	ip, 30	o	No potentiation	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+anpirtoline (0.25 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	8 and 16	ip, 30	(+)	Potentiation of the effects of HG1	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+bicuculline (2 and 8 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	32 and 64	ip, 30	+	No interaction	Clénet et al., 2005	Behav. Brain Res. 158:339-348

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
HG1+flumazenil (2 and 8 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	32 and 64	ip, 30	(o)	Incomplete antagonism	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+methiothepine (0.015-0.06 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	32 and 64	ip, 30	(o)	Antagonism of the effects of HG1	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+NAN-190 (0.125 and 0.25 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	32 and 64	ip, 30	(o)	Antagonism of the effects of HG1	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+picrotoxine (0.06 and 0.25 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	32 and 64	ip, 30	+	No interaction	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+WAY 100635 (0.002 and 0.008 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	8 and 16	ip, 30	(+)	Potentiation of the effects of HG1	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HG1+WAY 100635 (2 mg/kg)	5-HT-moduline antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	32 and 64	ip, 30	(o)	Antagonism of the effects of HG1	Clénet et al., 2005	Behav. Brain Res. 158:339-348
HT-90B	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Rats	3-30	po	+		Miyauchi et al., 1993	Soc. Neurosci. Abstr. 19:1867
HT-90B	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Light/dark test	Mice	1-10	po	+		Inagawa et al., 1995	Soc. Neurosci. Abstr. 21:978
HT-90B	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	10-30	po, 30	+	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145
HT-90B	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	20	po, 2h	+	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145
HT-90B	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	20	po, 4h	+	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
HT-90B	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (300-400g)	10	po, for 14 days	+	Electric footshock of 75V, 500 ms	Inagawa et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:129-145
ICI 169369	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	20	sc, 30	+		Kennett et al., 1992	Psychopharmacology 107:379-384
ICI 169369	5-HT_2 antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	20	sc, 30	+	VI30/FR5 and 0.75 mA	Kennett et al., 1994	Psychopharmacology 114:90-96
ICI 169369	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (250-320g)	6	sc, 30	+		Kennett, 1992	Psychopharmacology 107:379-384
ICI 169369	5-HT_2 antagonist	Marble burying	Female MF1 mice (23-35g)	1-10	ip, 30	o		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
ICI 169369	5-HT_2 antagonist	Conditioned fear	Sprague-Dawley rats (250-300g)	5-20	sc, 20	o	Inescapable footshock of 2.5 mA	Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
ICI 169369	5-$HT_{2A/2C}$ antagonist	Conditioned fear	Sprague-Dawley rats (250-300g)	10	sc, 40	o		Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
IL639	5-HT_{2C} agonist	Open-field	Sprague-Dawley rats (275-300g)	300 pmol/0.1 µl/min	basolateral amygdala, 0	-		Campbell and Merchant, 2003	Brain Res. 993:1-9
Imipramine	NA/5-HT reuptake inhibitor	Geller-Seifter conflict test	Wistar rats (180-200g)	20	ip, 30	-	VI30	Sanger, 1992	J. Pharmacol. Exp. Ther. 261:513-517
Imipramine	NA/5-HT reuptake inhibitor	Geller-Seifter conflict test	Rats	0.55-17.7	po	o	VI30/FR10	Cook and Davidson, 1973	In: The Benzodiazepines, pp. 379-404
Imipramine	NA/5-HT reuptake inhibitor	Geller-Seifter conflict test	Sprague-Dawley rats (200-320g)	1-10	ip, 20	o	FR40	Kilts et al., 1981	Psychopharmacology 74:290-296

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Sprague-Dawley rats (250-300g)	100-300	ip, 30	-	Modified Vogel test	McCown et al., 1983	Pharmacol. Biochem. Behav. 18:277-279
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Female Sprague-Dawley rats (225-275g)	7.1-20	ip, 10	-	Modified Vogel test	Fontana and Commissaris, 1988	Psychopharmacology 95:147-150
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Female Sprague-Dawley rats	15-30	ip, 3 injections at day 1	-	60 min after the last injection	Commissaris and Hill, 1994	Soc. Neurosci. Abstr. 20:384
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Sprague-Dawley rats (200-320g)	1-10	ip, 30	o	VI21	Kilts et al., 1981	Psychopharmacology 74:290-296
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Rats			+		Chasin et al., 1972	Biochem. Pharmacol. 21:2443-2450
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Female Sprague-Dawley rats (225-275g)	2.5	ip, for 1-5 weeks (b.i.d.)	+	Modified Vogel test	Fontana and Commissaris, 1988	Psychopharmacology 95:147-150
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Female Sprague-Dawley rats	30	ip, 3 injections at day 1	+	2 to 4 weeks after the last injection	Commissaris and Hill, 1994	Soc. Neurosci. Abstr. 20:384
Imipramine	NA/5-HT reuptake inhibitor	Conflict test	White Carneau Pigeons	1-30	im, 15	o		Nanry et al., 1991	Drug Dev. Res. 24:269-276
Imipramine	NA/5-HT reuptake inhibitor	Avoidance test	Rats	8-32	30	+	Caffeine-pretreated rats	Martin, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 203
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Lister rats (250-400g)	5-15	ip, 30	o		Pellow et al., 1985	J. Neurosci. Methods 14:149-167
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (170-200g)	1-30	po, 60	o		Luscombe et al., 1990	Br. J. Pharmacol. 100:356P
Imipramine	NA/5-HT reuptake inhibitor	Light/dark test	ICR mice (20-35g)	1-4	ip, 30	o	Transitions and Asymmetric compartments	Onaivi and Martin, 1989	Prog. Neuropsychopharmacol. Biol. Psychiatry 13:963-976

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Light/dark test	ddY mice (4-week-old)	5-10	ip, 30	o	Modified test	Shimada et al., 1995	Gen. Pharmacol. 26:205-210
Imipramine	NA/5-HT reuptake inhibitor	Light/dark test	Female ICR-DUB mice (17-35g)	3.16	ip, 30	+	Locomotion decreased and Asymmetric compartments	Young and Johnson, 1991	Pharmacol. Biochem. Behav. 40:739-743
Imipramine	NA/5-HT reuptake inhibitor	Open-field	Female Long-Evans rats (1-week-old)	20	ip, 60	-	Saline injection between 6 to 21 days postnatal	Dwyer and Roy, 1993	Pharmacol. Biochem. Behav. 45:201-207
Imipramine	NA/5-HT reuptake inhibitor	Open-field	Female Long-Evans rats (12-week-old)	20	ip, for 11 days (o.d.)	-	Saline injection between 6 to 21 days postnatal	Dwyer and Roy, 1993	Pharmacol. Biochem. Behav. 45:201-207
Imipramine	NA/5-HT reuptake inhibitor	Open-field	Female Long-Evans rats (12-week-old)	20	ip, 60	o	No saline injection	Dwyer and Roy, 1993	Pharmacol. Biochem. Behav. 45:201-207
Imipramine	NA/5-HT reuptake inhibitor	Open-field	Female Long-Evans rats (12-week-old)	20	ip, for 11 days (o.d.)	o	No saline injection	Dwyer and Roy, 1993	Pharmacol. Biochem. Behav. 45:201-207
Imipramine	NA/5-HT reuptake inhibitor	Defense test battery	Female and male Long-Evans rats (105-117 day-old)	15	ip, for 3 weeks (o.d.)	+		Blanchard et al., 1993	Psychopharmacology 110:245-253
Imipramine	NA/5-HT reuptake inhibitor	Mouse defense test battery	Swiss-Webster mice (60-75-day-old)	5-15	ip, 30	-		Griebel et al., 1995	Psychopharmacology 120:57-66
Imipramine	NA/5-HT reuptake inhibitor	Mouse defense test battery	Swiss-Webster mice (60-75-day-old)	5-15	ip, for 3 weeks (o.d.)	+		Griebel et al., 1995	Psychopharmacology 120:57-66
Imipramine	NA/5-HT reuptake inhibitor	Stress-induced stretched approach posture	Wistar rats (180-220g)	1-10	ip, 30	o	Elicited by electrified prod	Molewijk et al., 1995	Psychopharmacology 117:32-40
Imipramine	NA/5-HT reuptake inhibitor	Reaction towards Tawny Owl call	Mice		Acute	o		Hendrie and Neill, 1992	J. Psychopharmacol. 6:125

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Reaction towards Tawny Owl call	Mice		Chonic	+		Hendrie and Neill, 1992	J. Psychopharmacol. 6:125
Imipramine	NA/5-HT reuptake inhibitor	Social behavior	CD1 mice (35-45g)	63.2 mol	ip, 30	-		Gao and Cutler, 1994	Neuropharmacology 33:813-824
Imipramine	NA/5-HT reuptake inhibitor	Social behavior	CD1 mice (35-45g)	63.2 mol	drinking fluid, 12-16 days	+		Gao and Cutler, 1994	Neuropharmacology 33:813-824
Imipramine	NA/5-HT reuptake inhibitor	Social competition	Wistar rats (120g)	5-10	ip, 30	o		Joly and Sanger, 1991	Behav. Pharmacol. 2:205-213
Imipramine	NA/5-HT reuptake inhibitor	Social competition	Rats	5-10		o		Sanger and Joly, 1992	J. Psychopharmacol. 6:141
Imipramine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats	30	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Imipramine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Adult rats	LED=20	ip	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
Imipramine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (180-280g)	10-20	ip, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
Imipramine	NA/5-HT reuptake inhibitor	Conditioned emotional response	Wistar rats (400-500g)	5-20	ip, 30	-		Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426
Imipramine	NA/5-HT reuptake inhibitor	Shock-probe burying test	Wistar rats (250-280g)	0.63-40	sc, 60	+		Meert and Colpaert, 1986	Psychopharmacology 88:445-450
Imipramine	NA/5-HT reuptake inhibitor	Marble burying	Rats Long- Ewans (325-500g)	4-16	ip, 30	+		Craft et al., 1988	Pharmacol. Biochem. Behav. 30:775-780

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	5-10	ip, 5	o		Cassella and Davis, 1985	Psychopharmacology 87:278-282
Imipramine	NA/5-HT reuptake inhibitor	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	5-10	ip, for 3 weeks (o.d.)	o		Cassella and Davis, 1985	Psychopharmacology 87:278-282
Imipramine	NA/5-HT reuptake inhibitor	Fear-potentiated startle reflex	CD rats (250-450g)	5-10	ip, 30	o	0.25 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254
Imipramine	NA/5-HT reuptake inhibitor	Fear-potentiated startle reflex	CD rats (250-450g)	5-10	ip, 30	o	0.5 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254
Imipramine	NA/5-HT reuptake inhibitor	Passive-avoidance test	Wistar rats (220-240g)	7.5-30	ip, 30	o		Sanger et al., 1989	Behav. Pharmacol. 1:153-160
Imipramine	NA/5-HT reuptake inhibitor	Conditioned place aversion	Long-Evans rats (8-week-old)	2-24	ip, 60	o		Ervin et al., 1987	Drug. Dev. Res. 11:87-95
Imipramine	NA/5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice		po	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Imipramine	NA/5-HT reuptake inhibitor	Stress-induced hyperthermia	NMRI mice (12-14g)	3-30	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Imipramine	NA/5-HT reuptake inhibitor	Cork gnawing	Long-Evans rats (435-640g)	4-32	po, 30	o		Pollard and Howard, 1991	Drug Dev. Res. 22:179-187
Imipramine	5-HT/NA reuptake inhibitor	Light/dark test	Female CD1 mice (22-24g)	10-20	ip, 30	+		De Angelis, 1996	Naunyn Schmied. Arch. Pharmacol. 354:379-383
Imipramine	5-HT/NA reuptake inhibitor	Open-field	Female CD1 mice (22-24g)	10-40	ip, 30	o		De Angelis, 1996	Naunyn Schmied. Arch. Pharmacol. 354:379-383

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	5-HT/NA reuptake inhibitor	Conditioned fear	Sprague-Dawley rats		po, 60	o	Electric footshock-induced freezing	Ohno et al., 1996	Soc. Neurosci. Abstr. 22:480
Imipramine	5-HT/NA reuptake inhibitor	Elevated plus-maze	Wistar rats	10	ip, for 21 days (o.d.)	+		Harro et al., 1997	Naunyn Schmied. Arch. Pharmacol. 355:57-63
Imipramine	5-HT/NA reuptake inhibitor	Light/dark test	Mice	4	ip, 30	+	Asymmetric compartments	Bourin et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:1389-1402
Imipramine	5-HT/NA reuptake inhibitor	Elevated plus-maze	Rats	5-15	ip	o		Allikmets et al., 1995	Pharmacol. Toxicol. 76 (Suppl. 3):9
Imipramine	NA/5-HT reuptake inhibitor	Ultrasound-induced defensive behaviors	Lister hooded rats (200-250g)	2.5-10	ip, for 1-4 weeks (o.d.)	+	Rats received ultrasound pulse of 91, 98 or 101 dB SPL	Graham and Marsden, 1997	Proceeding of meeting
Imipramine	NA/5-HT reuptake inhibitor	DLH-induced escape	Hooded Lister rats (325-375g)	10	ip, 2-3 days (o.d.)	o	dorsolateral hypothalamus was injected into the dorsal PAG	Mongeau and Marsden, 1997	Psychopharmacology 131:321-328
Imipramine	NA/5-HT reuptake inhibitor	DLH-induced escape	Hooded Lister rats (325-375g)	10	sc, for 3 weeks (o.d.)	o	dorsolateral hypothalamus was injected into the dorsal PAG	Mongeau and Marsden, 1997	Psychopharmacology 131:321-328
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	1-10	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Imipramine	5-HT/NA reuptake inhibitor	Geller-Seifter conflict test	Rats	16	ip, for 7 weeks (o.d.)	+	Weak effects	Beaufour et al., 1997	Behav. Pharmacol. 8:641
Imipramine	5-HT/NA reuptake inhibitor	Safety signal withdrawal conflict test	Rats	8-16	ip, 60	o		Beaufour et al., 1997	Behav. Pharmacol. 8:641
Imipramine	NA/5-HT reuptake inhibitor	Pinch-induced catalepsy	Female and male Swiss mice (25-30g)	20-30	ip, 30	+	The drug shortened the duration of catalepsy	Fundaro, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:147-158

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Stress-suppressed feeding	Rats		po, 60	+	Tail-pinch stress	Yamada et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S9
Imipramine	NA/5-HT reuptake inhibitor	Marble burying	Mice		po, 60	o		Yamada et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S9
Imipramine	NA/5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (175-255g)	10-300	po, 60	o	Animals were subjected to a 2 mA of scramble footshock, 30 min)	Ishida-Tokuda et al., 1996	Jpn. J. Pharmacol. 72:119-126
Imipramine	NA/5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (175-255g)	30	po, for two weeks (o.d.)	+	Animals were subjected to a 2 mA of scramble footshock, 30 min)	Ishida-Tokuda et al., 1996	Jpn. J. Pharmacol. 72:119-126
Imipramine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>100	po, 30	o		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Imipramine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 30	o		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Imipramine	NA/5-HT reuptake inhibitor	Marble burying	Mice	ED50=3	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Imipramine	5-HT/NA reuptake inhibitor	Safety signal withdrawal conflict test	Wistar AF rats (350-425g)	4-16	ip, o.d. for 7 weeks	+	Anxiolytic-like effects appeared 2 days after the end of treatment	Beaufour et al., 1999	Pharmacol. Biochem. Behav. 62:591-599
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Sprague-Dawley rats (300g)	0,3-30	ip, 30	o	Rats received a sucrose solution and were non-water deprived	Vanover et al., 1999	Psychopharmacology 145:333-341
Imipramine	NA/5-HT reuptake inhibitor	Novelty-suppressed feeding	Wild-type 5-HT_{1A} KO 129/Sv mice	20	ip, for 30 days	+		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Novelty-suppressed feeding	5-HT_{1A} KO 129/Sv mice	20	ip, for 30 days	+		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Wild-type 5-HT_{1A} KO 129/Sv mice	20	ip, for 30 days	+		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	5-HT_{1A} KO 129/Sv mice	20	ip, for 30 days	+		Santarelli et al., 1999	Soc. Neurosci. Abstr. 25:69
Imipramine	5-HT/NA reuptake inhibitor	Elevated plus-maze	Wistar rats (192-216g)	3-10	sc, 30	o		Silvestre et al., 1999	J. Psychopharmacol. 13:274-277
Imipramine	5-HT/NA reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	15	ip, 30	+	Locomotor activity was decreased at the active dose	Teixeira et al., 2000	Pharmacol. Biochem. Behav. 65:571-6
Imipramine	5-HT/NA reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	10	ip, 30	-	Locomotor activity was decreased at the active dose	Teixeira et al., 2000	Pharmacol. Biochem. Behav. 65:571-6
Imipramine	5-HT/NA reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	5-15	ip, for 19 days (o.d.)	+	Locomotor activity was decreased at the active doses	Teixeira et al., 2000	Pharmacol. Biochem. Behav. 65:571-6
Imipramine	5-HT/NA reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	10-15	ip, for 19 days (o.d.)	+	Locomotor activity was decreased at the active doses	Teixeira et al., 2000	Pharmacol. Biochem. Behav. 65:571-6
Imipramine	5-HT/NA reuptake inhibitor	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}=5.4	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
Imipramine	5-HT/NA reuptake inhibitor	Distress vocalizations	Mice (8-day-old)	30	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	5-HT/NA reuptake inhibitor	Ultrasonic distress vocalizations	Long Evans rat pups (7-8-day-old)	15-30	sc, 30	+	(1) ultrasonic vocalizations was recorded in both low- and high-vocalizing pups; (2) motor activity was increased	Podhorna and Brown, 2000	Br. J. Pharmacol. 130:739-746
Imipramine	5-HT/NA reuptake inhibitor	Elevated plus-maze	SHR rats (4-5-week-old)	10	po, 60	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Imipramine	5-HT/NA reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (4-5-week-old)	10	po, 60	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Imipramine	5-HT/NA reuptake inhibitor	Elevated plus-maze	SHR rats (4-5-week-old)	10	po, for 21 days (o.d.)	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Imipramine	5-HT/NA reuptake inhibitor	Elevated plus-maze	Wistar-Kyoto rats (4-5-week-old)	10	po, for 21 days (o.d.)	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Imipramine	5-HT/NA reuptake inhibitor	Open-field	SHR rats (4-5-week-old)	10	po, for 21 days (o.d.)	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Imipramine	5-HT/NA reuptake inhibitor	Open-field	Wistar-Kyoto rats (4-5-week-old)	10	po, for 21 days (o.d.)	o		Durand et al., 2000	Neuropharmacology 39:2464-2477
Imipramine	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	1-32	ip, 30	o	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344
Imipramine	NA/5-HT reuptake inhibitor	Mouse defense test battery	Swiss mice (10-week-old)	3-30	ip, 30	o	Sedative effects only	Griebel et al., 2001	Psychopharmacology 158:241-251
Imipramine	NA/5-HT reuptake inhibitor	Staircase test	Wistar rats (190-230g)	30	ip, 30	+	Staircase test following cat exposure	Griebel et al., 2001	Psychopharmacology 158:241-251
Imipramine	NA/5-HT reuptake inhibitor	Free-exploration test	Swiss mice (10-week-old)	3-30	ip, 30	o	Free-exploration test following cat exposure	Griebel et al., 2001	Psychopharmacology 158:241-251

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Free-exploration test	Swiss mice (10-week-old)	3-30	ip, b.i.d. for 5 days	o	Free-exploration test following cat exposure	Griebel et al., 2001	Psychopharmacology 158:241-251
Imipramine	NA/5-HT reuptake inhibitor	Social interaction	Wistar rats (200-350g)	3-30	po, 60	o	HLU conditions	Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-350g)	10-100	po, 60	o		Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Female Mongolian gerbils (30-50g)	10-30	po, 60	+	(1) Weak effects (stretch-attend); (2) High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:357-370
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	15	po, o.d. for 14 days	o		Flausino Jr. et al., 2002	Pharmacol. Biochem. Behav. 71:259-265
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	15	po, o.d. for 14 days	+		Flausino Jr. et al., 2002	Pharmacol. Biochem. Behav. 71:259-265
Imipramine	NA/5-HT reuptake inhibitor	Light/dark test	Wistar rats (250-300g)	15	po, o.d. for 19 days	+		Flausino Jr. et al., 2002	Pharmacol. Biochem. Behav. 71:259-265
Imipramine	NA/5-HT reuptake inhibitor	Cat odor test	Wistar rats (250-300g)	15	po, o.d. for 19 days	o		Flausino Jr. et al., 2002	Pharmacol. Biochem. Behav. 71:259-265
Imipramine	NA/5-HT reuptake inhibitor	Light/dark test	C57BL/6J mice	50		o		Suzuki et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S101
Imipramine	NA/5-HT reuptake inhibitor	DPAG stimulation	Female Wistar rats (199-237g)	15	ip, for 21 to 24 days	o	Basal aversive theshold inducing escape was not modified	Jacob et al., 2002	Pharmacol. Biochem. Behav. 72:761-766

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Stress-induced hyperthermia	ICR mice (7-week-old)	30-60	ip, 30	+		Liu et al., 2003	J. Psychiat. Res. 37:249-259
Imipramine	NA/5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 7 day-old posthatch	10-15	im, 15	+		Feltenstein et al., 2004	Pharmacol. Biochem. Behav. 77:221-226
Imipramine	NA/5-HT reuptake inhibitor	Strychnine-facilitated wild running	Wistar rats (250-350g)	10	ip, 3 injections within 24 h	+	The drug reduced the incidence of wild running	de Paula and Hoshino, 2003	Behav. Brain Res. 147:157-62
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Transgenic mice overexpressing glucocorticoid receptor in forebrain	10	ip, o.d. for 10 days	+	The drug reversed increased anxiety in transgenic mice	Wei et al., 2004	Proc. Natl. Acad. Sci. U.S.A. 101:11851-11856
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	C57BL/6J background mice	10	ip, o.d. for 10 days	o		Wei et al., 2004	Proc. Natl. Acad. Sci. U.S.A. 101:11851-11856
Imipramine	NA/5-HT reuptake inhibitor	Distress vocalizations	Dunkin Hartley guinea pig pups (12-16-day-old)	32	ip, 30	+	Isolation-induced distress vocalizations	Lamberty and Gower, 2004	Pharmacol. Biochem. Behav. 79:119-124
Imipramine	NA/5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 8 day-old posthatch	10-20	ip, 15	+		Feltenstein et al., 2005	Psychopharmacology 181:153-159
Imipramine	NA/5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 8 day-old posthatch	10-20	ip, o.d., for 3 days	+		Feltenstein et al., 2005	Psychopharmacology 181:153-159
Imipramine	NA/5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, strain W36), 8 day-old posthatch	10-20	ip, o.d., for 6 days	+		Feltenstein et al., 2005	Psychopharmacology 181:153-159
Imipramine	NA/5-HT reuptake inhibitor	Nestlet shredding	NIH Swiss mice (28-32g)	3-30	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Marble burying	NIH Swiss mice (28-32g)	15-30	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 3 days, o.d.	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 3 days, o.d.	o		Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	+	The drug impaired inhibitory avoidance	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	+	The drug increased latency to escape	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine	NA/5-HT reuptake inhibitor	Social interaction	Wistar rats (200-275g)	3-10	ip, 30	+	HLU conditions were used	Artaiz et al., 2005	Psychopharmacology 182:400-413
Imipramine	NA/5-HT reuptake inhibitor	Social interaction	Wistar rats (200-275g)	32	po, for 14 days, o.d.	+	HLU conditions were used	Artaiz et al., 2005	Psychopharmacology 182:400-413
Imipramine	NA/5-HT reuptake inhibitor	Chick separation stress paradigm	Cockerels (Gallus gallus, 7 day-old after hatch)	10-15	im, 15	+		Warnick et al., 2006	Behav. Pharmacol. 17:581-587
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	15	ip, for 14 days, o.d.	+	The drug impaired inhibitory avoidance	Dombrowski and Andreatini, 2006	Neurosci. Lett. 407:80-85
Imipramine	NA/5-HT reuptake	Escape behavior	Wistar rats (220-250g)	15	ip, for 14 days, o.d.	+	The drug increased	Dombrowski and	Neurosci. Lett. 407:80-85

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	inhibitor	in the elevated T-maze					latency to escape	Andreatini, 2006	
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	ICR mice (5-week-old)	30-50	ip, 60	o		Komiya et al., 2006	Behav. Brain Res. 172:240-249
Imipramine	NA/5-HT reuptake inhibitor	Novelty-suppressed feeding	129S6/SvEvTac mice (7-8-week-old, 23-35g)	20	sc, 60	+		David et al., 2007	J. Pharmacol. Exp. Ther. 321:237-248
Imipramine	NA/5-HT reuptake inhibitor	Open-field	Mixed 129SvEvBrd x C57BL6/J background mice (9-11 week-old, 25-30g)	10-30	ip, 30	o	The open-fiedl contained a rectangular ceramic platform	Pogorelov et al., 2007	J. Neurosci. Methods 162:222-228
Imipramine	NA/5-HT reuptake inhibitor	Open-field	Mixed female 129SvEvBrd x C57BL6/J background mice (9-11 week-old, 25-30g)	10-30	ip, 30	o	The open-fiedl contained a rectangular ceramic platform	Pogorelov et al., 2007	J. Neurosci. Methods 162:222-228
Imipramine	NA/5-HT reuptake inhibitor	Stress-induced hyperthermia	C57BL/6J (21-30g)	20	po, 60	o	Hyperthermia was produced by exposure to an open-field	Grundmann et al., 2006	Planta Med. 72:1366-1371
Imipramine	NA/5-HT reuptake inhibitor	Distress vocalizations	Cockerels (Gallus gallus, 4-6 day-old after hatch)	15	ip, 15	+	The drug reduced distress vocalizations during the protest and depression-like phase	Sufka et al., 2006	Behav. Pharmacol. 17:681-689
Imipramine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Female and male CD rat pups (8-10-day-old, 17-30g)	>10	ip, 30	o		Hodgson et al., 2008	Pharmacol. Biochem. Behav. 88:341-348
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	3-10	sc, for 3 weeks, o.d.	+	The drug prevented anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Light/dark test	C57BL/6J mice (18-23g)	10	sc, for 3 weeks, o.d.	+	The drug prevented anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965
Imipramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	3-10	sc, for 3 weeks, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965
Imipramine	NA/5-HT reuptake inhibitor	Light/dark test	C57BL/6J mice (18-23g)	10	sc, for 3 weeks, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965
Imipramine	NA/5-HT reuptake inhibitor	Elevated open-platform	ICR mice (6-8-week-old)	0.1-10	ip, 30	o		Miyata et al., 2007	J. Pharmacol. Sci. 105:272-278
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Swiss mice (25-35g)	1-10	ip, for 15 days, o.d.	o		Gomes et al., 2009	Brain Res. Bull. 78:323-327
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Swiss mice (25-35g)	1-10	ip, 30	o		Gomes et al., 2009	Brain Res. Bull. 78:323-327
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Swiss mice (25-35g)	1-10	ip, for 15 days, o.d.	o		Gomes et al., 2009	Brain Res. Bull. 78:323-327
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Swiss mice (25-35g)	1-10	ip, 30	o		Gomes et al., 2009	Brain Res. Bull. 78:323-327
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-330g)	15	po, 120	o		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-330g)	15	po, for 21 days	+		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-330g)	15	po, 120	o		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-330g)	15	po, for 21 days	+		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-330g)	15	po, for 14 days	o		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-330g)	15	po, for 14 days	o		Pinheiro et al., 2008	J. Psychopharmacology 22:132-137
Imipramine	NA/5-HT reuptake inhibitor	Marble burying	CD1 mice (25-30g)	60	po, 60	+		Kobayashi et al., 2008	Psychopharmacology 197:567-580
Imipramine	NA/5-HT reuptake inhibitor	Open-field	C57BL/6Ntac mice (7-8-week-old)	40	po, for 3 weeks	o		David et al., 2009	Neuron 62:479-493
Imipramine	NA/5-HT reuptake inhibitor	Open-field	C57BL/6Ntac mice (7-8-week-old)	40	po, for 3 weeks	+	Treatment started after 4 weeks of corticosterone (35 µg/ml/day)	David et al., 2009	Neuron 62:479-493
Imipramine	NA/5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6Ntac mice (7-8-week-old)	40	po, for 3 weeks	o		David et al., 2009	Neuron 62:479-493

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine	NA/5-HT reuptake inhibitor	Novelty-suppressed feeding	C57BL/6Ntac mice (7-8-week-old)	40	po, for 3 weeks	o	Treatment started after 4 weeks of corticosterone (35 μg/ml/day)	David et al., 2009	Neuron 62:479-493
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (290-310g)	10	ip, 30	+		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (290-310g)	10	ip, 30	-		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
Imipramine	NA/5-HT reuptake inhibitor	Vogel conflict test	Wistar rats (290-310g)	10	ip, 30	-	Shocks of 0.5 mA/2 s were applied	Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
Imipramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (300g)	15	ip, for 21 days	o		Diniz et al., 2011	Braz. J. Med. Biol. Res. 44:1048-1053
Imipramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (300g)	15	ip, for 21 days	+		Diniz et al., 2011	Braz. J. Med. Biol. Res. 44:1048-1053
Imipramine+8-OH-DPAT (0.4 nmol/0.2 μl)	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	(+)	The combination impaired inhibitory avoidance further	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+8-OH-DPAT (0.4 nmol/0.2 μl)	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	(+)	The combination increased latency to escape further	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine+8-OH-DPAT (3.2 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 3 days, o.d.	+	The combination impaired inhibitory avoidance	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+8-OH-DPAT (3.2 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 3 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+8-OH-DPAT (3.2 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	+	The combination impaired inhibitory avoidance	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+8-OH-DPAT (3.2 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+DOI (16 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 3 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+DOI (16 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 3 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+DOI (16 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552
Imipramine+DOI (16 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	15	ip, for 21 days, o.d.	o	No interaction	Zanoveli et al., 2005	Behav. Pharmacol. 16:543-552

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Imipramine+lemon oil vapor	NA/5-HT reuptake inhibitor	Elevated plus-maze	ICR mice (5-week-old)	30	ip, 60	o	No interaction	Komiya et al., 2006	Behav. Brain Res. 172:240-249
Imipramine+lidocaine (4%/0,2 µl in DRN)	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	15	ip, for 14 days, o.d.	(o)	Lidocaine blocked the effects on inhibitory avoidance	Dombrowski and Andreatini, 2006	Neurosci. Lett. 407:80-85
Imipramine+lidocaine (4%/0,2 µl in DRN)	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	15	ip, for 14 days, o.d.	(o)	Lidocaine blocked the effects on escape latency	Dombrowski and Andreatini, 2006	Neurosci. Lett. 407:80-85
Imipramine+SB 242084 (0.01 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (290-310g)	10	ip, 30	+		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
Imipramine+SB 242084 (0.01 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (290-310g)	10	ip, 30	(o)		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
Imipramine+SB 242084 (0.01 nmol/0.2 µl)	NA/5-HT reuptake inhibitor	Vogel conflict test	Wistar rats (290-310g)	10	ip, 30	(o)	Shocks of 0.5 mA/2 s were applied	Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
Imipramine+Substance P	NA/5-HT reuptake inhibitor	Distress vocalizations	Guinea pig pups		ip, 30	+		Kramer et al., 1998	Science 281:1640-1645
Indalpine	5-HT reuptake inhibitor	Marble burying	Female MF1 mice (23-35g)	1-20	ip, 30	+		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Indole-3-pyruvic acid	Metabolite of tryptophan	Elevated plus-maze	SHR mice (19-20g)	100-200	ip, 60	+		Lapin and Politi, 1993	Pharmacol. Res. 28:129-134
Indorenate	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (12-week-old)	3.1-10	ip, 30	+	0.16 mA shocks	Meneses and Hong, 1993	Pharmacol. Biochem. Behav. 46:569-573
Indorenate	5-HT_{1A} partial agonist	Vogel conflict	Wistar rats (12-week-old)	5.6-10	ip, 30	+	0.32 mA shocks	Meneses and Hong,	Pharmacol. Biochem. Behav. 46:569-573

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test						1993	
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss mice (20-30g)	2.5-10	ip, 90	+	Transitions only	Fernández-Guasti and López-Rubalcava, 1990	Psychopharmacology 101:354-358
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Mice	5		+	Asymmetric compartments	Fernández-Guasti and López-Rubalcava, 1992	In: The Role of Serotonin in Psychiatric Disorders, p. 49
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	5	ip, 90	+	Transitions only	López-Rubalcava et al., 1992	Pharmacol. Biochem. Behav. 43:433-440
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (7-week-old)	2.5-5	ip, 90	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (11-week-old)	2.5-5	ip, 90	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (21-week-old)	2.5-5	ip, 90	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (280-350g)	10	ip, 90	+		Fernández-Guasti and Hong, 1989	In: Behavioural Pharmacology of 5-HT, pp. 377-382
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying	Wistar rats (300-350g)	5	ip, 90	+		Fernández-Guasti et al., 1992	Psychopharmacology 107:61-67

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-35g)	5	ip, 90	+		Fernández-Guasti et al., 1992	Psychopharmacology 107:61-67
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats	5	ip, 90	+		Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats	5	ip, 90	+	+5,7-DHT	Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (250-350g)	5	ip, 30	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1994	Behav. Pharmacol. 5:42-51
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (3-week-old)	5	ip, 90	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	10	ip, 90	+	Electric shock of 0.3 mA	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	5-10	ip, 90	+		López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	10	ip, 90	+	Electric shock of 0.3 mA+PCPA treatment	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying	Swiss-Webster mice (20-30g)	10	ip, 90	+	Electric shock of 0.3 mA+5,7-DHT lesion	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	10	ip, 90	o	PCPA treatment	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	10	ip, 90	o	5,7-DHT lesion	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (285-300g)	5	ip, 90	+		Fernández-Guasti and López-Rubalcava, 1998	Pharmacol. Biochem. Behav. 60:27-32
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Rats (7 to 21-week-old)	2.5-5		+	(1) No effect in 3-week old rats; (2) Shock of 0.3 mA	Fernández-Guasti et al., 1996	Salud Mental 19:36-41
Indorenate	5-HT_{1A} partial agonist	Shock-probe burying test	Female and male adult rats	5		+	(1) Females were either in pro or metestrous phase; (2) Shock of 0.3 mA	Fernández-Guasti et al., 1996	Salud Mental 19:36-41
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.62-1.25	ip, 20	+		Briones-Aranda et al., 2002	Psychopharmacology 162:147-155
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.31-0.62	ip, 20	-	Animals had forced swim stress 1 or 24 h prior to testing	Briones-Aranda et al., 2002	Psychopharmacology 162:147-155
Indorenate	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.6	ip, 90	-	Mice were subjected to swim stress prior to testing	Alfredo and Ofir, 2005	Eur. J. Pharmacol. 508:155-158
Indorenate+MM-77 (0.03 mg/kg)	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (25-30g)	0.6	ip, 90	-	(1) No antagonism; (2) Mice were subjected to swim stress prior to testing	Alfredo and Ofir, 2005	Eur. J. Pharmacol. 508:155-158

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats	2.5	ip, 25	o		Deacon and Gardner, 1986	Br. J. Pharmacol. 88:330P
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (400-500g)	2.5-20	ip, 30	o		Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats	3-5.4	ip	+		Amrick and Bennett, 1986	Soc. Neurosi. Abstr. 12:907
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (420-480g)	0.5-60	po, 30	+		Young et al., 1987	Eur. J. Pharmacol. 143:361-371
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (180-200g)	5-20	ip, 30	+	VI30	Sanger, 1992	J. Pharmacol. Exp. Ther. 261:513-517
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats		ip	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats		dorsal raphe	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats		hippocampus	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Rats		Lateral septum	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-250g)	10	ip, 30	+	VI30/FR3	Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar AF rats (300-400g)	0.5	sc, 15	+	FR8/FR1	Charrier et al., 1994	Pharmacol. Biochem. Behav. 48:281-289
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (250-300g)	0.25-2	ip, 30	+	Modified test and FR1/FR8	Hascoët et al., 1994	J. Psychopharmacol. 8:227-237
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	5-10	sc, 30	+		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676
Ipsapirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	2-10	sc, 30	+		Cervo and Samanin, 1995	Eur. J. Pharmacol. 284:249-255
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (12-week-old)	1-10	ip, 30	o	0.32 mA shocks	Meneses and Hong, 1993	Pharmacol. Biochem. Behav. 46:569-573
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats			+		Schuurman et al., 1986	Psychopharmacology 89:S54
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Lister rats (200-250g)	0.002	dorsal raphe, 5	+		Higgins et al., 1987	Br. J. Pharmacol. 90:658P
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Lister rats (210-270g)	0.004-0.01	dorsal raphe, 5	+		Higgins et al., 1988	Neuropharmacology 27:993-1001
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats	2.5-15	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-220g)	1.25-20	ip, 30	+	Modified Vogel test	Chojnacka-Wójcik and Przegalinski, 1991	Neuropharmacology 30:711-717
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Lister rats (200-280g)	0.002	dorsal raphe, 5	+		Higgins et al., 1992	Psychopharmacology 106:261-267
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict	Wistar rats (180-220g)	1.25-10	ip, 30	+	Modified Vogel test	Przegalinski et al., 1992	J. Pharm. Pharmacol. 44:780-782

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (180-220g)	0.3-1.25	ip, 30	+	Modified Vogel test	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Rats	0.3-0.62		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (200-250g)	3-10	ip, 30	+	Modified Vogel test	Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (12-week-old)	3.1-10	ip, 30	+	0.16 mA shocks	Meneses and Hong, 1993	Pharmacol. Biochem. Behav. 46:569-573
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (230-270g)	5	ip, 15	+		Przegalinski et al., 1994	Neuropharmacology 33:1109-1115
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (230-270g)	0.3-3g	hippocampus,10	+		Przegalinski et al., 1994	Neuropharmacology 33:1109-1115
Ipsapirone	5-HT_{1A} partial agonist	Conflict test	Squirrel monkeys (800-1050g)	0.01-1	im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337
Ipsapirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.1-10	im, 5	+		Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
Ipsapirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	1-3	im, 15	+	FR30	Nanry et al., 1991	Drug Dev. Res. 24:269-276
Ipsapirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.1-53	im, 0	+	FR30	Barrett, 1992	Drug Dev. Res. 26:299-317
Ipsapirone	5-HT_{1A} partial agonist	Conditioned emotional response	Sprague-Dawley rats (300-325g)	0.5-5	ip, 15	o		Lorens et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 357-369
Ipsapirone	5-HT_{1A} partial agonist	Conditioned emotional response	Wistar rats (400-500g)	2.5-20	ip, 30	+		Sanger, 1990	J. Pharmacol. Exp. Ther. 254:420-426

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (250-350g)	2.5-10	ip, 30	-		Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.15-10	sc, 30	-		Moser, 1989	Psychopharmacology 99:48-53
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	10	sc, 30	-	Decreased total open arm entries	Moser, 1989	In: Behavioural Pharmacology of 5-HT, pp. 371-375
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (200-270g)	0.1	ip, 30	-		Wright et al., 1992	Psychopharmacology 107:405-414
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats	2.5-10		o		File et al., 1987	Br. J. Pharmacol. 90:265P
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (144-196g)	0.5-5	ip, 30	o	Rats were malnourished	Almeida et al., 1991	Psychopharmacology 103:513-518
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	BALB/cByJ (8-week-old)		ip, 30	o		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (200-270g)	0.01-1	ip, for 2 weeks (b.i.d.)	o		Wright et al., 1992	Psychopharmacology 107:405-414
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Lister rats (240-300g)	1	ip, 5-20	o		Wright et al., 1992	Psychopharmacology 109:338-346
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.05	sc, 30	o		Curle et al., 1994	Drug Dev. Res. 32:183-190
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	PVG rats (200-260g)	1	ip, 30	+	Observations during 10-min	Critchley et al., 1988	Br. J. Pharmacol. 94 (Suppl.):389P
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	8-2048 nmol	sc, 10	+		Söderpalm et al., 1989	Pharmacol. Biochem. Behav. 32:259-265
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Rats	0.5-2.5	ip, 30	+	Observations during 10-min	Graeff et al., 1990	Neurosci. Biobehav. Rev. 14:501-506
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (292-368)	0.5	ip, 30	+	Rats were well-nourished	Almeida et al., 1991	Psychopharmacology 103:513-518
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	PVG rats (180-260g)	0.25-5	ip, 30	+	Observations during 10-min	Critchley et al., 1992	Psychopharmacology 106:484-490
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	CD rats (160-200g)	0.01-1	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Elevated T-maze	Wistar rats (250-300g)	1-2	ip, 25	+		Viana et al., 1994	Pharmacol. Biochem. Behav. 49:549-554
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Female T/O mice (22-30g)	1.5	sc, 30	+	Asymmetric compartments	Bill et al., 1989	Br. J. Pharmacol. 98 (Suppl.):679P
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Swiss mice (20-30g)	2.5-5	ip, 30	+	Transitions only	Fernández-Guasti and López-Rubalcava, 1990	Psychopharmacology 101:354-358
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Female ICR-DUB mice (17-35g)	17.8-31.6	ip, 30	+	Asymmetric compartments	Young and Johnson, 1991	Pharmacol. Biochem. Behav. 40:739-743
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	BKW mice (25-30g)	1-5	ip, 40	+	Asymmetric compartments	Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Mice	5		+	Asymmetric compartments	Fernández-Guasti and López-Rubalcava, 1992	In: The Role of Serotonin in Psychiatric Disorders, p. 49
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	5	ip, 30	+	Transitions only	López-Rubalcava et al., 1992	Pharmacol. Biochem. Behav. 43:433-440
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	MED=1.5	sc, 30	+		Bill and Fletcher, 1994	Br. J. Pharmacol. 111:151P
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Hamsters (100-150g)	10	30	+		Fernández-Guasti and López-Rubalcava, 1995	Pharmacol. Biochem. Behav. 50:375-382
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Lundbeck mice strain (30-35g)	0.11 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Ipsapirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (180-220g)	0.31-1.25	ip, 30	+	Bruit de 65 dB	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Ipsapirone	5-HT_{1A} partial agonist	Open-field	Rats	0.3-0.62		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-280g)	0.0002	dorsal raphe, 5	o	LLF	Higgins et al., 1992	Psychopharmacology 106:261-267
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.05	sc, 30	o	HLU	Curle et al., 1994	Drug Dev. Res. 32:183-190
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (250-350g)	2.5-10	ip, 30	o	HLU and 5,7-DHT	Picazo et al., 1995	Brain Res. Bull. 37:169-175
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Rats			+		Schuurman et al., 1986	Psychopharmacology 89:S54
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-250g)	0.002	dorsal raphe, 5	+	HLU	Higgins et al., 1987	Br. J. Pharmacol. 90:658P
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Rats			+	LLF	Critchley et al., 1987	Psychopharmacology 93:502-506
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (210-270g)	0.0004-0.01	dorsal raphe, 5	+		Higgins et al., 1988	Neuropharmacology 27:993-1001
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	DAP mice (22-30g)	10	ip, 30	+	Isolated mice	Olivier et al., 1989	Psychopharmacology 97:154-156
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats	1.25	ip, 15	+	HLU et LLF	De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats	0.63-4	ip, 15	+	HLU et LLF	De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Rats	0.025-10	ip	+		Carter and Smith, 1992	In: The Role of Serotonin in Psychiatric Disorders, p. 44
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (250-300g)	1-5	ip, 40	+	HLU	Costall et al., 1992	Pharmacol. Toxicol. 70:157-162
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Lister rats (200-280g)	0.0002	dorsal raphe, 5	+	HLU	Higgins et al., 1992	Psychopharmacology 106:261-267
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.05	sc, 30	+	LLU	Curle et al., 1994	Drug Dev. Res. 32:183-190
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.05	sc, 30	+	LLF	Curle et al., 1994	Drug Dev. Res. 32:183-190
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.05	sc, 30	+	HLF	Curle et al., 1994	Drug Dev. Res. 32:183-190
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (250-350g)	5	ip, 30	+	HLU	Picazo et al., 1995	Brain Res. Bull. 37:169-175

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (250-350g)	0.2 µg/µl	dorsal raphe, 0	+	HLU	Picazo et al., 1995	Brain Res. Bull. 37:169-175
Ipsapirone	5-HT_{1A} partial agonist	Social behavior	BSVS mice (25-35g)	0.1-10	sc, 30	+		Bell and Hobson, 1994	Neurosci. Biobehav. Rev. 18:325-338
Ipsapirone	5-HT_{1A} partial agonist	Staircase test	Rats	1-2.5	ip	+		Boaventura et al., 1986	Neurosci. Lett. 26 (Suppl.):S278
Ipsapirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	Rats	2		+		Rex et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 147
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	0.01	median raphe, 5	o		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	1	30	+	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	1-3	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-240g)	5	ip, 30	+		Kaltwasser, 1991	Behav. Brain Res. 43:133-137
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	2.5-5	30	+		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats			+		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizati	Rats		ip	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		ons							
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats		dorsal raphe	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats		hippocampus	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats		Lateral septum	+		Schreiber et al., 1993	Eur. J. Pharmacol. 249:341-351
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (200-220g)	0.5 g/l	po, 48 h	+		Baudrie et al., 1993	Eur. J. Pharmacol. 231:395-406
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (200-220g)	0.5 g/l	for 21 days (o.d.)	+		Baudrie et al., 1993	Eur. J. Pharmacol. 231:395-406
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=0.06	iv, 5	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=0.2	sc, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=1-1.4	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=2.8	po, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Adult rats	LED=3	ip	+		Molewijk et al., 1993	Br. Assoc. Psychopharmacol., 25-28th July, Cambridge :A12
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.40	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.227	ip, 15	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0057	icv, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0007	dorsal raphe, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0252	hippocampus, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	ED50=0.0153	amygdala, 5	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	1	ip, 15	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	1	ip, 15	+	+5,7-DHT	Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	0.005	dorsal raphe	+	+PCPA	Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	0.005	dorsal raphe	+	+PCPA	Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	0.3-10	sc, 15	+		Sommermeyer et al., 1993	Eur. J. Pharmacol. 240:29-37
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=6.1	po, 30	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=0.44	sc, 30	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=9.5	po, 120	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=2.3	sc, 120	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=16.7	po, 210	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=4.6	sc, 210	+	Foot-shocks	Bartoszyk et al., 1994	Soc. Neurosci. Abstr. 20:386
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (250-300g)	ED50=0.0127/rat	dorsal hippocampus (unilateral)	+	2 mA, 2 s electric shock	Jolas et al., 1995	J. Pharmacol. Exp. Ther. 272:920-929
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (250-300g)	ED50=0.026/rat	dorsal hippocampus (bilateral)	+	2 mA, 2 s electric shock	Jolas et al., 1995	J. Pharmacol. Exp. Ther. 272:920-929

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (180-280g)	3	ip, 30	+	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
Ipsapirone	5-HT_{1A} partial agonist	Face-to-face test	CF-1 mice (18-29g)	3-10	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
Ipsapirone	5-HT_{1A} partial agonist	Center test (thigmotaxis)	Sprague-Dawley rats (170-190g)	1-10	sc, 20	o		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
Ipsapirone	5-HT_{1A} partial agonist	Marble burying	Female MF1 mice (23-35g)	5-20	ip, 30	o		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Ipsapirone	5-HT_{1A} partial agonist	Mirrored chamber	BALB/cByJ (8-week-old)		ip, 30	+		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (7-week-old)	2.5-5	ip, 30	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (11-week-old)	2.5-5	ip, 30	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (21-week-old)	2.5-5	ip, 30	o	0.3 mA	López-Rubalcava and Fernández-Guasti, 1996	Dev. Psychobiol. 29:157-169
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (280-350g)	2.5-10	ip, 30	+		Fernández-Guasti and Hong, 1989	In: Behavioural Pharmacology of 5-HT, pp. 377-382

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Rats	0.5-2.5	iv	+		Bouws et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 168
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-350g)	2.5-5	ip, 30	+		Fernández-Guasti et al., 1992	Psychopharmacology 107:61-67
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-35g)	2.5-5	ip, 30	+		Fernández-Guasti et al., 1992	Psychopharmacology 107:61-67
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats	5	ip, 30	+		Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats	5	ip, 30	+	+5,7-DHT	Fernández-Guasti et al., 1992	Brain Res. Bull. 28:497-501
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-360g)	0.625-10	ip, 30	+		Korte and Bohus, 1990	Eur. J. Pharmacol. 179:393-401
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (290-340g)	0.5-2.5	iv, 10	+		Korte et al., 1992	Physiol. Behav. 51:1129-1133
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (250-350g)	5	ip, 30	+	0.3 mA	López-Rubalcava and Fernández-Guasti, 1994	Behav. Pharmacol. 5:42-51
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (3-week-old)	2.5	ip, 30	+	0.3 mA	López-Rubalcava and Fernández-Guasti,	Dev. Psychobiol. 29:157-169

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1996	
Ipsapirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	10-40	ip, 0	+		Davis et al., 1988	Psychopharmacology 94:14-20
Ipsapirone	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Sprague-Dawley rats	1-10	sc, 10	+		Mansbach and Geyer, 1988	Eur. J. Pharmacol. 156:375-383
Ipsapirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	Mice		po	o		Schipper et al., 1991	Hum. Psychopharmacol. 6:53-61
Ipsapirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	NMRI mice		po	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Ipsapirone	5-HT_{1A} partial agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	10-20	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Ipsapirone	5-HT_{1A} partial agonist	Conditioned avoidance	Wistar rats (220-240g)	20-40	ip, 30	+		Sanger et al., 1989	Behav. Pharmacol. 1:153-160
Ipsapirone	5-HT_{1A} partial agonist	Passive-avoidance test	Wistar rats (220-240g)	1.2-10	ip, 30	+		Sanger et al., 1989	Behav. Pharmacol. 1:153-160
Ipsapirone	5-HT_{1A} partial agonist	Agonistic behavior	NMRI mice	ED50=2.2	ip, 30	+		Traber et al., 1984	Brain Res. Bull. 12:741-744
Ipsapirone	5-HT_{1A} partial agonist	Agonistic behavior	NMRI mice	10-30	ip, 30	+		De Vry et al., 1991	In: New Concepts in Anxiety, pp. 94-129
Ipsapirone	5-HT_{1A} partial agonist	Stress-induced stretched approach posture	Wistar rats (180-220g)	3	ip, 30	+	Elicited by electrified prod	Molewijk et al., 1995	Psychopharmacology 121:81-90

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Cork gnawing	Ovariectomized Long-Evans CD rats (330g)	1-3	po, 30	+		Pollard et al., 1992	Eur. J. Pharmacol. 221:297-305
Ipsapirone	5-HT_{1A} partial agonist	Hot-plate	Wistar rats (200-250g)	3-10	ip, 30	+		Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
Ipsapirone	5-HT_{1A} partial agonist	DPAG stimulation	Rats			o		Jenck et al., 1989	Psychopharmacology 97:489-495
Ipsapirone	5-HT_{1A} partial agonist	DPAG stimulation	Rats	10-40 nmol	dorsal PAG	+	Weak effect	Graeff et al., 1990	Neurosci. Biobehav. Rev. 14:501-506
Ipsapirone	5-HT_{1A} partial agonist	DPAG stimulation	Rats	20-40 nmol	dorsal PAG, 10	+		Graeff et al., 1993	Behav. Brain Res. 58:123-131
Ipsapirone	5-HT_{1A} partial agonist	Conditioned emotional response	Listed hooded rats (250g)	50	po, 30	+		Oxley et al., 1995	Br. J. Pharmacol. 116:215P
Ipsapirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-300g)	0.5-10	sc, 20	+	Inescapable footshock of 2.5 mA	Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	5	ip, 30	+	Electric shock of 0.3 mA	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	2.5-5	ip, 30	+		López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	5	ip, 30	+	Electric shock of 0.3 mA+PCPA treatment	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Swiss-Webster mice (20-30g)	5	ip, 30	+	Electric shock of 0.3 mA+5,7-DHT lesion	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	5	ip, 30	o	PCPA treatment	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Light/dark test	Swiss-Webster mice (20-30g)	5	ip, 30	o	5,7-DHT lesion	López-Rubalcava, 1996	Pharmacol. Biochem. Behav. 54:677-686
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=0.4	sc, 30	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=6.1	po, 30	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=2.3	sc, 120	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=9.5	po, 120	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=4.6	sc, 210	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=16.7	po, 210	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Ipsapirone	5-HT_{1A} partial agonist	Isolation-induced aggression	CDY mice (18-22g)	ED50=4.02	ip, 20	+		Chamberlain, 1996	Soc. Neurosci. Abstr. 22:1584
Ipsapirone	5-HT_{1A} partial agonist	Conditioned emotional response	Lister hooded rats (208g)	10	sc, 30	+		Stanhope and Dourish, 1996	Psychopharmacology 128:293-303.
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (200-300g)	3	ip, 15	+	Animals received 20 inescapable footshocks of 2 mA/2 s	Xu et al., 1997	Eur. J. Pharmacol. 323:59-68

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats (200-300g)	1-2	ip, for 4-8 days (o.d.)	+	Animals received 20 inescapable footshocks of 2 mA/2 s	Xu et al., 1997	Eur. J. Pharmacol. 323:59-68
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	3	sc, 30	+		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Ipsapirone	5-HT_{1A} partial agonist	Canopy stretched attend posture test	TO mice (25-35g)	3	sc, 30	+		Grewal et al., 1997	Psychopharmacology 133:29-38
Ipsapirone	5-HT_{1A} partial agonist	Canopy stretched attend posture test	Sprague-Dawley rats (300-350g)	3	sc, 30	+	Non-specific effects	Grewal et al., 1997	Psychopharmacology 133:29-38
Ipsapirone	5-HT_{1A} partial agonist	Open-field	Wistar rats (175-225g)	2	ip, 0	+	Latency to eat in the open-field was reduced	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (285-300g)	5	ip, 30	+		Fernández-Guasti and López-Rubalcava, 1998	Pharmacol. Biochem. Behav. 60:27-32
Ipsapirone	5-HT_{1A} partial agonist	Novelty-suppressed feeding	Wistar rats (220-250g)	3-6	ip, 30	+	Ipsapirone increased water intake	Ganouni et al., 1998	Pharmacol. Biochem. Behav. 60:365-369
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=6	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Ipsapirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Rats	ED50=0.4	sc, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112
Ipsapirone	5-HT_{1A} partial agonist	Marble burying	Mice	ED50=0.6	po, 30	+		Bartoszyk et al., 1998	Soc. Neurosci. Abstr. 24:1112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (300-340g)	5	ip, 20	o	Low light condition	To and Bagdy, 1999	Neuropharmacology 38:279-282
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-350g)	5	ip, 30	+	Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
Ipsapirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (300g)	10-17	ip, 30	+	Rats received a sucrose solution and were non-water deprived	Vanover et al., 1999	Psychopharmacology 145:333-341
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	Wistar rats (190-240g)	0,25-2,25	ip, 30	+	Significant effects on risk assessment only	Setem et al., 1999	Pharmacol. Biochem. Behav. 62:515-521
Ipsapirone	5-HT_{1A} partial agonist	Elevated plus-maze	C57BL/6 mice	3	ip, for 14 days (o.d.)	+	Following social defeat	Avgustinovich et al., 1999	Eur. Neuropsychopharmacol. 9 (S5):S301
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Rats (7 to 11-week-old)	2.5-5		+	(1) No effect in 3- and 21-week old rats; (2) Shock of 0.3 mA	Fernández-Guasti et al., 1996	Salud Mental 19:36-41
Ipsapirone	5-HT_{1A} partial agonist	Shock-probe burying test	Female and male adult rats	10		+	(1) Females were either in pro or metestrous phase; (2) Shock of 0.3 mA	Fernández-Guasti et al., 1996	Salud Mental 19:36-41
Ipsapirone	5-HT_{1A} partial agonist	Wall test	C57BL/6J mice (24-26g)	3	ip, 30	-		Avgustinovich and Alekseenko, 2001	Bull. Exp. Biol. Med. 132:1121-1124
Ipsapirone	5-HT_{1A} partial agonist	Wall test	C57BL/6J mice (24-26g)	3	ip, 30	o	Mice were defeated in 20 intermale encounters	Avgustinovich and Alekseenko, 2001	Bull. Exp. Biol. Med. 132:1121-1124
Ipsapirone+adrenalectomy	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-350g)	5	ip, 15	(o)	(1) Blockade of the anxiolytic-like effects, (2) Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ipsapirone+CCK-8 (1 nmol/rat)	5-HT_{1A} partial agonist	Social interaction	Sprague-Dawley rats (300-340g)	5	ip, o.d. for 21 days	(o)	(1) Antagonism of the anxiogenic-like effects of CCK-8; (2) HLU	To and Bagdy, 1999	Neuropharmacology 38:279-282
Ipsapirone+demedullectomy	5-HT_{1A} partial agonist	Shock-probe burying test	Wistar rats (300-350g)	5	ip, 15	+	Shock of 0.3 mA	López-Rubalcava et al., 1999	Psychoneuroendocrinology 24:409-422
Irindalone	Non-selective 5-HT_{2C} antagonist	Schedule-induced polydipsia	Wistar rats	3.6	po, o.d. for 2 days	o		Hogg and Mork, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S65
Isamoltane	Non selective antagonist	Elevated plus-maze	Wistar rats (292-368)	2.5-20	ip, 30	o	Rats were well-nourished	Almeida et al., 1991	Psychopharmacology 103:513-518
Isamoltane	Non selective antagonist	Elevated plus-maze	Wistar rats (144-196g)	2.5-20	ip, 30	o	Rats were malnourished	Almeida et al., 1991	Psychopharmacology 103:513-518
Isamoltane	Non selective antagonist	DPAG stimulation	Wistar rats (180-250g)	4-32 nmol	dorsal PAG	+		Nogueira and Graeff, 1991	Behav. Pharmacol. 2:73-77
Isatin	5-HT stimulant	Elevated plus-maze	Mice	20	ip	-		Bhattachary a and Acharya, 1993	Biog. Amines 9:5-6
Isatin	5-HT stimulant	Elevated plus-maze	Wistar mice (25-30g)	20	ip, 45	-		Bhattachary a and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
Isatin	5-HT stimulant	Elevated plus-maze	Wistar mice (25-30g)	15	ip, 15	-		Bhattachary a et al., 1991	J. Psychopharmacol. 5:202-206
Isatin	5-HT stimulant	Open-field	Wistar mice (25-30g)	20	ip, 15	-		Bhattachary a et al., 1991	J. Psychopharmacol. 5:202-206
Isatin	5-HT stimulant	Social interaction	Charles Foster rats (150-180g)	20	ip, 15	-		Bhattachary a et al., 1991	J. Psychopharmacol. 5:202-206
Isatin	5-HT stimulant	Social behavior	Rhesus monkeys (*Macatta mulatta*)	20	im, 0	-		Palit et al., 1997	Biog. Amines 13:131-142

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
JB-788	5-HT_{1A} agonist	Elevated plus-maze	Mice	3.3	ip, 30	+		Picard et al., 2010	Neuroscience 169:1337-1346
Ketanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.3-30	ip	o	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
Ketanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	O.2	sc, 30	o		Kennett et al., 1992	Psychopharmacology 107:379-384
Ketanserin	5-HT_2 antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	0.2-1	sc, 30	o	VI30/FR5 and 0.75 mA	Kennett et al., 1994	Psychopharmacology 114:90-96
Ketanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Wistar rats	10	po	+		Amrick and Bennett, 1986	Soc. Neurosi. Abstr. 12:907
Ketanserin	5-HT_2 antagonist	Conflict test	Squirrel monkeys (550-900g)	0.1-3	im	+	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112
Ketanserin	5-HT_2 antagonist	Conflict test	White Carneau Pigeons	0.3-10	im, 5	+		Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (220-250g)	1	ip, 30	-		Motta et al., 1992	Psychopharmacology 107:135-139
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (300-330g)	10 nmol	amygdala, 10	-		Zangrossi and Graeff, 1994	Braz. J. Med. Biol. Res. 27:2453-2456
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	PVG rats (200-280g)	0.1-0.5	ip, 30	+	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	ICR mice (20-30g)	0.5	ip, 30	+		Onaivi et al., 1995	Life Sci. 57:2455-2466
Ketanserin	5-HT_2 antagonist	Light/dark test	BKW mice (30-25g)	0.01-10	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Ketanserin	5-HT_2 antagonist	Open-field	Sprague-Dawley rats (200-250g)	10	ip, 60	o		Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin	5-HT_2 antagonist	Social interaction	Rats			o	LLF	Critchley et al., 1987	Psychopharmacology 93:502-506
Ketanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (200-250g)	0.2	sc, 40	o		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Ketanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (250-320g)	0.2-1	sc, 30	o		Kennett, 1992	Psychopharmacology 107:379-384
Ketanserin	5-HT_2 antagonist	Social interaction	Lister hooded rats (250-300g)	0.1-10	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Ketanserin	5-HT_2 antagonist	Fear-potentiated startle reflex	CD rats (9-13-week-old)	1-4	sc, 180	o		Nanry and Tilson, 1989	Psychopharmacology 97:507-513
Ketanserin	5-HT_2 antagonist	Marble burying	Female MF1 mice (23-35g)	1-10	ip, 30	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Ketanserin	5-HT_2 antagonist	Stress-induced colonic motor alterations	Wistar rats (250-300g)	0.1-1	ip, 30	o		Gué et al., 1993	Eur. J. Pharmacol. 233:193-199
Ketanserin	5-HT_2 antagonist	Stress-induced hyperthermia	NMRI mice		po	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Ketanserin	5-HT_2 antagonist	Stress-induced hyperthermia	NMRI mice (12-14g)	1-10	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Ketanserin	5-HT_2 antagonist	Conditioned place aversion	Long-Evans rats (250-300g)	1-10	ip	o		Rocha et al., 1993	Behav. Pharmacol. 4:101-106
Ketanserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (250-300g)	10 nmol	dorsal PAG, 10	o		Schütz et al., 1985	Psychopharmacology 85:340-345
Ketanserin	5-HT_2 antagonist	DPAG stimulation	Rats	10 nmol	dorsal PAG, 10	o		Graeff et al., 1986	Behav. Brain Res. 22:173-180

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (370-450g)	1-10	ip, 35	+		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
Ketanserin	5-HT_2 antagonist	IC-stimulation	Wistar rats (250-300g)	10	ip, 25	o		Melo and Brandão, 1995	Behav. Pharmacol. 6:413-417
Ketanserin	5-HT_2 antagonist	Conditioned fear	Sprague-Dawley rats (250-300g)	0.1-5	sc, 20	o	Inescapable footshock of 2.5 mA	Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
Ketanserin	Non-selective 5-HT_{2A2C} antagonist	Conditioned fear	Sprague-Dawley rats		po, 60	o	Electric footshock-induced freezing	Ohno et al., 1996	Soc. Neurosci. Abstr. 22:480
Ketanserin	Non-selective 5-$HT_{2A/2C}$ antagonist	Stress-induced analgesia	Wistar rats (250-300g)	5 µg/µl	midbrain tectum	+		Brandão and Coimbra, 1996	Soc. Neurosci. Abstr. 22:1136
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar mice (25-30g)	5	ip, 30	o		Bhattacharya and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.1-1	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Ketanserin	5-HT_2 antagonist	Stress-induced analgesia	Wistar rats (250-300g)	2.5 µg/0.2 µl	midbrain tectum, 5	+	Animals were subjected to dorsal PAG and superior colliculus stimulation	Coimbra et al., 1997	Behav. Brain Res. 87:97-103
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-200g)	3	sc, 30	o		Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female Sprague-Dawley rats (180-200g)	3	sc, 30	+	Animals were diestrous rats	Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female Sprague-Dawley rats (180-200g)	3	sc, 30	-	Animals were proestrous rats	Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female Sprague-Dawley rats (180-200g)	3	sc, 30	-	Animals were estrous rats	Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female Sprague-Dawley rats (180-200g)	3	sc, 30	-	Animals were metestrous rats	Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (180-200g)	3	sc, 30	-		Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (180-200g)	3	sc, 30	-	Animals received in addition estradial benzoate (10 µg/kg)	Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (180-200g)	3	sc, 30	o	Animals received in addition progesterone (25 mg/kg)	Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (180-200g)	3	sc, 30	o	Animals received in addition benzoate (10 µg/kg) and progesterone (25 mg/kg)	Díaz-Véliz et al., 1997	Pharmacol. Biochem. Behav. 58:637-642
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats	0.1-0.3	ip, 30	o		Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Ketanserin	5-HT_2 antagonist	Conditioned fear	Sprague-Dawley rats (175-255g)	0.3-3	po, 60	o	Animals were subjected to a 2 mA of scramble footshock, 30 min)	Ishida-Tokuda et al., 1996	Jpn. J. Pharmacol. 72:119-126
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-300g)	3	ip, 30	o		Skrebuhhova et al., 1999	Med. Sci. Res. 27:277-280
Ketanserin	5-HT_2 antagonist	Stress-induced analgesia	Wistar rats (210-240g)	5 nmol/0.2 µl	dorsal PAG, 15	+	Rats received 2 sessions of dorsal PAG electrical stimulations	Castilho and Brandão, 2001	Psychopharmacology 155:154-162
Ketanserin	5-HT_2 antagonist	Four-plate test	Swiss mice (20-24g)	0.03-1	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin	5-HT_2 antagonist	Light/dark test	Swiss mice (20-24g)	0.015-0.03	ip, 30	-		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.06-2	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
Ketanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 30	-	Activity was reduced at this dose	Overstreet et al., 2003	Psychopharmacology 167:344-352
Ketanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 5 and 10 days	o	The drug was given after the first and second cycles	Overstreet et al., 2003	Psychopharmacology 167:344-352
Ketanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 4.5 h	o	The drug was given after removal of ethanol on the third cycle	Overstreet et al., 2003	Psychopharmacology 167:344-352
Ketanserin	5-HT_2 antagonist	Four-plate test	Swiss mice (4-week-old)	0.125-0.5	ip, 45	o	Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Ketanserin	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
Ketanserin	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
Ketanserin	5-HT_2 antagonist	Ventrolateral PAG stimulation	Wistar rats (250-310g)	5 nmol/0.2 µl	vPAG, 10	o		De Luca-Vinhas et al., 2006	Pain 121:94-104
Ketanserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (250-280g)	10 nmol/0.2 µl	dorsal PAG, 10	o	The drug did not modify escape theshold	Oliveira et al., 2007	Psychopharmacology 191:253-262

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin	5-HT_2 antagonist	Conditioned fear	Wistar rats (250-280g)	10 nmol/0.2 µl	dorsal PAG, 10	o	The drug did not reduce freezing in the same context they erceived footshocks (0.6 mA/1 s)	Oliveira et al., 2007	Psychopharmacology 191:253-262
Ketanserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (250-280g)	10 nmol/0.2 µl	dorsal PAG, 10	o	(1) The drug did not modify escape theshold; (2) Animals were under conditioned fear	Oliveira et al., 2007	Psychopharmacology 191:253-262
Ketanserin	5-HT_2 antagonist	Conditioned place aversion	Wistar rats (250-300g)	0.5-1 µg/0.2 µl	basolateral amygdala, 5	+	The drug reduced place conditioned aversion induced by the inferior colliculus infusion of semicarbazide	Macedo et al., 2007	Behav. Brain Res. 177:100-108
Ketanserin	5-HT_2 antagonist	Stress-suppressed feeding	Sprague-Dawley rats (8-12-week-old)	5	sc, 30	o	Tail-pinch stress	Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639
Ketanserin	5-HT_2 antagonist	Open-field	Sprague-Dawley rats (8-12-week-old)	5	sc, 30	o		Hawkins et al., 2008	Pharmacol. Biochem. Behav. 90:632-639
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (280-350g)	1	ip, 30	o		Ghisleni et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1508-1515
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Swiss mice (25-30g)	10 nmol/0.1 µl	PAG, 10	o		Nunes-de-Souza et al., 2008	Behav. Brain Res. 187:72-79
Ketanserin	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	10-20 nmol/0.2 µl	ventromedial hypothalamus, 10	o		da Silva et al., 2011	Behav. Brain Res. 216:692-698

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	10-20 nmol/0.2 µl	ventromedial hypothalamus, 10	o		da Silva et al., 2011	Behav. Brain Res. 216:692-698
Ketanserin	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe et al., 2010	Neuroscience Letters 479:87-91
Ketanserin	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe et al., 2010	Neuroscience Letters 479:87-91
Ketanserin	5-HT_2 antagonist	Open-field	Sprague-Dawley rats	5	po, between P2 and P14	o		Benekareddy et al., 2011	Biol. Psychiatry 70:1024-1032
Ketanserin	5-HT_2 antagonist	Open-field	Sprague-Dawley rats	5	po, between P2 and P14	+	Animals were maternally separated	Benekareddy et al., 2011	Biol. Psychiatry 70:1024-1032
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats	5	po, between P2 and P14	o		Benekareddy et al., 2011	Biol. Psychiatry 70:1024-1032
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats	5	po, between P2 and P14	+	Animals were maternally separated	Benekareddy et al., 2011	Biol. Psychiatry 70:1024-1032
Ketanserin	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	5-20 nmol/0.2 µl	ventrolateral PAG, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
Ketanserin	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	5-20 nmol/0.2 µl	ventrolateral PAG, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	+	Rats were tested during their estrous cycle	Fedotova, 2010	Ross. Fiziol. Zh. Im. I. M. Sechenova 96:426-432

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	+	Rats were tested during their proestrous cycle	Fedotova, 2010	Ross. Fiziol. Zh. Im. I. M. Sechenova 96:426-432
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	+	Rats were tested during their estrous cycle	Fedotova, 2010	Eksp. Klin. Farmakol. 73:6-9
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	+	Rats were tested during their proestrous cycle	Fedotova, 2010	Eksp. Klin. Farmakol. 73:6-9
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	Swiss mice (25-30g)	10 nmol/0.1 µl	PAG, 5	o		Nunes-de-Souza et al., 2011	Behav. Brain Res. 225:547-553
Ketanserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (270-300g)	10 nmol/0.2 µl	dorsal PAG, 10	o		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
Ketanserin	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	10-20 nmol/0.2 µl	dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55
Ketanserin	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	10-20 nmol/0.2 µl	dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	ddY mice	10	po, 60	o		Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
Ketanserin	5-HT_2 antagonist	Elevated plus-maze	ddY mice	10	po, 60	o	The drug attenuated anxionegic-like effects of ethanol withdrawal	Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
Ketanserin+$(PhSe)_2$ (50 nµmol/kg)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (280-350g)	1	ip, 30	(o)	Antagonism of the anxiolytic-like effects of $(PhSe)_2$	Ghisleni et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1508-1515

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketanserin+citalopram (5 mg/kg)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-300g)	3	ip, 30	o	Decrease of activity	Skrebuhhova et al., 1999	Med. Sci. Res. 27:277-280
Ketanserin+desipramine (10 mg/kg)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-300g)	3	ip, 30	o	Decrease of activity	Skrebuhhova et al., 1999	Med. Sci. Res. 27:277-280
Ketanserin+DOI (8 nmol/0.2 µl)	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	10 nmol/0.2 µl	ventromedial hypothalamus, 10	o	No interaction	da Silva et al., 2011	Behav. Brain Res. 216:692-698
Ketanserin+DOI (8 nmol/0.2 µl)	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	10 nmol/0.2 µl	ventromedial hypothalamus, 10	(o)	Ketanserin antagonized the effects of DOI	da Silva et al., 2011	Behav. Brain Res. 216:692-698
Ketanserin+EEDQ (0,31 mg/kg)	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)		sc, 15	(o)	(1) Antagonism of the effects of EEDQ, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
Ketanserin+kainic acid (60 pmol)	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	0,37 nmol/0.2 µl	dorsal PAG, 10	(o)	Ketanserin antagonized the effects of kanic acid	Pobbe et al., 2010	Neuroscience Letters 479:87-91
Ketanserin+kainic acid (60 pmol)	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0,37 nmol/0.2 µl	dorsal PAG, 10	(o)	Ketanserin antagonized the effects of kanic acid	Pobbe et al., 2010	Neuroscience Letters 479:87-91
Ketanserin+semicarbazide (6 µg/0.2 µl in IC)	5-HT_2 antagonist	Open-field	Wistar rats (250-300g)	0.5-1 µg/0.2 µl	basolateral amygdala, 5	(-)	The drug enhanced the aversiveness of the inferior colliculus infusion of semicarbazide	Macedo et al., 2007	Behav. Brain Res. 177:100-108

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LB50016	5-HT_{1A} agonist	Face-to-face test	ICR mice (20-25g)	1-10	ip, 30	+		Lee et al., 1999	Arch. Pharm. Res. 22:157-164
LB50016	5-HT_{1A} agonist	Isolation-induced aggression	ICR mice (20-25g)	1-10	ip, 30-4h	+		Lee et al., 1999	Arch. Pharm. Res. 22:157-164
LEK 8804	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau Pigeons (500-650g)	0.01-0.63	im, 5	o	FR30:FR30	Kleven and Koek, 1996	J. Pharmacol. Exp. Ther. 276:388-397
Linezolid	MAO A inhibitor	Elevated plus-maze	Swiss mice (20-25g)	20-40	ip, 30	+		Jindal et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 40C:47-53
Linezolid	MAO A inhibitor	Light/dark test	Swiss mice (20-25g)	10-40	ip, 30	+		Jindal et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 40C:47-53
Linezolid	MAO A inhibitor	Holeboard	Swiss mice (20-25g)	10-40	ip, 30	+		Jindal et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 40C:47-53
Lisuride	Non selective agonist	Vogel conflict test	Wistar rats	0.05-0.1	ip, 30	+		Akai et al., 1991	Nippon. Yakurigaku. Zasshi. 97:209-220
Lisuride	Non selective agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (320-350g)	0.05-0.8	ip, 10	-		Svensson, 1985	Psychopharmacology 85:469-475
LP-211	5-HT_7 agonist	Light/dark test	CD1 mice (30-45g)	0.25	ip, 15	+		Adriani et al., 2012	Neuropharmacology 62:833-842
LSD	Non selective antagonist	Conflict test	White Carneau Pigeons	0.1-3	im, 0	+	FI5/FR30	Graeff and Schoenfeld, 1970	J. Pharmacol. Exp. Ther. 173:277-283
LSD	Non selective antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.11	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
LSD	Non selective antagonist	Novelty-elicited head-bob	New Zealand rabbits (1.6-1.8 kg)	14.2 µg/kg	iv, o.d. for 8 days	+		Aloyo et al., 2007	Behav. Pharmacol. 18:651-659

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		behavior							
Lu 10-134C	5-HT reuptake inhibitor	Social interaction	Rats	20 µmol	for neonatal days 18-21 (b.i.d.)	+	Rats were singly housed	Hansen et al., 1997	J. Pharmacol. Exp. Ther. 283:1333-1341
Lurasidone	Non-selective 5-HT ligand	Vogel conflict test	Sprague-Dawley rats	10-30	po, 60	+	Shocks of 0.35 mA/0.5 s were applied	Ishibashi et al., 2010	J. Pharmacol. Exp. Ther. 334:171-181
Lurasidone	Non-selective 5-HT ligand	Social interaction	Lister hooded rats	1-3	po, 60	+		Ishibashi et al., 2010	J. Pharmacol. Exp. Ther. 334:171-181
LY 165,163	5-HT_{1A} agonist	Conflict test	White Carneau pigeons (500-600g)	0.16	im, 5	+		Schreiber et al., 1995	Pharmacol. Biochem. Behav. 51:211-215
LY 165,163	5-HT_{1A} agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.5-4	sc, 30	-		Moser, 1989	In: Behavioural Pharmacology of 5-HT, pp. 371-375
LY 165,163	5-HT_{1A} agonist	Elevated plus-maze	CD rats (160-200g)	0.03-3	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
LY 228729	5-HT_{1A} full agonist	Geller-Seifter conflict test	Long-Evans rats (325-375g)	0.08-0.32	ip, 20	+	VI30 and 0.25 mA	Foreman et al., 1993	J. Pharmacol. Exp. Ther. 267:58-71
LY 228729	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (450-600g)	0.04-2.5	im, 15	+	FR30 and 2-5 mA	Foreman et al., 1993	J. Pharmacol. Exp. Ther. 267:58-71
LY 228729	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Long-Evans rats	1	Pumps	-		Czachura and Rasmussen, 1994	Proceeding of meeting
LY 228729	5-HT_{1A} full agonist	Fear-potentiated startle reflex	Long-Evans rats	1	Pumps, for 7 days	+		Czachura and Rasmussen, 1994	Proceeding of meeting
LY 228729	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.03-3	im, 15	+	FR30/FR30. 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
LY 228729	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.64	im, 15	+	FR30/FR30. 3.2-5.6 mA shocks	Benvenga and Leander,	Behav. Pharmacol. 7:540-550

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1996	
LY 228729	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.64	im, 15	+	VI30/FR5, 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
LY 228729	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.3	im, 15	+	VI30/FR20. 1.7-3.8 mA shocks	Benvenga and Leander, 1996	Behav. Pharmacol. 7:540-550
LY 228729	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-650g)	0.001-10	im, 5	o		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
LY 274600	5-HT_{1A} full agonist	Elevated plus-maze	Mice	0.03-10	sc	+		Helton et al., 1995	Soc. Neurosci. Abstr. 21:1367
LY 274601	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (450-600g)	0.1-1	im, 10	+	FR30	Foreman et al., 1995	Drug Dev. Res. 34:66-85
LY 274601	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (450-600g)	0.1-3	im, 10	+	FR30	Foreman et al., 1995	Drug Dev. Res. 34:66-85
LY 278584	5-HT_3 antagonist	Light/dark test	NIH Swiss mice (18-22g)	1	ip, 30	o		Emmanouil et al., 2006	Pharmacol. Biochem. Behav. 84:313-320
LY 278584+N_2O	5-HT_3 antagonist	Light/dark test	NIH Swiss mice (18-22g)	1	ip, 30	+	No interaction	Emmanouil et al., 2006	Pharmacol. Biochem. Behav. 84:313-320
LY 293284	5-HT_{1A} full agonist	Elevated plus-maze	Swiss-Webster mice	0.01-0.3	ip, 30	o		Rodgers and Cao, 1997	Soc. Neurosci. Abstr. 23:988
LY 293284	5-HT_{1A} full agonist	Elevated plus-maze	Swiss-Webster mice (8-9-week-old)	0.01-0.3	sc, 30	o		Cao and Rodgers, 1998	Psychopharmacology 139:185-194
LY 297996	5-HT_{1A} antagonist	Elevated plus-maze	Mice	0.03-3	sc	o		Helton et al., 1995	Soc. Neurosci. Abstr. 21:1367
LY 297996	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice	3-10	ip, 30	+		Rodgers and Cao, 1997	Soc. Neurosci. Abstr. 23:988
LY 297996	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (8-9-week-old)	3-10	sc, 30	+		Cao and Rodgers, 1998	Psychopharmacology 139:185-194
LY 297996	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (8-9-week-old)	3-10	sc, 30	+	Animals were tested in the mid-dark phase	Rodgers et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S78

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							of the LD cycle		
LY 297996	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (8-9-week-old)	3-10	sc, 30	o	Animals were tested in the mid-light phase of the LD cycle	Rodgers et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S78
LY 315712	5-HT_{1A} partial agonist	Elevated plus-maze	Mice	0.03-0.3	sc	+		Helton et al., 1995	Soc. Neurosci. Abstr. 21:1367
LY 315712	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice	1-3	ip, 30	+	Weak anxiolytic-like effects	Rodgers and Cao, 1997	Soc. Neurosci. Abstr. 23:988
LY 315712	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (8-9-week-old)	1-3	sc, 30	+	Weak effects (risk assessment only)	Cao and Rodgers, 1998	Psychopharmacology 139:185-194
LY 333068	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Rats	ED50=0.1	sc	+		Kallman et al., 1997	Soc. Neurosci. Abstr. 23:130
LY 333068	5-HT_{1A} antagonist	Elevated plus-maze	Rats	ED50=0.3	sc	+		Kallman et al., 1997	Soc. Neurosci. Abstr. 23:130
LY 53857	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.03-3	ip	o	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
LY 53857	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	5	sc, 30	+		Kennett et al., 1992	Psychopharmacology 107:379-384
LY 53857	5-HT_2 antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	5	sc, 30	+	VI30/FR5 and 0.75 mA	Kennett et al., 1994	Psychopharmacology 114:90-96
LY 53857	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (250-320g)	2-5	sc, 30	+		Kennett, 1992	Psychopharmacology 107:379-384
LY 53857	5-HT_2 antagonist	Stress-induced hyperthermia	Swiss mice (25-30g)	1.5-3	ip, 60	o		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MCI-225	NA reuptake inhibitor/5-HT_3 antagonist	Social interaction	Wistar rats (200-350g)	10-30	po, 60	+	HLU conditions	Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
MCI-225	NA reuptake inhibitor/5-HT_3 antagonist	Elevated plus-maze	Wistar rats (200-350g)	10-100	po, 60	+		Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
MCI-225	NA reuptake inhibitor/5-HT_3 antagonist	Social interaction	Wistar rats (200-350g)	10	po, o.d. for 5 days	+	HLU conditions	Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
MCI-225+mCPBG (1 mg/kg ip)	NA reuptake inhibitor/5-HT_3 antagonist	Social interaction	Wistar rats (200-350g)	10-30	po, 60	(o)	(1) Antagonism of the anxiolytic-like effects; (2) HLU conditions	Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
m-CPBG	Non-selective 5-HT_3 agonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	+		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
m-CPBG	Non-selective 5-HT_3 agonist	Light/dark test	BKW mice (25-30g)	0.005	ip, 40	-	The latency to enter the dark compartment was reduced	Costall and Naylor, 1998	Br. J. Pharmacol. 123:242P
m-CPBG	Non-selective 5-HT_3 agonist	Light/dark test	BKW mice (25-30g)	0.005	ip, 40	-	The latency to enter the dark compartment was reduced	Costall and Naylor, 1998	Br. J. Pharmacol. 123:243P
m-CPBG	Non-selective 5-HT_3 agonist	Social interaction	Wistar rats (200-350g)	1	ip, 15	o	HLU conditions	Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
m-CPBG	Non-selective 5-HT_3 agonist	Elevated plus-maze	Wistar rats	3-10		-		Allikmets et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S271
mCPP	5-$HT_{2C/2B}$ agonist	Vogel conflict test	Sprague-Dawley rats (200g)	1-2	ip, 10	-	VI21, also decreased non-punished responding	Kilts et al., 1982	Psychopharmacology 78:156-164
mCPP	5-$HT_{2C/2B}$ agonist	Avoidance test	Rats	4		-		Martin, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 203
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Swiss mice NIH (20-30g)	1.56-3.125	ip, 30	-		Benjamin et al., 1990	Life Sci. 47:195-203

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Sprague-Dawley rats	0.5	ip	-		Gibson et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 134
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	DBA/2 mice (6-8-week-old)	1-4	ip, 30	-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Mice	0.5-4		-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.5	sc, 20	-		Blackburn et al., 1993	Psychopharmacology 110:257-264
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Wistar rats (150-220g)	0.3-3	ip, 30	-		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Lister hooded rats (180-280g)	1-5	ip, 30	-	10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Long-Evans rats (320-340g)	5	ip, 15	-		Rezazadeh et al., 1993	Alcohol 10:281-283
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	-		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Wistar rats (200-240g)	1	ip, for 21 days (o.d.)	o		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Lister hooded rats (280-400g)	3.1 nmol	amygdala, 1	o		Duxon et al., 1995	Br. J. Pharmacol. 116:331P
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Wistar rats (150g)	0.3-1	sc,15	-		Buczek et al., 1994	Behav. Pharmacol. 5:470-484
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Wistar rats (150g)	0.3	sc, for 8 days	-		Buczek et al., 1994	Behav. Pharmacol. 5:470-484
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Rats	ED50=1.02		-		Wallis et al., 1994	Soc. Neurosci. Abstr. 20:386
mCPP	5-$HT_{2C/2B}$ agonist	Elevated Zero-	Sprague-Dawley rats	1	sc, 30	-		Grewal et al., 1993	In: British Association for Psychopharmacology, A19

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		maze							
mCPP	5-$HT_{2C/2B}$ agonist	Elevated Zero-maze	Lister hooded rats (250-320g)	0.5-1	sc, 30	-		Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
mCPP	5-$HT_{2C/2B}$ agonist	Elevated Zero-maze	Sprague-Dawley rats (285-430g)	0.5-1	sc, 30	-	40-60 lux	Shepherd et al., 1994	Psychopharmacology 116:56-64
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Sprague-Dawley rats (200-250g)	0.5-0.75	ip, 20	-		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Swiss mice (10-week-old)	35125	ip, 30	-		Griebel et al., 1991	Neuroreport 2:627-629
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Rats	ED50=0.8		-		Wallis et al., 1994	Soc. Neurosci. Abstr. 20:386
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Swiss mice (10-week-old)	2	ip, for 21 days (o.d.)	o		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
mCPP	5-$HT_{2C/2B}$ agonist	Holeboard	Wistar rats (150g)	0.3-1	sc,15	-		Buczek et al., 1994	Behav. Pharmacol. 5:470-484
mCPP	5-$HT_{2C/2B}$ agonist	Holeboard	Wistar rats (150g)	0.3	sc, for 8 days	-		Buczek et al., 1994	Behav. Pharmacol. 5:470-484
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Wistar rats (200-250g)	1-5	ip, 30	-	Sedation?	Klodzinska et al., 1989	J. Neural Transm. Park. Dis. Dement. Sect. 1:207-218
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Sprague-Dawley rats (200-250g)	2.5-5	ip, 20	-	Locomotion decreased	Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
mCPP	5-$HT_{2C/2B}$ agonist	Free-exploration test	Swiss mice (10-week-old)	3-4	ip, 30	-		Griebel et al., 1991	Neuroreport 2:627-629
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.1-1	ip, 20	-		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-280g)	0.0002-0.0004	icv, 0	-		Whitton and Curzon, 1990	Psychopharmacology 100:138-140
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-280g)	0.001	hippocampus, 0	-		Whitton and Curzon,	Psychopharmacology 100:138-140

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1990	
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats	0.5	ip	-		Gibson et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 134
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (200-220g)	1	ip, 20	-	Singly housed	Kennedy et al., 1993	Psychopharmacology 113:262-268
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (200-220g)	1	ip, 20	-	Grouped	Kennedy et al., 1993	Psychopharmacology 113:262-268
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (200-220g)	0.5	ip, 20	-	Restrained	Kennedy et al., 1993	Psychopharmacology 113:262-268
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (220-250g)	0.5	ip, 30	-	LLF	Kennett et al., 1994	Br. J. Pharmacol. 111:797-802
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-280g)	0.001	amygdala, 0	o		Whitton et Curzon, 1990	Psychopharmacology 100:138-140
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Lister rats (200-280g)	0.0005-0.0125	dorsal raphe, 5	o		Higgins et al., 1992	Psychopharmacology 106:261-267
mCPP	5-HT$_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (200-220g)	1	ip, for 14 days (o.d.)	o		Kennedy et al., 1993	Psychopharmacology 113:262-268
mCPP	5-HT$_{2C/2B}$ agonist	Novelty-suppressed feeding	Rats			o		Rex et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 147
mCPP	5-HT$_{2C/2B}$ agonist	Fear-potentiated startle reflex	Sprague-Dawley rats	0.25-1	sc, 10	-	Locomotion increased	Mansbach and Geyer, 1988	Eur. J. Pharmacol. 156:375-383
mCPP	5-HT$_{2C/2B}$ agonist	Fear-potentiated startle reflex	Rats	0.1	IT, 30	o		Davis et al., 1986	Psychopharmacol. Bull. 22:837-843
mCPP	5-HT$_{2C/2B}$ agonist	Fear-potentiate	Rats	2.5-10	ip, 0	+		Davis et al., 1986	Psychopharmacol. Bull. 22:837-843

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		d startle reflex							
mCPP	5-$HT_{2C/2B}$ agonist	Fear-potentiated startle reflex	Rats	0.1	icv, 30	+		Davis et al., 1986	Psychopharmacol. Bull. 22:837-843
mCPP	5-$HT_{2C/2B}$ agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11 day-old)	0.1-1	sc, 30	+		Winslow and Insel, 1991	Psychopharmacology 105:513-520
mCPP	5-$HT_{2C/2B}$ agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=1.4	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
mCPP	5-$HT_{2C/2B}$ agonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.8	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
mCPP	5-$HT_{2C/2B}$ agonist	Shock-probe burying test	Rats			+		Meert, 1989	In: Serotonin, from Cell Biology to Pharmacology and Therapeutics
mCPP	5-$HT_{2C/2B}$ agonist	Marble burying	Female MF1 mice (23-35g)	1-20	ip, 30	+		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
mCPP	5-$HT_{2C/2B}$ agonist	Stress-induced hyperthermia	Swiss mice (25-30g)	2.5-5	ip, 45	o		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230
mCPP	5-$HT_{2C/2B}$ agonist	Stress-induced hyperthermia	NMRI mice (12-14g)			o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
mCPP	5-$HT_{2C/2B}$ agonist	Stress-induced hyperthermia	NMRI mice (12-14g)	1-10	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
mCPP	5-$HT_{2C/2B}$ agonist	Stress-induced stretched	Wistar rats (180-220g)	1-5	ip, 30	-	Elicited by electrified prod	Molewijk et al., 1995	Psychopharmacology 121:81-90

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		approach posture							
mCPP	5-$HT_{2C/2B}$ agonist	Conditioned place aversion	Long-Evans rats (250-300g)	0.1-1	ip	o		Rocha et al., 1993	Behav. Pharmacol. 4:101-106
mCPP	5-$HT_{2C/2B}$ agonist	DPAG stimulation	Lister hooded rats (200-250g)	18.5 nmol	dorsal PAG	-	dorsolateral hypothalamus stimulation	Beckett et al., 1992	Psychopharmacology 108:110-114
mCPP	5-$HT_{2C/2B}$ agonist	DPAG stimulation	Wistar rats (200-250g)	16, 32 nmol	dorsal PAG, 10	o		Nogueira and Graeff, 1995	Pharmacol. Biochem. Behav. 52:1-6
mCPP	5-$HT_{2C/2B}$ agonist	DPAG stimulation	Wistar rats	0.1-1	ip, 35	+	Electrical stimulation	Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Sprague-Dawley rats (280-320g)	0.5	ip, 20	-		Gibson et al., 1996	Behav. Pharmacol. 7:185-193
mCPP	5-$HT_{2C/2B}$ agonist	Ultrasound-induced defensive behaviors	Lister hooded rats	0.5-2	ip, 20	+		Beckett et al., 1996	Psychopharmacology 127:384-390
mCPP	5-$HT_{2C/2B}$ agonist	Ultrasound-induced defensive behaviors	Lister rats (250-300g)	1-2	ip, 20	+	Ultrasound of 72 and 75 dB	Beckett et al., 1996	Psychopharmacology 127:384-390
mCPP	5-$HT_{2C/2B}$ agonist	Distress vocalizations	Guinea pig pups (5 day-old)	1-10	ip	o		Molewijk et al., 1996	Psychopharmacology 128:31-38
mCPP	5-$HT_{2C/2B}$ agonist	Canopy stretched attend posture test	Sprague-Dawley rats (300-350g)	0.25-0.5	sc, 30	-		Grewal et al., 1997	Psychopharmacology 133:29-38
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Wistar rats (200-220g)	0.125-1	iv, 15	-		Meert et al., 1997	Behav. Pharmacol. 8:353-363
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Wistar rats (200-220g)	0.63-10	ip, 30	-		Meert et al., 1997	Behav. Pharmacol. 8:353-363
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Wistar rats (200-220g)	2.5-10	sc, 60	-		Meert et al., 1997	Behav. Pharmacol. 8:353-363

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mCPP	5-$HT_{2C/2B}$ agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	0.4-0.8	ip, 25	-		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
mCPP	5-$HT_{2C/2B}$ agonist	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	0.1-0.8	ip, 25	(+)	Non specific effects ?	Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Wistar rats (175-225g)	0.1-3	ip, 0	o	Latency to eat in the open-field was not modified	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	BKW mice (25-30g)	0.05	ip, 40	-	The latency to enter the dark compartment was reduced	Costall and Naylor, 1998	Br. J. Pharmacol. 123:242P
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Long Evans hooded rats (300-350g)	ED50=1.02	ip, 15	-		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
mCPP	5-$HT_{2C/2B}$ agonist	mCPP discrimination	Long Evans hooded rats (300-350g)	ED50=0.825	ip, 15	-		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
mCPP	5-$HT_{2C/2B}$ agonist	PTZ drug discrimination	Long Evans hooded rats (300-350g)	ED50=0.501	ip, 15	-		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Wistar rats (180-220g)	0.5-2	sc, 20	-		Bilkei-Gorzó et al., 1998	Psychopharmacology 136:291-298
mCPP	5-$HT_{2C/2B}$ agonist	8-OH-DPAT-induced scratching	Adult squirrel monkeys	ID_{50}=0.3	po, 0	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
mCPP	5-$HT_{2C/2B}$ agonist	Excessive eating of palatable food	Adult female RORO rats	0.3	po, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mCPP	5-$HT_{2C/2B}$ agonist	Elevated zero-maze	Rats	1-3	po	-		Weiss et al., 1998	Soc. Neurosci. Abstr. 24:943
mCPP	5-$HT_{2C/2B}$ agonist	Escape in unstable elevated plus-maze	Rats	0.5-1	ip	-		King et al., 1998	Soc. Neurosci. Abstr. 24:1930
mCPP	5-$HT_{2C/2B}$ agonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	0.3-3	ip, 30	o	Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Rats	0,5	ip	-	Unstable elevated plus-maze	King et al., 1999	Soc. Neurosci. Abstr. 25:2135
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-380g)	1	ip, 30	-	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (240-330g)	0.5-2	ip, 30	-	LLF conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Swiss mice (4-week-old)	1	ip, 45	o		Bourin et al., 2001	Behav. Brain Res. 124:87-95
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Albino mice (22-25g)	1	ip, 30	-		Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Albino mice (22-25g)	1	ip, 30	-		Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
mCPP	5-$HT_{2C/2B}$ agonist	Holeboard	Albino mice (22-25g)	1	ip, 30	-		Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Lister hooded rats (56-day-old)	1	ip, 20	-		Bull et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Lister hooded rats (202-318g)	1-2	ip, 30	-	Unstable elevated plus-maze	Jones et al., 2002	Psychopharmacology 161:314-323
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Lister hooded rats (292-364g)	1	ip, 30	-	Unstable elevated plus-maze	Jones et al., 2002	Psychopharmacology 164:214-2220
mCPP	5-$HT_{2C/2B}$ agonist	Stress-induced hyperther	129/Sv background (12-week-old)	0.3-3	sc, 60	o	The drug was inactive in either genotype (WT	Pattij et al., 2002	Neuropsychopharmacology 27:380-390

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		mia					and 5-HT_{1A} KO)		
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Wistar rats (160-200g)	0.5	sc, 10	-		Harsing et al., 2003	Pharmacol. Biochem. Behav. 74:811-825
mCPP	5-$HT_{2C/2B}$ agonist	Four-plate test	Swiss mice (20-24g)	0.25-4	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Swiss mice (20-24g)	0.25-4	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Swiss mice (20-24g)	0.25	ip, 30	+	Weak effect	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Sprague-Dawley rats (275-300g)	30-300 pmol/0.1 µl/min	basolateral amygdala, 0	-	The drug induced ultrasonic vocalizations	Campbell and Merchant, 2003	Brain Res. 993:1-9
mCPP	5-$HT_{2C/2B}$ agonist	Open-field	Sprague-Dawley rats (275-300g)	300 pmol/0.1 µl/min	central amygdala, 0	o		Campbell and Merchant, 2003	Brain Res. 993:1-9
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Wistar rats (190-250g)	1-5	ip, 30	-		Rex et al., 2004	Psychopharmacology 177:23-34
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (190-250g)	1-5	ip, 30	-		Rex et al., 2004	Psychopharmacology 177:23-34
mCPP	5-$HT_{2C/2B}$ agonist	Fear-potentiated startle reflex	DBA/1J mice (6-8-week-old)	0.3-3	sc, 15	o	The drug increased startle independently from the presence of the cue	Risbrough and Geyer, 2005	Biol. Psychiatry 57:33-43
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Swiss mice (8-week-old)	1-2	ip, 30	o		Bert et al., 2005	Psychopharmacology 179:846-853

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Swiss mice (8-week-old)	1-2	ip, 30	-	Animals were tested in complete darkness	Bert et al., 2005	Psychopharmacology 179:846-853
mCPP	5-$HT_{2C/2B}$ agonist	Social avoidance	Wistar rats (250-300g)	0.5-3	ip, 30	+	The drug mimicked the effects of electric shocks	Leveleki et al., 2006	Brain Res. Bull. 69:153-160
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-300g)	3	ip, 30	-		Hackler et al., 2007	J. Pharmacol. Exp. Ther. 320:1023-1029
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Swiss mice (25-30g)	0.03-0.1 nmol/0.1 µl	PAG, 10	+		Nunes-de-Souza et al., 2008	Behav. Brain Res. 187:72-79
mCPP	5-$HT_{2C/2B}$ agonist	Acoustic startle reflex	C57BL/6J	0.1-1	ip, 15	-		Fox et al., 2008	Behav. Neurosci. 122:943-948
mCPP	5-$HT_{2C/2B}$ agonist	Acoustic startle reflex	C57BL/6J	1	ip, 15	-	Anxiogenic-like effects were blunted in mice subjected to 2-week free access to running wheel	Fox et al., 2008	Behav. Neurosci. 122:943-948
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Wistar rats (200-220g)	3	ip, 30	-		Khan et al., 2008	Pharmacol. Rep. 60:716-724
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	Wistar rats (200-220g)	3	ip, 30	-	Rats were withdrawn from a 14-day diazepam (2 mg/kg) treatment	Khan et al., 2008	Pharmacol. Rep. 60:716-724
mCPP	5-$HT_{2C/2B}$ agonist	Light-enhanced startle	Wistar rats (300-350g)	0.5-2	ip, 25	o		Bijlsma et al., 2010	Pharmacol. Biochem. Behav. 96:24-31
mCPP	5-$HT_{2C/2B}$ agonist	Fear-potentiated startle reflex	Wistar rats (300-350g)	1-2	ip, 25	-		Bijlsma et al., 2010	Pharmacol. Biochem. Behav. 96:24-31
mCPP	5-$HT_{2C/2B}$ agonist	Canopy stretched	Sprague-Dawley rats (260-300g)	0,5-2	ip, 30	-		Voigt et al., 2010	Pharmacol. Biochem. Behav. 96:429-437

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		attend posture test							
mCPP	5-$HT_{2C/2B}$ agonist	Canopy stretched attend posture test	TGR rats (ASrAO-GEN)680 (260-300g)	0,5-2	ip, 30	-		Voigt et al., 2010	Pharmacol. Biochem. Behav. 96:429-437
mCPP	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (300g, 70-day-old)	0.5	ip, 15	-		Overstreet et al., 2009	Pharmacol. Biochem. Behav. 94:255-261
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Female rats	0.5	ip, for 14 days	+	Rats were tested during their estrous cycle	Fedotova, 2010	Eksp. Klin. Farmakol. 73:6-9
mCPP	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Female rats	0.5	ip, for 14 days	-	Rats were tested during their proestrous cycle	Fedotova, 2010	Eksp. Klin. Farmakol. 73:6-9
mCPP	5-$HT_{2C/2B}$ agonist	Light/dark test	NMRI mice (18-20g)	10	po, 60	-		Black et al., 2011	Psychopharmacology 215:149-163
mCPP	5-$HT_{2C/2B}$ agonist	DPAG stimulation	Wistar rats (270-300g)	40 nmol/0.2 µl	dorsal PAG, 20	+		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
mCPP	5-$HT_{2C/2B}$ agonist	Stress-induced grooming	Wistar rats (3-month-old, 250-300g)	0.6	ip, 0	-		Georgiadou et al., 2012	Neurosci. Lett. 528:27-30
mCPP+crcins (30 and 50 mg/kg)	5-$HT_{2C/2B}$ agonist	Stress-induced grooming	Wistar rats (3-month-old, 250-300g)	0.6	ip, 0	(o)		Georgiadou et al., 2012	Neurosci. Lett. 528:27-30
mCPP+CVT-10216 (3.75-15 mg/kg)	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (300g, 70-day-old)	0.5	ip, 15	-	No interaction	Overstreet et al., 2009	Pharmacol. Biochem. Behav. 94:255-261
mCPP+diazepam (0.1 mg/kg)	5-$HT_{2C/2B}$ agonist	Light/dark test	Wistar rats (160-200g)	0.5	sc, 10	(o)	Blockade of the anxiogenic-like effects of mCPP	Harsing et al., 2003	Pharmacol. Biochem. Behav. 74:811-825
mCPP+ketanserin (10 nmol/0.1 µl)	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Swiss mice (25-30g)	0.03 nmol/0.1 µl	PAG, 10	(o)	Antagonism of the effects of mCPP	Nunes-de-Souza et al., 2008	Behav. Brain Res. 187:72-79

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mCPP+ketanserin (10 pmol/0.2 µl)	5-$HT_{2C/2B}$ agonist	DPAG stimulation	Wistar rats (270-300g)	40 nmol/0.2 µl	dorsal PAG, 20	(o)		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
mCPP+MDMA (15 mg/kg)	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Lister hooded rats (56-day-old)	1	ip, 20	-	No alteration of the anxiogenic-like effects of mCPP	Bull et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
mCPP+NPFS (GlyT1 inhibitor)	5-$HT_{2C/2B}$ agonist	Light/dark test	Wistar rats (160-200g)	0.5	sc, 10	-	No blockade of the anxiogenic-like effects of mCPP	Harsing et al., 2003	Pharmacol. Biochem. Behav. 74:811-825
mCPP+Org 24461 (GlyT1 inhibitor)	5-$HT_{2C/2B}$ agonist	Light/dark test	Wistar rats (160-200g)	0.5	sc, 10	-	No blockade of the anxiogenic-like effects of mCPP	Harsing et al., 2003	Pharmacol. Biochem. Behav. 74:811-825
mCPP+SB 200646A (40 mg/kg)	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-380g)	1	ip, 30	(+)	(1) Antagonism of the effects of fluoxetine; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
mCPP+SB 221284 (1 mg/kg)	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-380g)	1	ip, 30	(+)	(1) Antagonism of the effects of fluoxetine; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
mCPP+SB 242084 (0.05 mg/kg)	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (240-330g)	0.5	ip, 30	(o)	(1) Antagonism of the anxiogenic-like effects of mCPP; (2) LLF conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
mCPP+SB 242084 (1 mg/kg)	5-$HT_{2C/2B}$ agonist	Open-field	Sprague-Dawley rats (275-300g)	30-300 pmol/0.1 µl/min	basolateral amygdala, 0	(o)	SB antagonized the anxiogenic-like effects of mCPP	Campbell and Merchant, 2003	Brain Res. 993:1-9
mCPP+SB 242084 (1 mg/kg)	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-300g)	3	ip, 30	(o)	Blockade of the anxiogenic- but not the anxiogenic-like effects of mCPP	Hackler et al., 2007	J. Pharmacol. Exp. Ther. 320:1023-1029

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mCPP+SB242084 (0,1-1 mg/kg)	5-$HT_{2C/2B}$ agonist	Elevated plus-maze	Lister hooded rats (292-364g)	1	ip, 30	(o)	(1) Unstable elevated plus-maze; (2) Antagonism of the anxiogenic-like effects of mCPP	Jones et al., 2002	Psychopharmacology 164:214-2220
mCPP+WAY 100,635 (1 mg/kg)	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-380g)	1	ip, 30	-	(1) No interaction; (2) LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
MDL 100.151	5-HT_{2A} antagonist	Light/dark test	Wistar rats (200-250g)	0.01-10	sc, 30	o	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
MDL 100.151+EEDQ (0,31 mg/kg)	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)		sc, 15	(o)	(1) Antagonism of the effects of EEDQ, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
MDL 11939	5-HT_2 antagonist	Light/dark test	BKW mice (30-25g)	0.00001-1	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
MDL 11939	5-HT_2 antagonist	Social interaction	Lister hooded rats (250-300g)	0.00001-0.1	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
MDL 11939	5-HT_2 antagonist	Light/dark test	BKW mice (30-35g)	0.00001-0.01	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
MDL 11939	5-HT_2 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day-old)	0.63-10	ip, 30	o		Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
MDL 72222	5-HT_3 antagonist	Geller-Seifter conflict test	Rats	10		o		Dunn et al., 1990	FASEB J. 4:A812
MDL 72222	5-HT_3 antagonist	Geller-Seifter conflict test	Rats	0.5-8		o	FR8	Hascoët et al., 1992	J. Psychopharmacol. 6:129

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDL 72222	5-HT_3 antagonist	Vogel conflict test	Wistar rats (300-350g)	5-20	ip, 30	o	Modified Vogel test	Dunn et al., 1991	J. Neurochem. 57:1615-1622
MDL 72222	5-HT_3 antagonist	Conflict test	White Carneau Pigeons	0.01-3	im, 5	+	Weak effect	Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
MDL 72222	5-HT_3 antagonist	Elevated plus-maze	Rats	10		+		Dunn et al., 1990	FASEB J. 4:A812
MDL 72222	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (200-250g)	10	ip, 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622
MDL 72222	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (150-220g)	1	ip, 30	+		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
MDL 72222	5-HT_3 antagonist	Light/dark test	BKW mice (20-30g)	10	ip, 45	-	Asymmetric compartments and rears	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
MDL 72222	5-HT_3 antagonist	Light/dark test	ddY mice (4-week-old)	1.25-0.5	ip, 30	o	Modified test	Shimada et al., 1995	Gen. Pharmacol. 26:205-210
MDL 72222	5-HT_3 antagonist	Light/dark test	BKW mice (20-30g)	1	ip, 45	+	Asymmetric compartments and rears	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
MDL 72222	5-HT_3 antagonist	Light/dark test	Female T/O mice (24-35g)	0.3-3	sc, 30	+	Asymmetric compartments	Bill et al., 1991	Br. J. Pharmacol. 103:1857-1864
MDL 72222	5-HT_3 antagonist	Light/dark test	ICR mice (20-35g)	0.001-1	ip, 30	+	Transitions and Asymmetric compartments	Onaivi and Martin, 1989	Prog. Neuropsychopharmacol. Biol. Psychiatry 13:963-976
MDL 72222	5-HT_3 antagonist	Social interaction	Lister rats (210-280g)	0.0010.01	amygdala, 5	o	LLF	Higgins et al., 1991	Psychopharmacology 104:545-551
MDL 72222	5-HT_3 antagonist	Social interaction	Lister rats (210-280g)	0.00005-0.005	dorsal raphe, 5	o	HLU	Higgins et al., 1991	Psychopharmacology 104:545-551
MDL 72222	5-HT_3 antagonist	Social interaction	Rats	0.001-0.1	po, 45	+	HLU	Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68
MDL 72222	5-HT_3 antagonist	Social interaction	Rats	10		+		Dunn et al., 1990	FASEB J. 4:A812
MDL 72222	5-HT_3 antagonist	Social interaction	Wistar rats (250-300g)	20	ip 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDL 72222	5-HT_3 antagonist	Social interaction	Lister rats (210-280g)	0.001-0.01	amygdala, 5	+		Higgins et al., 1991	Psychopharmacology 104:545-551
MDL 72222	5-HT_3 antagonist	DPAG stimulation	Wistar rats (370-450g)	0.1-22	ip, 35	o		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
MDL 72222	5-HT_3 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.01-0.1	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
MDL 72222	5-HT_3 antagonist	Elevated plus-maze	FH/Wjd rats (70-day-old)	3	ip, 30	o		Hensler et al., 2004	Pharmacol. Biochem. Behav. 77:281-289
MDL 72222	5-HT_3 antagonist	Elevated plus-maze	ACI/N rats (70-day-old)	3	ip, 30	+		Hensler et al., 2004	Pharmacol. Biochem. Behav. 77:281-289
MDL 72222	5-HT_3 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	0.3-3	ip, 30	o	The drug did not reverse anxiogenic-like effects of ethanol withdrawal	Knapp et al., 2004	Alcohol 32:101-111
MDL 72832	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.4-3.2	sc, 30	-	(+) isomer	Moser, 1989	Psychopharmacology 99:48-53
MDL 72832	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.05-0.8	sc, 30	-	(-) isomer	Moser, 1989	In: Behavioural Pharmacology of 5-HT, pp. 371-375
MDL 72832	5-HT_{1A} full agonist	Passive-avoidance test	Wistar rats (220-240g)	0.25-1	ip, 30	+		Sanger and Joly, 1989	Behav. Pharmacol. 1:153-160
MDL 73,147EF	5-HT_3 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day-old)	1.25-10	ip, 30	o		Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
MDL 73005EF	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Wistar rats (180-200g)	0.3-10	ip, 30	o	VI30	Sanger, 1992	J. Pharmacol. Exp. Ther. 261:513-517
MDL 73005EF	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (170-210g)	0.3-3	sc, 30	+		Moser et al., 1988	Br. J. Pharmacol. 93 (Suppl.):3P
MDL 73005EF	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats	0.1-3	sc	+		Hibert and Moser, 1990	Drugs Fut. 15:159-170

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDL 73005EF	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	0.1-3	sc, 30	+		Moser et al., 1990	Br. J. Pharmacol. 99:343-349
MDL 73005EF	5-HT_{1A} partial agonist	Vogel conflict test	Wistar AF rats (300-400g)	1	sc, 30	+	FR8/FR1	Charrier et al., 1994	Pharmacol. Biochem. Behav. 48:281-289
MDL 73005EF	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.03-0.25	sc, 30	+		Moser et al., 1988	Br. J. Pharmacol. 93 (Suppl.):3P
MDL 73005EF	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.25-1	po, 30	+		Moser et al., 1988	Br. J. Pharmacol. 93 (Suppl.):3P
MDL 73005EF	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats	0.03-2	sc	+		Hibert and Moser, 1990	Drugs Fut. 15:159-170
MDL 73005EF	5-HT_{1A} partial agonist	Elevated plus-maze	Sprague-Dawley rats (200-300g)	0.03-4	sc, 30	+		Moser et al., 1990	Br. J. Pharmacol. 99:343-349
MDL 73005EF	5-HT_{1A} partial agonist	Light/dark test	Female T/O mice (22-30g)	2	sc, 30	+	Asymmetric compartments	Bill et al., 1989	Br. J. Pharmacol. 98 (Suppl.):679P
MDL 73005EF	5-HT_{1A} partial agonist	Light/dark test	Swiss mice (10-week-old)	1.25-5	ip, 30	+		Misslin et al., 1990	Neuroreport 1:267-270
MDL 73005EF	5-HT_{1A} partial agonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	MED=2	sc, 30	+		Bill and Fletcher, 1994	Br. J. Pharmacol. 111:151P
MDL 73005EF	5-HT_{1A} partial agonist	Social behavior	BSVS mice (25-35g)	0.25-8	sc, 30	+		Bell and Hobson, 1994	Neurosci. Biobehav. Rev. 18:325-338
MDL 73005EF	5-HT_{1A} partial agonist	Fear-potentiated startle reflex	Rats	1.25-10		+		Hitchcock et al., 1991	Behav. Neurosci. 105:826-842
MDL 73005EF	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day-old)	0.63-5	ip, 30	+		Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
MDMA	5-HT releaser	Open-field	Charles Foster rats (180-220g)	5-10	ip, 30	-		Bhattachary a et al., 1998	Biog. Amines 14:217-237
MDMA	5-HT releaser	Elevated plus-maze	Charles Foster rats (180-220g)	5-10	ip, 30	-		Bhattachary a et al., 1998	Biog. Amines 14:217-237

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDMA	5-HT releaser	Social interaction	Charles Foster rats (180-220g)	5-10	ip, 30	-		Bhattachary a et al., 1998	Biog. Amines 14:217-237
MDMA	5-HT releaser	Novelty-suppresse d feeding	Charles Foster rats (180-220g)	5-10	ip, 30	-		Bhattachary a et al., 1998	Biog. Amines 14:217-237
MDMA	5-HT releaser	Light/dark test	OF1 mice	1-8	ip, 30	-		Maldonado et al., 1999	Eur. Neuropsychopharmacol. 9 (S5):S301
MDMA	5-HT releaser	Social interaction	Lister hooded rats (50-day-old)	15	ip, b.i.d. for 3 days 3 weeks before	-		Bull et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S152
MDMA	5-HT releaser	Emergenc e test	Wistar rats (3-month-old, 374g)	5	ip, once/h for 4 h/2 days, 4 weeks before	-		Gurtman et al., 2002	Eur. J. Pharmacol. 446:89-96
MDMA	5-HT releaser	Social interaction	Wistar rats (3-month-old, 374g)	5	ip, once/h for 4 h/2 days, 6 weeks before	-		Gurtman et al., 2002	Eur. J. Pharmacol. 446:89-96
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (3-month-old, 374g)	5	ip, once/h for 4 h/2 days, 9 weeks before	-		Gurtman et al., 2002	Eur. J. Pharmacol. 446:89-96
MDMA	5-HT releaser	Elevated plus-maze	OF1 mice (25-30g)	8	ip, 30	-		Navarro and Maldonado, 2002	Prog. Neuropsychopharmacol. Biol. Psychiatry 26:1151-1154
MDMA	5-HT releaser	Elevated plus-maze	OF1 mice (25-30g)	1-8/15	ip, o.d. for 5 days	-/+	The anxiogenic-like effects were more pronounced after repeated treatment (1 and 8 mg/kg)	Navarro and Maldonado, 2002	Prog. Neuropsychopharmacol. Biol. Psychiatry 26:1151-1154

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDMA	5-HT releaser	Social interaction	Wistar rats (3-month-old)	5	ip, 5 times over 4 h for 2 days 10 weeks before	-		McGregor et al., 2003	Neuropsychopharmacology 28:1472-1484
MDMA	5-HT releaser	Social interaction	Wistar rats (3-month-old)	1	ip, over 4 h for 2 days 10 weeks before	-		McGregor et al., 2003	Neuropsychopharmacology 28:1472-1484
MDMA	5-HT releaser	Emergence test	Wistar rats (3-month-old)	5	ip, 5 times over 4 h for 2 days 10 weeks before	-		McGregor et al., 2003	Neuropsychopharmacology 28:1472-1484
MDMA	5-HT releaser	Emergence test	Wistar rats (3-month-old)	1	ip, over 4 h for 2 days 10 weeks before	-		McGregor et al., 2003	Neuropsychopharmacology 28:1472-1484
MDMA	5-HT releaser	Elevated plus-maze	Lister hooded rats (180-210g)		ip, every 2 h for 6 h 14 days before	o		Summall et al., 2004	Pharmacol. Biochem. Behav. 77:805-814
MDMA	5-HT releaser	Elevated plus-maze	Lister hooded rats (180-210g)		ip, 20	-		Summall et al., 2004	Pharmacol. Biochem. Behav. 77:805-814
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (270-273g)	7.5-15	ip, 30	+/-	(1) Biphasic effects; (2) Low and high anxiety rats were used	Ho et al., 2004	Behav. Brain Res. 149:135-144
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (270-273g)	7.5	ip, 11 days	o	Low and high anxiety rats were used	Ho et al., 2004	Behav. Brain Res. 149:135-144
MDMA	5-HT releaser	Open-field	Wistar rats (270-273g)	7.5	ip, 9-10 days	o	Low and high anxiety rats were used	Ho et al., 2004	Behav. Brain Res. 149:135-144
MDMA	5-HT releaser	Elevated plus-maze	Sprague-Dawley rats (35 to 70-day-old)	10	sc, b.i.d. every fifth day from day 35 to 60	+		Piper and Meyer, 2004	Pharmacol. Biochem. Behav. 79:723-731

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDMA	5-HT releaser	Social interaction	Wistar rats (256-421g)	5	ip, 20	-		Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA	5-HT releaser	Emergence test	Wistar rats (256-421g)	5	ip, 20	-		Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA	5-HT releaser	Marble burying	NIH Swiss mice (25-30g)	ED50=1.35	ip, 30	+		Saadat et al., 2006	J. Psychopharmacology 20:264-271
MDMA	5-HT releaser	Marble burying	NIH Swiss mice (25-30g)	2.5	ip, 18 or 40 days	o		Saadat et al., 2006	J. Psychopharmacology 20:264-271
MDMA	5-HT releaser	Social interaction	Dark Agouti rats (7-week-old)	15	ip, 20	-	Rats were tested in a familiar arena	Ando et al., 2006	Neuropharmacology 50:884-896
MDMA	5-HT releaser	Social interaction	Dark Agouti rats (7-week-old)	15	ip, 3 weeks and 20 min, b.i.d.	-	(1) The effects of acute MDMA were potentiated; (2) Rats were tested in a familiar arena	Ando et al., 2006	Neuropharmacology 50:884-896
MDMA	5-HT releaser	Elevated plus-maze	Long-Evans Hooded rats (3-month-old)	10	ip, 19 days	o		Cassel et al., 2005	Neuropsychopharmacology 30:1870-1882
MDMA	5-HT releaser	Elevated plus-maze	CD1 mice (30-35g)	10-20	ip, 60	-		Touriño et al., 2008	Biol. Psychiatry 63:1030-1038
MDMA	5-HT releaser	Elevated plus-maze	CB1 knockout mice (CD1 background, 30-35g)	10-20	ip, 60	(o)	Anxiogenic-like effects of MDMA were abolished in CB1 KO	Touriño et al., 2008	Biol. Psychiatry 63:1030-1038
MDMA	5-HT releaser	Social interaction	Wistar rats (90-100-day-old, 421g)	5	4 ip injections over 4 h on 2 consecutive days	-		Thompson et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1013-1021

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDMA	5-HT releaser	Social interaction	Wistar rats (90-100-day-old, 421g)	2.5	ip, 20	o		Thompson et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1013-1021
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (242-275g)	5	sc, 60	o		Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (242-275g)	5	sc, for 5 days	o		Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (242-275g)	5	sc, 60	o	Animals were selected based on their high anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (242-275g)	5	sc, for 5 days	o	Animals were selected based on their high anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (242-275g)	5	sc, 60	o	Animals were selected based on their low anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Elevated plus-maze	Wistar rats (242-275g)	5	sc, for 5 days	o	Animals were selected based on their low anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Novel object test	Wistar rats (242-275g)	5	sc, 60	o	Animals were selected based on their high anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Novel object test	Wistar rats (242-275g)	5	sc, for 5 days	o	Animals were selected based on their high anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Novel object test	Wistar rats (242-275g)	5	sc, 60	o	Animals were selected based on their low anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64
MDMA	5-HT releaser	Novel object test	Wistar rats (242-275g)	5	sc, for 5 days	o	Animals were selected based on their low anxiety level	Ludwig et al., 2008	Behav. Brain Res. 189:52-64

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDMA	5-HT releaser	Conditioned avoidance	Wistar rats (300-340g)	0.2 µg/1 µl	icv, for 7 days	o	Shocks of 0.4 mA were applied	León et al., 2009	Behav. Brain Res. 205:259-264
MDMA	5-HT releaser	Conditioned avoidance	Wistar rats (300-340g)	0.2 µg/1 µl	icv, for 7 days	+	(1) Shocks of 0.4 mA were applied; (2) Animals were subjected to mild chonic stress	León et al., 2009	Behav. Brain Res. 205:259-264
MDMA	5-HT releaser	Social interaction	Sprague-Dawley rats (72-day-old)	10	sc, b.i.d. x 4h, between P35 and 60	-	Drug was given every fifth day	Shen et al., 2011	Neuropharmacology 61:1183-1192
MDMA	5-HT releaser	Emergence test	Sprague-Dawley rats (72-day-old)	10	sc, b.i.d. x 4h, between P35 and 60	-	Drug was given every fifth day	Shen et al., 2011	Neuropharmacology 61:1183-1192
MDMA	5-HT releaser	Holeboard	Sprague-Dawley rats (72-day-old)	10	sc, b.i.d. x 4h, between P35 and 60	-	Drug was given every fifth day	Shen et al., 2011	Neuropharmacology 61:1183-1192
MDMA+8-OH-DPAT (0.125-0.250 mg/kg)	5-HT releaser	Social interaction	Wistar rats (90-100-day-old, 421g)	5	4 ip injections over 4 h on 2 consecutive days	-	No interaction	Thompson et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1013-1021
MDMA+cocaine (10 mg/kg)	5-HT releaser	Elevated plus-maze	Lister hooded rats (180-210g)		ip, every 2 h for 6 h 14 days before	o	No interaction	Summall et al., 2004	Pharmacol. Biochem. Behav. 77:805-814
MDMA+D-amphetamine (2 mg/kg)	5-HT releaser	Elevated plus-maze	Lister hooded rats (180-210g)		ip, every 2 h for 6 h 14 days before	o	No interaction	Summall et al., 2004	Pharmacol. Biochem. Behav. 77:805-814
MDMA+ethanol (1.5 g/kg)	5-HT releaser	Elevated plus-maze	Long-Evans Hooded rats (3-month-old)	10	ip, 19 days	o		Cassel et al., 2005	Neuropsychopharmacology 30:1870-1882
MDMA+ethanol (2 mg/kg)	5-HT releaser	Elevated plus-maze	Lister hooded rats (180-210g)		ip, every 2 h for 6 h 14 days before	o	No interaction	Summall et al., 2004	Pharmacol. Biochem. Behav. 77:805-814

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDMA+GR 55562 (1 mg/kg)	5-HT releaser	Social interaction	Wistar rats (256-421g)	5	ip, 20	-	No antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA+GR 55562 (1 mg/kg)	5-HT releaser	Emergence test	Wistar rats (256-421g)	5	ip, 20	-	No antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA+heroin (0.5 mg/kg)	5-HT releaser	Elevated plus-maze	Lister hooded rats (180-210g)		ip, every 2 h for 6 h 14 days before	o	No interaction	Summall et al., 2004	Pharmacol. Biochem. Behav. 77:805-814
MDMA+ketanserin (1 mg/kg)	5-HT releaser	Social interaction	Wistar rats (256-421g)	5	ip, 20	-	No antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA+ketanserin (1 mg/kg)	5-HT releaser	Emergence test	Wistar rats (256-421g)	5	ip, 20	-	No antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA+MDMA (10 mg/kg)	5-HT releaser	Elevated plus-maze	Lister hooded rats (180-210g)		ip, every 2 h for 6 h 14 days before	-		Summall et al., 2004	Pharmacol. Biochem. Behav. 77:805-814
MDMA+MDMA (2.5 mg/kg)	5-HT releaser	Social interaction	Wistar rats (90-100-day-old, 421g)	5	4 ip injections over 4 h on 2 consecutive days	(o)	The acute MDMA injection antagonized its repeated effects	Thompson et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1013-1021
MDMA+SB 206553 (2 mg/kg)	5-HT releaser	Social interaction	Wistar rats (256-421g)	5	ip, 20	(o)	Antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MDMA+SB 206553 (2 mg/kg)	5-HT releaser	Emergence test	Wistar rats (256-421g)	5	ip, 20	-	No antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA+WAY 100635 (1 mg/kg)	5-HT releaser	Social interaction	Wistar rats (256-421g)	5	ip, 20	(o)	Antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA+WAY 100635 (1 mg/kg)	5-HT releaser	Emergence test	Wistar rats (256-421g)	5	ip, 20	-	No antagonism of the anxiogenic-like effects of MDMA	Morley et al., 2005	Prog. Neuropsychopharmacol. Biol. Psychiatry 29:648-657
MDMA+Δ^9-THC (5 mg/kg)	5-HT releaser	Social interaction	Sprague-Dawley rats (72-day-old)	10	sc, b.i.d. x 4h, between P35 and 60	(o)	Drug was given every fifth day	Shen et al., 2011	Neuropharmacology 61:1183-1192
MDMA+Δ^9-THC (5 mg/kg)	5-HT releaser	Emergence test	Sprague-Dawley rats (72-day-old)	10	sc, b.i.d. x 4h, between P35 and 60	(o)	Drug was given every fifth day	Shen et al., 2011	Neuropharmacology 61:1183-1192
MDMA+Δ^9-THC (5 mg/kg)	5-HT releaser	Holeboard	Sprague-Dawley rats (72-day-old)	10	sc, b.i.d. x 4h, between P35 and 60	(o)	Drug was given every fifth day	Shen et al., 2011	Neuropharmacology 61:1183-1192
Mesulergine	Non selective antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	0.1	sc, 60	+		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676
Metergoline	Non selective antagonist	Geller-Seifter conflict test	Rats	20	po, 25	o		Deacon and Gardner, 1986	Br. J. Pharmacol. 88:330P
Metergoline	Non selective antagonist	Geller-Seifter conflict test	Rats	2.5-20	po	+	VI30/FR10	Sullivan et al., 1985	Soc. Neurosci. Abstr. 11:1187
Metergoline	Non selective antagonist	Vogel conflict test	Sprague-Dawley rats (200-225g)	0.25-2	ip, 10	o		Commissaris and Rech, 1982	Psychopharmacology 76:282-285

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Metergoline	Non selective antagonist	Vogel conflict test	Sprague-Dawley rats (200g)	0.25-2	ip, 180	o	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
Metergoline	Non selective antagonist	Vogel conflict test	Wistar rats (180-220g)	2-4	ip, 60	o	Modified Vogel test	Chojnacka-Wójcik and Przegalinski, 1991	Neuropharmacology 30:711-717
Metergoline	Non selective antagonist	Conflict test	Pigeons Columbia livia	0.56	im, 30	+		Leone et al., 1983	Psychopharmacology 80:78-82
Metergoline	Non selective antagonist	Conflict test	Squirrel monkeys (550-900g)	0.03-0.3	im	+	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112
Metergoline	Non selective antagonist	Elevated plus-maze	Rats	4		+		File et al., 1987	Br. J. Pharmacol. 90:265P
Metergoline	Non selective antagonist	Elevated plus-maze	Lister rats (250-350g)	4	ip, 30	+		Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
Metergoline	Non selective antagonist	Light/dark test	Mice (25-35g)	0.05-10	ip, 40	-	Sedation and asymmetric compartments	Costall et al., 1988	J. Pharm. Pharmacol. 40:494-500
Metergoline	Non selective antagonist	Open-field	Sprague-Dawley rats (200-250g)	0.16-0.62	ip, 60	o		Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
Metergoline	Non selective antagonist	Social interaction	Rats			o	HLU	File, 1981	In: Metabolic Disorders of the Nervous System, pp. 429-445
Metergoline	Non selective antagonist	Social interaction	Wistar rats (180-200g)	5-20	po, 30	o		Guy and Gardner, 1985	Neuropsychobiology 13:194-200
Metergoline	Non selective antagonist	Social interaction	Sprague-Dawley rats (200-250g)	2.5	sc, 40	o		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Metergoline	Non selective antagonist	Shock-probe burying test	Wistar rats (250-280g)	0.63-10	sc, 60	+		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Metergoline	Non selective antagonist	Marble burying	Female MF1 mice (23-35g)	0.10-1	ip, 30	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Metergoline	Non selective antagonist	Ultrasonic distress vocalizati	Wistar rats (9-12-day-old)	0.1-10	ip, 30	+	Myorelaxation	Gardner, 1985	J. Pharmac. Meth. 14:181-187

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		ons							
Metergoline	Non selective antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (320-350g)	1	ip, 70	o		Svensson, 1985	Psychopharmacology 85:469-475
Metergoline	Non selective antagonist	Fear-potentiated startle reflex	CD rats (9-13-week-old)	0.5-2	sc, 180	+		Nanry and Tilson, 1989	Psychopharmacology 97:507-513
Metergoline	Non selective antagonist	Conditioned emotional response	Rats	7580		o		Gardner, 1985	Drug. Dev. Res. 5:185-193
Metergoline	Non selective antagonist	DPAG stimulation	Wistar rats (250-300g)	10 nmol	dorsal PAG, 10	o		Schütz et al., 1985	Psychopharmacology 85:340-345
Metergoline	Non selective antagonist	DPAG stimulation	Wistar rats (370-450g)	0.1-10	ip, 35	-		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
Metergoline	Non selective antagonist	DPAG stimulation	Rats	10 nmol	dorsal PAG, 10	o		Graeff et al., 1986	Behav. Brain Res. 22:173-180
Metergoline	Non selective antagonist	Elevated plus-maze	Wistar mice (25-30g)	5	ip, 30	o		Bhattachary a and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
Metergoline	Non selective antagonist	Conditioned emotional response	Lister hooded rats (250-300g)	3	ip, 40	o		Mirza et al., 2005	Psychopharmacology 180:159-168
Metergoline	Non selective antagonist	Vogel conflict test	Wistar rats (200-250g)	2	ip, 60	o	The shock intensity was 0.5 mA	Stachowicz et al., 2007	Neuropharmacology 52:306-312
Metergoline	Non selective antagonist	Vogel conflict test	Wistar rats (230-270g)	2	ip, 60	o	Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
Metergoline	5-HT2A/2C antagonist receptor	Escape behavior in the	Wistar rats (55-day-old, 230-250g)	1-3	ip, 5	+		Roncon et al., 2011	Planta Med. 77:236-241

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		elevated T-maze							
Metergoline	5-HT2A/2C antagonist receptor	Escape behavior in the elevated T-maze	Wistar rats (55-day-old, 230-250g)	1-3	ip, 5	o		Roncon et al., 2011	Planta Med. 77:236-241
Metergoline+lamotrigine (30 mg/kg)	Non selective antagonist	Conditioned emotional response	Lister hooded rats (250-300g)	3	ip, 40	+	Metergoline did not block the anxiolytic-like activity of lamotrigine	Mirza et al., 2005	Psychopharmacology 180:159-168
Methiothepin	Non selective 5-HT antagonist	Elevated plus-maze	Leeds-coloured guinea pigs (360-440g)	10	ip, 30	o		Rex et al., 1993	J. Psychopharmacol. 7:338-345
Methiothepin	Non selective 5-HT antagonist	Elevated plus-maze	Leeds-coloured guinea pigs (360-440g)	10	ip, 50	o		Rex et al., 1994	Neuropharmacology 33:559-565
Methiothepin	Non selective 5-HT antagonist	Light/dark test	Swiss mice (20-30g)	0.25	ip, 30	o		Fernández-Guasti and López-Rubalcava, 1990	Psychopharmacology 101:354-358
Methiothepin	Non selective 5-HT antagonist	Light/dark test	Swiss-Webster mice (20-30g)	0.31	ip, 30	o		López-Rubalcava et al., 1992	Pharmacol. Biochem. Behav. 43:433-440
Methiothepin	Non selective 5-HT antagonist	Light/dark test	Hamsters (100-150g)	0.31	20	o		Fernández-Guasti and López-Rubalcava, 1995	Pharmacol. Biochem. Behav. 50:375-382
Methiothepin	Non selective 5-HT antagonist	Light/dark test	Hamsters (100-150g)	0.31	30	o		Fernández-Guasti and López-Rubalcava, 1995	Pharmacol. Biochem. Behav. 50:375-382
Methiothepin	Non selective 5-HT antagonist	Shock-probe burying test	Swiss-Webster mice (20-35g)	0.31	ip, 30	o		Fernández-Guasti et al., 1992	Psychopharmacology 107:61-67

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Methiothepin	Non selective 5-HT antagonist	Shock-probe burying test	Wistar rats (300-350g)	0.31	ip, 30	+		Fernández-Guasti et al., 1992	Psychopharmacology 107:61-67
Methiothepin	Non selective 5-HT antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (320-350g)	0.1	ip, 70	o		Svensson, 1985	Psychopharmacology 85:469-475
Methiothepin	Non selective 5-HT antagonist	Free-exploration test	BALB/c mice (8-week-old)	0.03-0.3	ip, 30	o		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Methiothepin	Non selective 5-HT antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	0.008-0.06	ip, 45	o		Clénet et al., 2005	Behav. Brain Res. 158:339-348
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-320g)	1-18	ip, 30	o	FR40	Kilts et al., 1981	Psychopharmacology 74:290-296
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Female CFN rats	3	ip	+	VI30/FR10	Winter, 1972	Arch. Int. Pharmacodyn. 197:147-159
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Wistar rats (198-260g)	10	ip, 30	+	FI1/FR5	Graeff, 1974	J. Pharmacol. Exp. Ther. 189:344-350
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Rats	1.25-5	ip, 1	+	FR10/VI30	Cook and Sepinwall, 1975	In: Mechanisms of Actions of Benzodiazepines, pp. 1-28
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Rats	10	ip, 0	+		Stein et al., 1975	In: Mechanisms of Actions of Benzodiazepines, pp. 29-44
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Rats (382-446g)	0.0005-0.0025	amygdala, 0	+	VI20	Hodges et al., 1987	Psychopharmacology 92:491-504
Methysergide	Non-selective 5-$HT_{2A/2C}$	Geller-Seifter	Rats (382-446g)	0.25-5	ip, 15	+	VI20	Hodges et al., 1987	Psychopharmacology 92:491-504

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	conflict test							
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.1-30	ip	+	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (200-320g)	10	ip, 30	-	VI21	Kilts et al., 1981	Psychopharmacology 74:290-296
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (200g)	10	ip, 30	-	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (200-320g)	1-10	ip, 1	o	VI21	Kilts et al., 1981	Psychopharmacology 74:290-296
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (200g)	1-18	ip, 1	o	VI21	Kilts et al., 1982	Psychopharmacology 78:156-164
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Wistar rats (220g)	0.3-3	ip, 30	o	Modified Vogel test	Petersen and Lassen, 1981	Psychopharmacology 75:236-239
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Rats	2-20		+		Gardner, 1985	Drug. Dev. Res. 5:185-193
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau Pigeons	0.1-3	im, 0	+	FI5/FR30	Graeff and Schoenfeld, 1970	J. Pharmacol. Exp. Ther. 173:277-283
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Conflict test	Squirrel monkeys (550-900g)	0.1-1	im	+	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Conditioned emotional response	Sprague-Dawley rats (200-320g)	1-10	ip, 30	o	FR40	Kilts et al., 1981	Psychopharmacology 74:290-296
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	o		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Lister hooded rats (180-280g)	2.5	ip, 30	+	10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Light/dark test	Mice (25-35g)	0.05-10	ip, 40	-	Sedation, ataxia and asymmetric compartments	Costall et al., 1988	J. Pharm. Pharmacol. 40:494-500
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Light/dark test	BKW mice (30-36g)	1-5	ip, 40	o	Asymmetric compartments	Cheng et al., 1994	Eur. J. Pharmacol. 255:39-49
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Light/dark test	BKW mice (30-25g)	0.01-5	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Open-field	Sprague-Dawley rats (200-250g)	5-10	ip, 30	o		Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Open-field	Rats (180-220g)	10 µg	nucleus accumbens, 5	o		Plaznik et al., 1991	Pharmacol. Biochem. Behav. 39:43-48
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Social interaction	Rats			o	LLF and HLU	File, 1981	In: Metabolic Disorders of the Nervous System, pp. 429-445
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Social interaction	Lister hooded rats (250-300g)	0.05-5	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats	0.3-10	sc, 10	-		Mansbach and Geyer, 1988	Eur. J. Pharmacol. 156:375-383
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Shock-probe burying test	Wistar rats (250-280g)	10	sc, 60	+		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Marble burying	Female MF1 mice (23-35g)	5-10	ip, 30	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Stress-induced analgesia	ddY mice (18-20g)	2-10	ip, 30	+		Tokuyama et al., 1993	Jpn. J. Pharmacol. 61:237-242
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Stress-induced defecation	Rats			+	High level of illumination	Meert and Colpaert, 1986	Psychopharmacology 89:S23
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Stress-induced colonic motor alterations	Wistar rats (250-300g)	0.1	ip, 30	+		Gué et al., 1993	Eur. J. Pharmacol. 233:193-199
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	DPAG stimulation	Rats	10-30	ip, 30	-		Clarke and File, 1982	Prog. Neuropsychopharmacol. Biol. Psychiatry 6:27-35
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Stress-induced analgesia	Wistar rats (250-300g)	2.5 µg/0.2 µl	midbrain tectum	+		Brandão and Coimbra, 1996	Soc. Neurosci. Abstr. 22:1136
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	5	ip, 30	o		Biró et al., 1995	Neuropeptides 29:215-220
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (180-220g)	5	ip, 30	o		Biró et al., 1996	Neuropeptides 30:59-65
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	5	ip, 30	o		Biró et al., 1997	Neuropeptides 31:281-285
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Stress-induced analgesia	Wistar rats (250-300g)	2.5 µg/0.2 µl	midbrain tectum, 5	+	Animals were subjected to dorsal PAG-stimulation	Coimbra et al., 1997	Behav. Brain Res. 87:97-103
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Open-field	Wistar rats (200-220g)	0.63-10	sc, 60	o		Meert et al., 1997	Behav. Pharmacol. 8:353-363
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Light/dark test	BKW mice (30-35g)	0.1-5	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
Methysergide	Non-selective 5-HT$_{2A/2C}$ antagonist	Light/dark test	BKW mice (25-30g)	1	ip, 40	o	The latency to enter the dark compartment was not affected	Costall and Naylor, 1998	Br. J. Pharmacol. 123:243P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	mCPP discrimination	Long Evans hooded rats (300-350g)	ED50=5.798	ip, 60	+		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Long Evans hooded rats (300-350g)	0.32-1.25	ip, 15	+		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Stress-induced analgesia	Wistar rats (210-240g)	5 nmol/0.2 µl	dorsal PAG, 15	+	Rats received 2 sessions of dorsal PAG electrical stimulations	Castilho and Brandão, 2001	Psychopharmacology 155:154-162
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Stress-induced grooming	Wistar rats (220-240g)	2	ip, 30	o		Consoli et al., 2007	Eur. J. Pharmacol. 573:139-147
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (220-240g)	2	ip, 30	o		Consoli et al., 2007	Eur. J. Pharmacol. 573:139-147
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Social interaction	Wistar rats (220-240g)	2	ip, 30	o		Consoli et al., 2007	Eur. J. Pharmacol. 573:139-147
Methysergide	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	CFLP mice (25-28g)	5	ip, 30	o		Telegdy and Schally, 2012	Behav. Brain Res. 233:232-236
Methysergide+MZ-4-71 (0.5 µg/2 µl icv)	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	CFLP mice (25-28g)	5	ip, 30	(o)	MZ-4-71 is GH antagonist	Telegdy and Schally, 2012	Behav. Brain Res. 233:232-236
Methysergide+SR58611A (10 mg/kg)	Non-selective 5-$HT_{2A/2C}$ antagonist	Stress-induced grooming	Wistar rats (220-240g)	2	ip, 30	(o)	Methysergide blocked the anxiolytic-like effects of SR58611A	Consoli et al., 2007	Eur. J. Pharmacol. 573:139-147
Methysergide+SR58611A (10 mg/kg)	Non-selective 5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (220-240g)	2	ip, 30	(o)	Methysergide blocked the anxiolytic-like effects of SR58611A	Consoli et al., 2007	Eur. J. Pharmacol. 573:139-147
Methysergide+SR58611A (10 mg/kg)	Non-selective 5-$HT_{2A/2C}$ antagonist	Social interaction	Wistar rats (220-240g)	2	ip, 30	(o)	Methysergide blocked the anxiolytic-like	Consoli et al., 2007	Eur. J. Pharmacol. 573:139-147

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							effects of SR58611A		
Mianserin	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.3-17	ip	o	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
Mianserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats			+		Van Riezen et al., 1981	In: Pharmacological and Biochemical Properties of Drug Substances, pp. 56-93
Mianserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	0.7-0.5	ip	+	VI30/FR10	Sullivan et al., 1985	Soc. Neurosci. Abstr. 11:1187
Mianserin	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-225g)	3	ip, 60	+	VI30/FR30	Mason et al., 1987	Psychopharmacology 92:30-34
Mianserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	2-8	sc, 30	+		Kennett et al., 1992	Psychopharmacology 107:379-384
Mianserin	5-HT_2 antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	2-8	sc, 30	+	VI30/FR5 and 0.75 mA	Kennett et al., 1994	Psychopharmacology 114:90-96
Mianserin	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	8	sc, 30	+		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676
Mianserin	5-HT_2 antagonist	Conflict test	Squirrel monkeys (550-900g)	0.1-10	im	+	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (150-220g)	10	ip, 30	-		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats (250-400g)	10-20	ip, 30	o		Pellow et al., 1985	J. Neurosci. Methods 14:149-167
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Swiss mice NIH (24-28g)	5	ip, 30	o		Benjamin et al., 1992	Drug Dev. Res. 26:287-297
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Long-Evans rats (280-300g)	10	ip, 10	o		Rocha et al., 1994	Eur. J. Pharmacol. 262:125-131
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Swiss mice NIH (24-28g)	2.5-20	ip, 48 h	+		Benjamin et al., 1992	Drug Dev. Res. 26:287-297
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Swiss mice NIH (24-28g)	20	ip, 18 j	+		Benjamin et al., 1992	Drug Dev. Res. 26:287-297
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Long-Evans rats (280-300g)	10	ip, for 14 days (o.d.)	+		Rocha et al., 1994	Eur. J. Pharmacol. 262:125-131
Mianserin	5-HT_2 antagonist	Elevated plus-maze	ICR mice (20-30g)	1	ip, 30	+		Onaivi et al., 1995	Life Sci. 57:2455-2466
Mianserin	5-HT_2 antagonist	Light/dark test	Swiss mice (10-week-old)	1-10	ip, 30	o		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
Mianserin	5-HT_2 antagonist	Open-field	Rats Sprague-Dawley (200-250g)	2.5-5	ip, 60	o		Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
Mianserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (200-250g)	2	sc, 40	o	Locomotion increased	Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Mianserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (250-320g)	1-2	sc, 30	+		Kennett, 1992	Psychopharmacology 107:379-384
Mianserin	5-HT_2 antagonist	Social behavior	CD1 mice (35-45g)	0.12-1.93 mol	ip, 30	+		Gao and Cutler, 1994	Neuropharmacology 33:813-824
Mianserin	5-HT_2 antagonist	Social behavior	CD1 mice (35-45g)	0.12-1.93 mol	drinking fluid, 12-16 days	+		Gao and Cutler, 1994	Neuropharmacology 33:813-824
Mianserin	5-HT_2 antagonist	Novelty-suppressed feeding	Long-Evans rats (300-325g)	10	ip, 60	o		Bodnoff et al., 1989	Psychopharmacology 97:277-279
Mianserin	5-HT_2 antagonist	Novelty-suppressed feeding	Long-Evans rats (300-325g)	10	for 21 days (o.d.)	+		Bodnoff et al., 1989	Psychopharmacology 97:277-279

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mianserin	5-HT_2 antagonist	Shock-probe burying test	Wistar rats (250-280g)	0.63-40	sc, 60	o		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Mianserin	5-HT_2 antagonist	Conditioned place aversion	Rats			-		Rocha et al., 1992	In: The Role of Serotonin in Psychiatric Disorders
Mianserin	5-HT_2 antagonist	Conditioned place aversion	Long-Evans rats (250-300g)	10	ip	-		Rocha et al., 1993	Behav. Pharmacol. 4:101-106
Mianserin	5-HT_2 antagonist	Conditioned place aversion	Long-Evans rats (280-300g)	10	ip	-		Rocha et al., 1993	Neuroscience 56:687-693
Mianserin	5-HT_2 antagonist	Conditioned place aversion	Long-Evans rats (280-300g)	0.1-10	ip	-	+5,7-DHT	Rocha et al., 1993	Neuroscience 56:687-693
Mianserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (370-450g)	1-32	ip, 35	-		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
Mianserin	5-HT_2 antagonist	Light/dark test	Mice	0.5-8	ip, 30	o	Asymmetric compartments	Bourin et al., 1996	Prog. Neuropsychopharmacol. Biol. Psychiatry 20:1389-1402
Mianserin	5-HT_2 antagonist	Vogel conflict test	Sprague-Dawley rats (180-230g)	10	ip, 30	+	48 h water deprivation and electric shocks of 0.3 mA	Griebel et al., 1997	Neuropharmacology 36:793-802
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-230g)	1	ip, 30	+		Griebel et al., 1997	Neuropharmacology 36:793-802
Mianserin	5-HT_2 antagonist	Light/dark test	BALB/c mice (7-week-old)	0.3-3	ip, 30	o		Griebel et al., 1997	Neuropharmacology 36:793-802
Mianserin	5-HT_2 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	1-10	ip, 30	o		Griebel et al., 1997	Neuropharmacology 36:793-802
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.3	sc, 30	+		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Mianserin	5-HT_2 antagonist	Social drinking	Wistar rats (100-120g)	0.16-0.63	sc, 60	+		Meert et al., 1997	Behav. Pharmacol. 8:656

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		dominance test							
Mianserin	5-HT_2 antagonist	Open-field	Wistar rats (200-220g)	0.63-10	sc, 60	o		Meert et al., 1997	Behav. Pharmacol. 8:353-363
Mianserin	5-HT_2 antagonist	Free-exploration test	BALB/c mice (8-week-old)	0.3	ip, 30	+		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Mianserin	5-HT_2 antagonist	Four-plate test	Swiss mice (20-24g)	1-32	ip, 30	o	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344
Mianserin	5-HT_2 antagonist	Social interaction	Wistar rats (200-250g)	5	ip, 60	+	Rats were withdrawn from a 14-day diazepam (4 mg/kg) treatment	Begg et al., 2005	Behav. Brain Res. 161:286-290
Mianserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-250g)	5	ip, 60	+	Rats were withdrawn from a 14-day diazepam (4 mg/kg) treatment	Begg et al., 2005	Behav. Brain Res. 161:286-290
Mianserin	5-HT_2 antagonist	Elevated plus-maze	ICR mice (5-week-old)	1-3	ip, 30	o		Komiya et al., 2006	Behav. Brain Res. 172:240-249
Mianserin	5-HT_2 antagonist	Conditioned fear	Sprague-Dawley rats (270-300g)	1-30	ip, 30	o	Shocks of 1 mA/30 s were applied	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398
Mianserin	5-HT_2 antagonist	Conflict test	Female and male marmoset (400-500g)	2.5	po, 60	+		Bright et al., 1996	Br. J. Pharmacol. 107:153P
Mianserin+lemon oil vapor	5-HT_2 antagonist	Elevated plus-maze	ICR mice (5-week-old)	1	ip, 30	o	No interaction	Komiya et al., 2006	Behav. Brain Res. 172:240-249
Milnacipran	NA/5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (230-270g)	30	sc, 60	+	Inescapable electric footshock of 2.5 mA	Hashimoto et al., 1996	Psychopharmacology 123:182-186
Milnacipran	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-32	ip, 30	+	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Milnacipran	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old)	4-32	ip, 30	+	Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Milnacipran	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Female and male Sprague-Dawley rat pups (9- to 11-day-old, 21-30g)	3-10	ip, 30	+		Iijima and Chaki, 2005	Pharmacol. Biochem. Behav. 82:652-657
Milnacipran	NA/5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (250-300g)	12.5-50	ip, 60	o		Moojen et al., 2006	Neurochem Res. 31:571-577
Milnacipran	NA/5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (250-300g)	25-50	ip, for 28 days, o.d.	+		Moojen et al., 2006	Neurochem Res. 31:571-577
Milnacipran	NA/5-HT reuptake inhibitor	Step-down inhibitory avoidance	Wistar rats (250-300g)	12.5-50	ip, 60	o	Shocks of 0.4 mA/2 s were applied the day before	Moojen et al., 2006	Neurochem Res. 31:571-577
Milnacipran	NA/5-HT reuptake inhibitor	Step-down inhibitory avoidance	Wistar rats (250-300g)	12.5-50	ip, for 28 days, o.d.	o	Shocks of 0.4 mA/2 s were applied the day before	Moojen et al., 2006	Neurochem Res. 31:571-577
Milnacipran	NA/5-HT reuptake inhibitor	Open-field	Wistar rats (250-300g)	12.5-50	ip, 60	o		Moojen et al., 2006	Neurochem Res. 31:571-577
Milnacipran	NA/5-HT reuptake inhibitor	Open-field	Wistar rats (250-300g)	12.5-50	ip, for 28 days, o.d.	o		Moojen et al., 2006	Neurochem Res. 31:571-577
Milnacipran	NA/5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	10	sc, for 3 weeks, o.d.	+	The drug prevented anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965
Milnacipran	NA/5-HT reuptake inhibitor	Light/dark test	C57BL/6J mice (18-23g)	10	sc, for 3 weeks, o.d.	+	The drug prevented anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Milnacipran	NA/5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	10	sc, for 3 weeks, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Milnacipran	NA/5-HT reuptake inhibitor	Light/dark test	C57BL/6J mice (18-23g)	10	sc, for 3 weeks, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Milnacipran	NA/5-HT reuptake inhibitor	Marble burying	ddY mice (4-8-week-old)	20	sc, 60	+		Honda et al., 2011	Behav. Brain. Res. 216:308-312
Milnacipran+DSP4 (50 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old)	8-32	ip, 30	(o)	(1) antagonism of the effects of milnacipran; (2) Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Milnacipran+Epliva nserin (0.1-1 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old)	16	ip, 30	(o)	(1) antagonism of the effects of milnacipran; (2) Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Milnacipran+ketanse rin (0.125-0.5 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old)	8-16	ip, 30	(o)	(1) antagonism of the effects of milnacipran; (2) Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Milnacipran+PCPA (300 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old)	8-16	ip, 30	(o)	(1) antagonism of the effects of milnacipran; (2) Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Milnacipran+SB 206553 (0.1-1 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old)	8-16	ip, 30	+	(1) No antagonism of the effects of milnacipran; (2) Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
Mirtazapine	Non-selective 5-HT antagonist	Open-field	Wistar rats (200-220g)	10	sc, 60	-		Meert et al., 1997	Behav. Pharmacol. 8:353-363
Mirtazapine	Non-selective 5-HT	Condition ed fear	Sprague-Dawley rats (270-300g)	1-10	ip, 30	+	Shocks of 1 mA/30 s were	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist						applied		
Mirtazapine+prazosin (0.03 mg/kg)	Non-selective 5-HT antagonist	Conditioned fear	Sprague-Dawley rats (270-300g)	10	ip, 30	(o)	Shocks of 1 mA/30 s were applied	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398
Mirtazapine+WAY 100635 (1 mg/kg)	Non-selective 5-HT antagonist	Conditioned fear	Sprague-Dawley rats (270-300g)	10	ip, 30	(o)	Shocks of 1 mA/30 s were applied	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398
MK-212	Non selective agonist	Conflict test	White Carneau Pigeons (480-528g)	0.01	im, 0	o	FR30	Witkin et al., 1987	J. Pharmacol. Exp. Ther. 243:970-977
MK-212	Non selective agonist	Elevated plus-maze	Wistar rats (150-200g)	0.5	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
MK-212	Non selective agonist	Light/dark test	Wistar rats (150-200g)	0.5	30	o	Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
MK-212	Non selective agonist	Holeboard	Wistar rats (150-200g)	0.5	30	-		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
MK-212	Non selective agonist	Open-field	Sprague-Dawley rats (200-250g)	0.31-0.62	ip, 20	-	Locomotion decreased	Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
MK-212	Non selective agonist	Shock-induced fighting	Mice	ED50=1.7-5	po	+		Abe et al., 1995	Soc. Neurosci. Abstr. 21:2106
MK-212	Non selective agonist	Ultrasonic distress vocalizations	Wistar rats (9-12-day-old)	0.2-1	ip, 30	+	Myoclonus	Gardner, 1985	J. Pharmac. Meth. 14:181-187
MK-212	Non selective agonist	Elevated plus-maze	Wistar rats (190-260g)	0.1-1 µg/0.2 µl	ventral hippocampus, 15	+	Activity was reduced at 0.3 and 1 µg	Alves et al., 2004	Behav. Pharmacol. 15:37-43
MK-212	Non selective agonist	Elevated plus-maze	Wistar rats (190-260g)	0.1-1 µg/0.2 µl	dorsal hippocampus, 15	o		Alves et al., 2004	Behav. Pharmacol. 15:37-43
MK-212	Non selective agonist	Elevated plus-maze	Wistar rats (200-290g)	2	ip, 27	-		de Mello Cruz et al. 2005	Psychopharmacology 182:345-354
MK-212	Non selective agonist	Airjet-induced	Sprague-Dawley rats (270-300g)	0.1	ip, 20	-	The drug exacerbated the	Salchner and	Psychopharmacology 185:282-288

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		escape responses					airjet escape responses	Singewald, 2006	
MK-212	Non selective agonist	Light/dark test	CBA/LacIcg mice (2,5-month-old)	0,1-0,2	ip, 20	+		Kuznetsova et al., 2006	Bull. Exp. Biol. Med. 142:594-597
MK-212	5-HT_{2C} agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	0,1 nmol/0,2 µl	ventromedial hypothalamus, 10	o		da Silva et al., 2011	Behav. Brain Res. 216:692-698
MK-212	5-HT_{2C} agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	0,1 nmol/0,2 µl	ventromedial hypothalamus, 10	+		da Silva et al., 2011	Behav. Brain Res. 216:692-698
MK-212	5-HT_{2C} receptor agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1-10 nmol/0.2 µl	dorsal PAG, 10	o		Yamashita et al., 2011	Neuropharmacology 60:216-222
MK-212	5-HT_{2C} receptor agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1-10 nmol/0.2 µl	dorsal PAG, 10	-		Yamashita et al., 2011	Neuropharmacology 60:216-222
MK-212	5-HT_{2C} receptor agonist	Elevated plus-maze	Swiss mice (28-35g)	63.6 nmol/0.10 µl	dorsal PAG, 0	+		Gomes and Nunes-De-Souza, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1261-1269
MK-212	5-HT_{2C} receptor agonist	Elevated plus-maze	Swiss mice (28-35g)	63.6 nmol/0.10 µl	dorsal PAG, 0	+	Maze-experienced mice were used	Gomes and Nunes-De-Souza, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1261-1269
MK-212	5-HT_{2C} receptor agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	0.1-1 nmol/0.2 µl	dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MK-212	5-HT_{2C} receptor agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	0.1-1 nmol/0.2 µl	dorsolateral septum, 10	o		de Paula et al., 2012	Behav. Brain Res. 226:50-55
MK-212	5-HT_{2C} receptor agonist	Escape behavior in the elevated T-maze	Wistar rats (290-310g)	0.01-1 nmol/0.2 µl	basolateral amygdala, 10	o		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
MK-212	5-HT_{2C} receptor agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (290-310g)	0.01-0.1 nmol/0.2 µl	basolateral amygdala, 10	-		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
MK-212+ritanserin (1.25-5 µg/0.2 µl)	Non selective agonist	Elevated plus-maze	Wistar rats (200-290g)	2	ip, 27	(o)	Antagonism of the anxiogenic-like effects of ritanserin	de Mello Cruz et al. 2005	Psychopharmacology 182:345-354
MK-212+SB 242084 (10 nmol/0.2 µl)	5-HT_{2C} receptor agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1-10 nmol/0.2 µl	dorsal PAG, 10	o	No interaction	Yamashita et al., 2011	Neuropharmacology 60:216-222
MK-212+SB 242084 (10 nmol/0.2 µl)	5-HT_{2C} receptor agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1-10 nmol/0.2 µl	dorsal PAG, 10	(o)	SB 242084 blocked the effects of MK-212	Yamashita et al., 2011	Neuropharmacology 60:216-222
MKC-242	5-HT_{1A} full agonist	Conflict test	Rats	LED=0.0625	Acute	+		Egawa et al., 1993	Soc. Neurosci. Abstr. 19:1243
MKC-242	5-HT_{1A} full agonist	Conflict test	Rats	LED=0.0625	Chonic	+		Egawa et al., 1993	Soc. Neurosci. Abstr. 19:1243
MKC-242	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (150-250g)	0.0625-0.25	po, 30	+	40 h water deprivation	Abe et al., 1996	J. Pharmacol. Exp. Ther. 278:898-905
MKC-242	5-HT_{1A} full agonist	Social interaction	Wistar rats (150-250g)	0.1-0.5	po, 30	+	HLU	Abe et al., 1996	J. Pharmacol. Exp. Ther. 278:898-905

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MKC-242	5-HT_{1A} full agonist	Stress-induced fighting behavior	ddY mice (17-28g)	1.5-3	po, 60	+	Animals received a footshock (240 V AC) for 1 min	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Stress-induced fighting behavior	ddY mice (17-28g)	ED50=2.6	po, 120	+	Animals received a footshock (240 V AC) for 1 min	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Stress-induced fighting behavior	ddY mice (17-28g)	ED50=4.5	po, 180	+	Animals received a footshock (240 V AC) for 1 min	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (150-250g)	0.125	po, 60	+	Animals received footshocks (240 V AC) for 2 s	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (150-250g)	0.125	po, 120	+	Animals received footshocks (240 V AC) for 2 s	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (150-250g)	0.125	po, 180	o	Animals received footshocks (240 V AC) for 2 s	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (150-250g)	0.125	po, 240	o	Animals received footshocks (240 V AC) for 2 s	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Marble burying	ICR mice (25-35g)	3.2-6.4	po, 60	+		Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
MKC-242	5-HT_{1A} full agonist	Stress-induced gastric lesion	ICR mice (7-8-week-old)	2.5-5	po, 30	+	Footshocks (from 0.6 to 1 mA/10 s) for 3 h, during 3 days	Hara et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S207
MKC-242	5-HT_{1A} full agonist	Stress-induced gastric lesion	ICR mice (7-8-week-old)	2.5-5	po, for 3 days (o.d.)	+	Footshocks (from 0.6 to 1 mA/10 s) for 3 h, during 3 days	Hara et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S207

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MKC-242	5-HT_{1A} full agonist	Conditioned fear	Rats	1		+	(1) Rats received a subchonic pretreatment with lithium; (2) potentiation	Muraki et al., 1998	Soc. Neurosci. Abstr. 24:1192
MKC-242	5-HT_{1A} full agonist	Conditioned fear	Rats	1		+		Muraki et al., 1998	Soc. Neurosci. Abstr. 24:1192
MKC-242	5-HT_{1A} full agonist	Conditioned fear	Sprague-Dawley rats (230-270g)	1-10	sc, 30	+	Electric footshock for 2.5 min (2.5 mA scrambled shock, 10-ms every 100 ms) was applied	Muraki et al., 1999	Eur. J. Pharmacol. 383:223-29
MKC-242	5-HT_{1A} full agonist	Elevated plus-maze	ddY mice (4-week-old)	0.1-1	po, 60	+		Sakaue et al., 2003	Eur. J. Pharmacol. 458:141-144
MKC-242+Lithium (for 7 days)	5-HT_{1A} full agonist	Conditioned fear	Sprague-Dawley rats (230-270g)	1	sc, 30	(+)	(1) Lithium potentiated effects; (2) Electric footshock for 2.5 min (2.5 mA scrambled shock, 10-ms every 100 ms) was applied	Muraki et al., 1999	Eur. J. Pharmacol. 383:223-29
MKC-242+WAY 100635 (0.1 mg/kg)	5-HT_{1A} full agonist	Elevated plus-maze	ddY mice (4-week-old)		po, 60	(o)	Antagonism of the effects of MKC-242	Sakaue et al., 2003	Eur. J. Pharmacol. 458:141-144
MM199	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (220-250g)	0.62-2.5	ip, 30	+	Shock of 0.5 mA	Dereń-Wesołek et al., 1998	J. Psychopharmacol. 12:380-384
MM199+WAY100135 (20 mg/kg))	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (220-250g)	1.25	ip, 30	(o)	(1) antagonism; (2) Shock of 0.5 mA	Dereń-Wesołek et al., 1998	J. Psychopharmacol. 12:380-384
MM-77	5-HT_{1A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3-1	sc, 15	+		Griebel et al., 1999	Psychopharmacology 144:121-130

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MM-77	5-HT_{1A} antagonist	Conflict test	Wistar rats (400-500g)	0.03-1	sc, 15	o		Griebel et al., 2000	Neuropharmacology 39:1848-57
MM-77	5-HT_{1A} antagonist	Vogel conflict test	Sprague-Dawley rats (180-200g)	0.03-0.3	sc, 15	+		Griebel et al., 2000	Neuropharmacology 39:1848-57
MM-77	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (180-200g)	0.01-0.3	sc, 15	+		Griebel et al., 2000	Neuropharmacology 39:1848-57
MM-77	5-HT_{1A} antagonist	Light/dark test	Swiss-Webster mice (25-30g)	0.03	ip, 20	o	Mice were subjected to swim stress prior to testing	Alfredo and Ofir, 2005	Eur. J. Pharmacol. 508:155-158
MM-77	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (250-300g)	0.05	ip, 20	o		Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
MM-77	5-HT_{1A} antagonist	Elevated plus-maze	Adrenalectomized Wistar rats (250-300g)	0.05	ip, 20	o		Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
MM-77	5-HT_{1A} antagonist	Shock-probe burying test	Wistar rats (250-300g)	0.05	ip, 20	o	Shocks of 0.3 mA were applied	Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
MM-77	5-HT_{1A} antagonist	Shock-probe burying test	Adrenalectomized Wistar rats (250-300g)	0.05	ip, 20	o	Shocks of 0.3 mA were applied	Briones-Aranda et al., 2009	Pharmacol. Biochem. Behav. 92:182-189
Moclobemide	MAO A inhibitor	Elevated plus-maze	Sprague-Dawley rats (230-280g)	20	po, 2h	-		Weinstock et al., 2002	Psychopharmacology 160:318-324
Moclobemide	MAO A inhibitor	Elevated plus-maze	Sprague-Dawley rats (230-280g)	20	po, o.d. daily for 2 weeks	-		Weinstock et al., 2002	Psychopharmacology 160:318-324
Moclobemide	MAO A inhibitor	Elevated plus-maze	Swiss mice (20-25g)	10	ip, 30	+		Jindal et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 40C:47-53
Moclobemide	MAO A inhibitor	Light/dark test	Swiss mice (20-25g)	10	ip, 30	+		Jindal et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 40C:47-53

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Moclobemide	MAO A inhibitor	Holeboard	Swiss mice (20-25g)	10	ip, 30	+		Jindal et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 40C:47-53
MP349	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (250-350g)	0.25-0.5	ip, 60	+	Electric shocks of 0.5 mA	Wesolowska et al., 2003	J. Pharm. Pharmacol. 55:533-543
MP349	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (250-350g)	0.125	ip, 60	+		Wesolowska et al., 2003	J. Pharm. Pharmacol. 55:533-543
MP349	5-HT_{1A} antagonist	Four-plate test	Swiss mice (25-30g)	0.125	ip, 60	+		Wesolowska et al., 2003	J. Pharm. Pharmacol. 55:533-543
Mutant mice	5-HT_{1A} knockout	Open-field	Swiss-Webster/12^{SV} mice			-		Parks et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:10734-10739
Mutant mice	5-HT_{1A} knockout	Open-field	Mice			-		Toth and Sibille, 1998	Soc. Neurosci. Abstr. 24:600
Mutant mice	5-HT_{1A} knockout	Elevated plus-maze	Mice			-		Toth and Sibille, 1998	Soc. Neurosci. Abstr. 24:600
Mutant mice	5-HT_{2C} knockout	Open-field	Mice			+		Heisler et al., 1998	Soc. Neurosci. Abstr. 24:602
Mutant mice	5-HT_{2C} knockout	Elevated plus-maze	Mice			+		Heisler et al., 1998	Soc. Neurosci. Abstr. 24:602
Mutant mice	5-HT_{2C} knockout	Novel object test	Mice			+		Heisler et al., 1998	Soc. Neurosci. Abstr. 24:602
Mutant mice	5-HT_{1A} knockout	Open-field	Female and male C57BL6/Jx129/sv mice			-		Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
Mutant mice	5-HT_{1A} knockout	Elevated plus-maze	Female and male C57BL6/Jx129/sv mice			-		Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
Mutant mice	5-HT_{1A} knockout	Open-field	129/SvxC57BL/6J mice			-		Heisler et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:15049-15054
Mutant mice	5-HT_{1A} knockout	Elevated zero-maze	129/SvxC57BL/6J mice			-		Heisler et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:15049-15054
Mutant mice	5-HT_{1A} knockout	Novel object test	129/SvxC57BL/6J mice			-		Heisler et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:15049-15054

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_{5A} knockout	Open-field	C57/BL6 mice			+	Increase in exploratory activity	Grailhe et al., 1999	Neuron 581-591
Mutant mice	5-HT_{5A} knockout	Novel object test	C57/BL6 mice			+	Increase in exploratory activity and curiosity	Grailhe et al., 1999	Neuron 581-591
Mutant mice	5-HT_{5A} knockout	Elevated plus-maze	C57/BL6 mice			o		Grailhe et al., 1999	Neuron 581-591
Mutant mice	5-HT_{5A} knockout	Shock-probe burying test	C57/BL6 mice			o	Shock of 0.15 mA	Grailhe et al., 1999	Neuron 581-591
Mutant mice	5-HT_{5A} knockout	Acoustic startle reflex	C57/BL6 mice			o	Bursts of 120 dB	Grailhe et al., 1999	Neuron 581-591
Mutant mice	5-HT_{1B} knockout	Ultrasonic distress vocalizations	Female and male mice from 129 Sv strain			+		Brunner et al., 1999	Behav. Neurosci. 113:587-601
Mutant mice	5-HT_{1B} knockout	Elevated plus-maze	Female and male mice from 129 Sv strain			+	Weak decrease in anxiety-related behaviors	Brunner et al., 1999	Behav. Neurosci. 113:587-601
Mutant mice	5-HT_{1B} knockout	Elevated plus-maze	129/Sv mice			o		Malleret et al., 1999	J. Neurosci. 19:6157-6168
Mutant mice	5-HT_{1B} knockout	Novel object test	129/Sv mice			+		Malleret et al., 1999	J. Neurosci. 19:6157-6168
Mutant mice	5-HT_3 knockout	Light/dark test	C57BL/6J x 129 background (90-120-day-old)			+	Knockout animals were less anxious than WT mice	Kelley et al., 2003	Eur. J. Pharmacol. 461:19-25
Mutant mice	5-HT_3 knockout	Elevated plus-maze	C57BL/6J x 129 background (90-120-day-old)			+	Knockout animals were less anxious than WT mice	Kelley et al., 2003	Eur. J. Pharmacol. 461:19-25
Mutant mice	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv-ter background mice			-	Knockout animals were more anxious than WT mice	Pattij et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S275

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_{1A} knockout	Elevated plus-maze	Female and male 129/svxC57BL/6J mice (8-10-week-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice	5-HT_{1A} knockout rescue	Elevated plus-maze	Female and male 129/svxC57BL/6J mice (18-20-week-old)			(o)	Anxious phenotype of 5-HT_{1A} knockout mice was no longer seen	Gross et al., 2002	Nature 416:396-400
Mutant mice	5-HT_{1A} knockout	Open-field	Female and male 129/svxC57BL/6J mice (8-10-week-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice	5-HT_{1A} knockout rescue	Open-field	Female and male 129/svxC57BL/6J mice (18-20-week-old)			(o)	Anxious phenotype of 5-HT_{1A} knockout mice was no longer seen	Gross et al., 2002	Nature 416:396-400
Mutant mice	5-HT_{1A} knockout	Novelty-suppressed feeding	Female and male 129/svxC57BL/6J mice (8-10-week-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice	5-HT_{1A} knockout rescue	Novelty-suppressed feeding	Female and male 129/svxC57BL/6J mice (18-20-week-old)			(o)	Anxious phenotype of 5-HT_{1A} knockout mice was no longer seen	Gross et al., 2002	Nature 416:396-400
Mutant mice	5-HT_{1B} knockout	Elevated plus-maze	Mice from 129 Sv strain (20-30g)			o	No difference between genotypes	López-Rubalcava et al., 2000	Behav. Brain Res. 115:85-94
Mutant mice	5-HT_{1B} knockout	Shock-probe burying test	Mice from 129 Sv strain (20-30g)			+	Knockout animals were less anxious than WT mice	López-Rubalcava et al., 2000	Behav. Brain Res. 115:85-94
Mutant mice	5-HT_{1A} knockout	Acoustic startle reflex	Mixed 129/sv background			o	(1) No difference between genotypes; (2) 85 to 120 dB were used	Dirks et al., 2001	Behav. Brain Res. 118:169-178

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_{1A} knockout	Stress-induced sensitization in acoustic startle reflex	Mixed 129/sv background			o	No difference between genotypes	Dirks et al., 2001	Behav. Brain Res. 118:169-178
Mutant mice	5-HT_{1B} knockout	Acoustic startle reflex	Mixed 129/sv background			+	(1) Reduced reactivity in KO; (2) 85 to 120 dB were used	Dirks et al., 2001	Behav. Brain Res. 118:169-178
Mutant mice	5-HT_{1B} knockout	Stress-induced sensitization in acoustic startle reflex	Mixed 129/sv background			+	Sensitization was reduced in KO	Dirks et al., 2001	Behav. Brain Res. 118:169-178
Mutant mice	5-HT_{1A} knockout	Open-field	Mixed 129/sv background			o	No difference between genotypes	Pattij and Olivier, 2001	Behav. Pharmacol. 12 (Suppl. 1):S75
Mutant mice	5-HT_{1A} knockout	Light/dark test	Mixed 129/sv background			o	No difference between genotypes	Pattij and Olivier, 2001	Behav. Pharmacol. 12 (Suppl. 1):S75
Mutant mice	5-HT_{1A} knockout	Stress-induced hyperthermia	Mixed 129/sv background			o	No difference between genotypes	Pattij and Olivier, 2001	Behav. Pharmacol. 12 (Suppl. 1):S75
Mutant mice	5-HT_{1A} knockout	Stress-induced physiological changes	Mixed 129/sv background			-	(1) KO mice displayed higher stress response; (2) injection stress was used	Pattij and Olivier, 2001	Behav. Pharmacol. 12 (Suppl. 1):S75
Mutant mice	5-HT_{1A} knockout	Stress-induced physiological changes	Mixed 129/sv background			-	(1) KO mice displayed higher stress response; (2) novel cage exposure stress was used	Pattij and Olivier, 2001	Behav. Pharmacol. 12 (Suppl. 1):S75
Mutant mice	5-HT_{1A}	Stress-	129/Sv background			o	No difference	Pattij et al.,	Eur. J. Pharmacol. 447:67-74

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	knockout	induced hyperthermia					between genotypes	2002	
Mutant mice	5-HT_{1A} knockout	Elevated plus-maze	129/Sv background			o	No difference between genotypes	Pattij et al., 2002	Eur. J. Pharmacol. 447:67-74
Mutant mice	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background (12-week-old)			-	KO mice displayed higher stress response	Pattij et al., 2002	Neuropsychopharmacology 27:380-390
Mutant mice	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background (12-week-old)			o	No difference between genotypes	Pattij et al., 2002	Neuropsychopharmacology 27:380-390
Mutant mice	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background (12-week-old)			-	KO mice displayed higher stress response	Pattij et al., 2002	Neuropsychopharmacology 27:380-390
Mutant mice	5-HT_4 deletion	Restraint stress-induced hypophagia	Mixed 129/sv x C57BL6/J x B6CBAF1/J background mice			+	Hypophagia was reduced in Transgenic mice	Compan et al., 2004	J. Neurosci. 24:412-419
Mutant mice	5-HT_4 deletion	Open-field	Mixed 129/sv x C57BL6/J x B6CBAF1/J background mice			+	Transgenic mice were less anxious	Compan et al., 2004	J. Neurosci. 24:412-419
Mutant mice	5-HT transporter knockout	Open-field	Female and male 129S6/SvEv background mice			o	No difference between genotypes	Lira et al., 2003	Biol. Psychiatry 54:960-971
Mutant mice	5-HT transporter knockout	Elevated plus-maze	Female and male 129S6/SvEv background mice			o	No difference between genotypes	Lira et al., 2003	Biol. Psychiatry 54:960-971
Mutant mice	5-HT transporter knockout	Novelty-suppressed feeding	Female and male 129S6/SvEv background mice			-	Transgenic mice showed an increase in latency to feed	Lira et al., 2003	Biol. Psychiatry 54:960-971

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT transporter knockout	Elevated plus-maze	Female and male C57BL/6J background mice (3-7-month old)			-	5-HTT -/- mice showed increased anxiety-like behavior	Holmes et al., 2003	Neuropsychopharmacology 28:2077-2088
Mutant mice	5-HT transporter knockout	Light/dark test	Female and male C57BL/6J background mice (3-7-month old)			-	5-HTT -/- mice showed increased anxiety-like behavior	Holmes et al., 2003	Neuropsychopharmacology 28:2077-2088
Mutant mice	5-HT transporter knockout	Emergence test	Female and male C57BL/6J background mice (3-7-month old)			-	5-HTT -/- mice showed increased anxiety-like behavior	Holmes et al., 2003	Neuropsychopharmacology 28:2077-2088
Mutant mice	5-HT transporter knockout	Open-field	Female and male C57BL/6J background mice (3-7-month old)			-	5-HTT -/- mice showed increased anxiety-like behavior	Holmes et al., 2003	Neuropsychopharmacology 28:2077-2088
Mutant mice	5-HT_{1A} knockout	Elevated plus-maze	Swiss background mice (2- to 5-month-old)			-	Knockout animals were more anxious than WT mice	Bailey and Toth, 2004	J. Neurosci. 24:6343-6351
Mutant mice	5-HT_{1A} knockout	Open-field	Swiss background mice (2- to 5-month-old)			-	Knockout animals were more anxious than WT mice	Bailey and Toth, 2004	J. Neurosci. 24:6343-6351
Mutant mice	5-HT_{1A} knockout	Elevated plus-maze	B6 background mice (2- to 5-month-old)			-	Knockout animals were more anxious than WT mice	Bailey and Toth, 2004	J. Neurosci. 24:6343-6351
Mutant mice	5-HT_{1A} knockout	Open-field	B6 background mice (2- to 5-month-old)			-	Knockout animals were more anxious than WT mice	Bailey and Toth, 2004	J. Neurosci. 24:6343-6351
Mutant mice	5-HT_{3} knockout	Elevated plus-maze	C57BL/6J x 129 background (7-20-week-old)			+	Knockout animals were less anxious than WT mice	Bhatnagar et al., 2004	Physiol. Behav. 81:545-555

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_3 knockout	Open-field	C57BL/6J x 129 background (7-20-week-old)			o	No difference between genotypes	Bhatnagar et al., 2004	Physiol. Behav. 81:545-555
Mutant mice	5-HT_3 knockout	Light/dark test	C57BL/6J x 129 background (7-20-week-old)			o	No difference between genotypes	Bhatnagar et al., 2004	Physiol. Behav. 81:545-555
Mutant mice	5-HT_3 knockout	Conditioned fear	C57BL/6J x 129 background (7-20-week-old)			-	KO mice displayed enhancing freezing	Bhatnagar et al., 2004	Physiol. Behav. 81:545-555
Mutant mice	5-HT_3 knockout	Defensive withdrawal	C57BL/6J background (5-7-month-old)			-	Knockout animals appeared more anxious than WT mice	Bhatnagar et al., 2004	Behav. Brain Res. 153:527-535
Mutant mice	5-HT_3 knockout	Defensive withdrawal	Female C57BL/6J background (5-7-month-old)			+	Knockout animals appeared less anxious than WT mice	Bhatnagar et al., 2004	Behav. Brain Res. 153:527-535
Mutant mice	5-HT_{1A} receptor overexpression	Elevated plus-maze	Female and male NMRI mice (15-week-old)			+	Mice displayed reduced anxiety-like behavior	Kusserow et al., 2004	Mol. Brain Res. 129:104-116
Mutant mice	5-HT_{1A} receptor overexpression	Open-field	Female and male NMRI mice (15-week-old)			o	No phenotypic differences	Kusserow et al., 2004	Mol. Brain Res. 129:104-116
Mutant mice	5-HT_{1A} receptor overexpression	Free-exploration test	Female and male NMRI mice (15-week-old)			+	Mice displayed reduced anxiety-like behavior	Kusserow et al., 2004	Mol. Brain Res. 129:104-116
Mutant mice	5-HT_{1A} knockout	Elevated plus-maze	Female C57BL/6J background mice (5-8 month-old)			-	Transgenic mice displayed increased anxiety-like behavior	Li et al., 2004	J. Neurosci. 24:10868-10877
Mutant mice	5-HT_{1A} knockout	Light/dark test	129/SvxC57BL/6J mice (8-10-week-old)			-	Knockout animals were more anxious than WT mice	Klemenhagen et al., 2006	Neuropsychopharmacology 31:101-111

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_{1A} knockout	Vogel conflict test	129/SvxC57BL/6J mice (8-10-week-old)			o	No difference between genotypes	Klemenhagen et al., 2006	Neuropsychopharmacology 31:101-111
Mutant mice	5-HT_{1A} knockout	Conditioned fear	129/SvxC57BL/6J mice (8-10-week-old)			-	Freezing response of KO mice did not decrease when placed in an ambiguous environment	Klemenhagen et al., 2006	Neuropsychopharmacology 31:101-111
Mutant mice	5-HT_{2A} knockout	Open-field	Mice			+	Knockout animals appeared less anxious than WT mice	Weisstaub et al., 2006	Science 313:536-540
Mutant mice	5-HT_{2A} knockout	Light/dark test	Mice			+	Knockout animals appeared less anxious than WT mice	Weisstaub et al., 2006	Science 313:536-540
Mutant mice	5-HT_{2A} knockout	Elevated plus-maze	Mice			+	Knockout animals appeared less anxious than WT mice	Weisstaub et al., 2006	Science 313:536-540
Mutant mice	5-HT_{2A} knockout	Novelty-suppressed feeding	Mice			+	Knockout animals appeared less anxious than WT mice	Weisstaub et al., 2006	Science 313:536-540
Mutant mice	5-HTT overexpression	Elevated plus-maze	CBAxC57BL/6J background mice (3-6-month-old)			+	Transgenic mice displayed reduced anxiety-related behaviors	Jennings et al., 2006	J. Neurosci. 26:8955-8964
Mutant mice	5-HTT overexpression	Novelty-suppressed feeding	CBAxC57BL/6J background mice (3-6-month-old)			+	Transgenic mice displayed reduced anxiety-related behaviors	Jennings et al., 2006	J. Neurosci. 26:8955-8964

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT transporter knockout	Conditioned fear	Mixed 129P1/ReJ x C57BL6/J background mice (8-10-week-old)			-	Transgenic mice exhibited a significant deficit in extinction recall	Wellman et al., 2007	J. Neurosci. 27:684-691
Mutant mice	5-HT_{1A} knockout	Conditioned fear	Mixed (C57BL6/J x CBA/J) x C57BL/6J background mice (>5-week-old)			-	Mice showed enhanced fear conditioning to ambiguous stimuli	Tsetsenis et al., 2007	Nat. Neurosci. 10:896-902
Mutant mice	5-HT_{2C} antagonist	Elevated zero-maze	C57BL/6J background mice			+	KO mice displayed an anxiolytic-like phenotype	Heisler et al., 2007	Genes, Brain Behav. 6:491-496
Mutant mice	5-HT_{2C} antagonist	Open-field	C57BL/6J background mice			+	KO mice displayed an anxiolytic-like phenotype	Heisler et al., 2007	Genes, Brain Behav. 6:491-496
Mutant mice	5-HT_{2C} antagonist	Novel object test	C57BL/6J background mice			+	KO mice displayed an anxiolytic-like phenotype	Heisler et al., 2007	Genes, Brain Behav. 6:491-496
Mutant mice	5-HT_{2C} antagonist	Mirrored chamber	C57BL/6J background mice			+	KO mice displayed an anxiolytic-like phenotype	Heisler et al., 2007	Genes, Brain Behav. 6:491-496
Mutant mice	Tryptophan 2,3-dioxygenase $^{-/-}$	Elevated plus-maze	C57BL/6 background mice (13-15-week-old)			+	Mutant mice displayed decreased anxiety	Kanai et al., 2009	Mol. Brain 2:8
Mutant mice	Tryptophan 2,3-dioxygenase $^{-/-}$	Open-field	C57BL/6 background mice (13-15-week-old)			+	Mutant mice displayed decreased anxiety	Kanai et al., 2009	Mol. Brain 2:8
Mutant mice	5-HT_{1A} autoreceptor deletion	Open-field	Mixed 126S6/Sv, C57B6, CBA background mice (11-13-week-old)			-		Richardson-Jones et al., 2011	J. Neurosci. 31:6008-6018

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference
Mutant mice	5-HT_{1A} autoreceptor deletion	Light/dark test	Mixed 126S6/Sv, C57B6, CBA background mice (11-13-week-old)			-		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018
Mutant mice	5-HT_{1A} autoreceptor deletion	Elevated plus-maze	Mixed 126S6/Sv, C57B6, CBA background mice (11-13-week-old)			o		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor deletion	Open-field	Mixed 126S6/Sv, C57B6, CBA background mice (early postnatal period)			o		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor deletion	Light/dark test	Mixed 126S6/Sv, C57B6, CBA background mice (early postnatal period)			o		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor deletion	Elevated plus-maze	Mixed 126S6/Sv, C57B6, CBA background mice (early postnatal period)			o		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor deletion	Open-field	Mixed 126S6/Sv, C57B6, CBA background mice (11-13-week-old)			o		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor deletion	Light/dark test	Mixed 126S6/Sv, C57B6, CBA background mice (11-13-week-old)			o		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor deletion	Elevated plus-maze	Mixed 126S6/Sv, C57B6, CBA background mice (11-13-week-old)			o		Richardson-Jones et al., 2011 J. Neurosci. 31:6008-6018

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	KO offsprings of KO mothers	Gleason et al., 2010	PNAS 107:7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	KO offsprings of heterozygote mothers	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	WT offsprings of heterozygote mothers	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	(1) KO offsprings of KO mothers; (2) Cross-fostering of WT pups to KO mothers at birth	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	(1) KO offsprings of KO mothers; (2) Cross-fostering of WT pups to KO mothers at 1-day old embryo stage	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to KO mothers at birth	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			o	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to KO mothers at 1-day old	Gleason et al., 2010	PNAS, 107(16):7592-7597

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							embryo stage		
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to WT mothers at birth	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	Mixed Swiss-Webster, B6, 129SvEv background mice			-	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to WT mothers at 1-day old embryo stage	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			-	KO offsprings of KO mothers	Gleason et al., 2010	PNAS 107:7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			-	KO offsprings of heterozygote mothers	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			o	WT offsprings of heterozygote mothers	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			-	(1) KO offsprings of KO mothers; (2) Cross-fostering of WT pups to KO mothers at birth	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			o	(1) KO offsprings of KO mothers; (2) Cross-fostering	Gleason et al., 2010	PNAS, 107(16):7592-7597

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							of WT pups to KO mothers at 1-day old embryo stage		
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			o	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to KO mothers at birth	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			o	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to KO mothers at 1-day old embryo stage	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			-	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to WT mothers at birth	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	5-HT_{1A} receptor deletion	Open-field	Mixed Swiss-Webster, B6, 129SvEv background mice			o	(1) KO offsprings of KO mothers; (2) Cross-fostering of KO pups to WT mothers at 1-day old embryo stage	Gleason et al., 2010	PNAS, 107(16):7592-7597
Mutant mice	$5HT_{2C}$R-VGV	Elevated plus-maze	Female and male 5-HT_{2C}R-VGVxBALB/c mice (3-8-month-old)			-	Mice expressed the fully-edited form of the 5-HT_{2C}R	Mombereau et al., 2010	Neuropharmacology 59:468-473

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	$5HT_{2C}$R-VGV	Elevated plus-maze	Female and male 5-HT_{2C}R-VGVxC57BL/6J mice (3-8-month-old)			-	Mice expressed the fully-edited form of the 5-HT_{2C}R	Mombereau et al., 2010	Neuropharmacology 59:468-473
Mutant mice	$5HT_{2C}$R-INI	Elevated plus-maze	Female and male 5-HT_{2C}R-INIxBALB/c mice (3-8-month-old)			-	Mice expressed the non-edited form of the 5-HT_{2C}R	Mombereau et al., 2010	Neuropharmacology 59:468-473
Mutant mice	$5HT_{2C}$R-INI	Elevated plus-maze	Female and male 5-HT_{2C}R-INIxC57BL/6J mice (3-8-month-old)			-	Mice expressed the non-edited form of the 5-HT_{2C}R	Mombereau et al., 2010	Neuropharmacology 59:468-473
Mutant mice	5-HTT overexpression	Elevated plus-maze	Female and male CBAxC57BL6/6J mice			+		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116
Mutant mice	5-HTT overexpression	Novelty-suppressed feeding	Female and male CBAxC57BL6/6J mice			+		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116
Mutant mice	5-HTT overexpression	Successive alleys	Female and male CBAxC57BL6/6J mice			+		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116
Mutant mice	5-HTT overexpression	Light/dark test	Female and male CBAxC57BL6/6J mice			o		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116
Mutant mice	5-HTT knockout	Elevated plus-maze	Female and male 129P1(129P1/ReJ)xC57BL6/6J hybrid mice			-		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116
Mutant mice	5-HTT knockout	Novelty-suppressed feeding	Female and male 129P1(129P1/ReJ)xC57BL6/6J hybrid mice			-		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116
Mutant mice	5-HTT knockout	Successive alleys	Female and male 129P1(129P1/ReJ)xC57BL6/6J hybrid mice			o		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116
Mutant mice	5-HTT knockout	Light/dark test	Female and male 129P1(129P1/ReJ)xC57BL6/6J hybrid mice			-		Line et al., 2011	Eur. Neuropsychopharmacol. 21:108-116

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_{3A}	Novelty-suppressed feeding	Female and male C57BL/6J mice (7-14-week-old)			o		Smit-Rigter et al., 2010	Front. Behav. Neurosci. 4:169
Mutant mice	5-HT_{3A}	Social interaction	Female and male C57BL/6J mice (7-14-week-old)			-	Only female mice showed deficit in social interaction	Smit-Rigter et al., 2010	Front. Behav. Neurosci. 4:169
Mutant mice	5-$HT_{1A/1B}$ knockout	Open-field	C57BL6/6Jx129Sv mice (6-8-week-old)			-		Guilloux et al., 2011	Neuropharmacology 61:478-488
Mutant mice	5-$HT_{1A/1B}$ knockout	Elevated plus-maze	C57BL6/6Jx129Sv mice (6-8-week-old)			-		Guilloux et al., 2011	Neuropharmacology 61:478-488
Mutant mice	5-$HT_{1A/1B}$ knockout	Novelty-suppressed feeding	C57BL6/6Jx129Sv mice (6-8-week-old)			-		Guilloux et al., 2011	Neuropharmacology 61:478-488
Mutant mice	5-HT_{1A} autoreceptor knockout	Open-field	Htr1atetOx129S6/SvxC57B6/6JxCDA mice			-		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	5-HT_{1A} autoreceptor knockout	Light/dark test	Htr1atetOx129S6/SvxC57B6/6JxCDA mice			-		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	5-HT_{1A} autoreceptor knockout	Elevated plus-maze	Htr1atetOx129S6/SvxC57B6/6JxCDA background mice			o		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor knockout	Open-field	Htr1atetO/tetOx129S6/SvxC57B6/6JxCDA background mice			o		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor knockout	Light/dark test	Htr1atetO/tetOx129S6/SvxC57B6/6JxCDA background mice			o		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor knockout	Elevated plus-maze	Htr1atetO/tetOx129S6/SvxC57B6/6JxCDA mice			o		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor knockout	Open-field	Htr1atetO/tetOx129S6/SvxC57B6/6JxCDA mice (post-natal day 50-old)			o		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	5-HT_{1A} heteroreceptor knockout	Light/dark test	Htr1atetO/tetOx129S6/SvxC57 B6/6JxCDA mice (post-natal day 50-old)			o		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	5-HT_{1A} heteroreceptor knockout	Elevated plus-maze	Htr1atetO/tetOx129S6/SvxC57 B6/6JxCDA mice (post-natal day 50-old)			o		Richardson-Jones et al., 2011	J. Neurosci. 3:6008-6018
Mutant mice	VMAT2	Elevated plus-maze	VMAT2lox/loxxC57B6/6Jx SERTcre mice (2-3-month-old)			o		Narboux-Nême et al., 2011	Neuropsychopharmacology 36:2538-2550
Mutant mice	VMAT2	Novelty-suppressed feeding	VMAT2lox/loxxC57B6/6Jx SERTcre mice (2-3-month-old)			+		Narboux-Nême et al., 2011	Neuropsychopharmacology 36:2538-2550
Mutant mice	VMAT2	Ultrasound-induced defensive behaviors	VMAT2lox/loxxC57B6/6Jx SERTcre mice (2-3-month-old)			-		Narboux-Nême et al., 2011	Neuropsychopharmacology 36:2538-2550
Mutant mice	5-HTT knockout	Conditioned fear	C57BL/6J mice (9-12-week-old)			-	Animals were socially defeated prior to testing	Narayanan et al., 2011	PloS ONE 6: e22600
Mutant mice	MAO A	Elevated plus-maze	129S6 (2-3-month-old)			o		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A	Light/dark test	129S6 (2-3-month-old)			o		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A	Marble burying	129S6 (2-3-month-old)			o		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A	Stress-induced grooming	129S6 (2-3-month-old)			o		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A	Social interaction	129S6 (2-3-month-old)			-		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A^{Neo}	Elevated plus-maze	129S6 (2-3-month-old)			o		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A^{Neo}	Light/dark test	129S6 (2-3-month-old)			o		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	MAO A^{Neo}	Marble burying	129S6 (2-3-month-old)			-		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A^{Neo}	Stress-induced grooming	129S6 (2-3-month-old)			-		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO A^{Neo}	Social interaction	129S6 (2-3-month-old)			-		Bortolato et al., 2011	Neuropsychopharmacology 36:2674-2688
Mutant mice	MAO B knockout	Elevated plus-maze	129/Sv mice (4-5-month-old)			+		Bortolato et al., 2009	Neuropsychopharmacology 34:2746-2757
Mutant mice	MAO B knockout	Defensive withdrawal	129/Sv mice (4-5-month-old)			+		Bortolato et al., 2009	Neuropsychopharmacology 34:2746-2757
Mutant mice	MAO B knockout	Marble burying	129/Sv mice (4-5-month-old)			+		Bortolato et al., 2009	Neuropsychopharmacology 34:2746-2757
Mutant mice	MAO B knockout	Holeboard	129/Sv mice (4-5-month-old)			+		Bortolato et al., 2009	Neuropsychopharmacology 34:2746-2757
Mutant mice	MAO B knockout	Wire beam bridge test	129/Sv mice (4-5-month-old)			+		Bortolato et al., 2009	Neuropsychopharmacology 34:2746-2757
Mutant mice	5-HTT knockout	Elevated plus-maze	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with neutral bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT knockout	Elevated plus-maze	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with unfamiliar male bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT knockout	Light/dark test	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with neutral bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT knockout	Light/dark test	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated	Heiming et al., 2009	Front. Behav. Neurosci. 3:26

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							with unfamiliar male bedding		
Mutant mice	5-HTT knockout	Open-field	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with neutral bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT knockout	Open-field	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with unfamiliar male bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT heterozygote	Elevated plus-maze	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with neutral bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT heterozygote	Elevated plus-maze	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with unfamiliar male bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT heterozygote	Light/dark test	5-HTT mice (50-day-old)			o	Mice were offsprings of mothers treated with neutral bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT heterozygote	Light/dark test	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with unfamiliar male bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT heterozygote	Open-field	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated with neutral bedding	Heiming et al., 2009	Front. Behav. Neurosci. 3:26
Mutant mice	5-HTT heterozygote	Open-field	5-HTT mice (50-day-old)			-	Mice were offsprings of mothers treated	Heiming et al., 2009	Front. Behav. Neurosci. 3:26

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							with unfamiliar male bedding		
Mutant mice	5-HT_{1B}	Open-field	Sprague-Dawley rats (275-350g)			o	Receptor expression was reduced by viral-mediated gene transfer into dorsal raphe nucleus	McDevitt et al., 2011	Biol. Psychiatry 69:780-787
Mutant mice	5-HT_{1B}	Conditioned fear	Sprague-Dawley rats (275-350g)			+	Receptor expression was reduced by viral-mediated gene transfer into dorsal raphe nucleus	McDevitt et al., 2011	Biol. Psychiatry 69:780-787
Mutant mice	5-HTT knockout	Light/dark test	129P1xC57BL/6J mice			-		Carroll et al., 2007	Behav. Genet. 37:214-222
Mutant mice	5-HTT knockout	Light/dark test	129P1xC57BL/6J mice			-	Animals were subjected to early life stress	Carroll et al., 2007	Behav. Genet. 37:214-222
Mutant mice	5-HTT knockout	Open-field	129P1xC57BL/6J mice			-		Carroll et al., 2007	Behav. Genet. 37:214-222
Mutant mice	5-HTT knockout	Open-field	129P1xC57BL/6J mice			-	Animals were subjected to early life stress	Carroll et al., 2007	Behav. Genet. 37:214-222
Mutant mice	5-HT_{1A} receptor deletion	Elevated plus-maze	C57BL/6J (10-15-week-old)			-		Bortolozzi et al., 2012	Mol. Psychiatry 17:612-623
Mutant mice	5-HT_{3A}	Novelty-suppressed feeding	C57BL/6J mice (450-day-old)			o		Smit-Rigter et al., 2012	Neuropharmacology 62:865-870
Mutant mice	5-HT depletion	Elevated plus-maze	C57BL/6 (18-22-week-old)			+		Mosienko et al., 2012	Transl. Psychiatry 2:e122
Mutant mice	5-HT depletion	Marble burying	C57BL/6 (18-22-week-old)			+		Mosienko et al., 2012	Transl. Psychiatry 2:e122
Mutant mice	5-HT depletion	Novelty-suppressed feeding	C57BL/6 (18-22-week-old)			+		Mosienko et al., 2012	Transl. Psychiatry 2:e122

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice+8-OH-DPAT (0.1-1 mg/kg)	5-HT_{1A} knockout	Open-field	Female and male C57BL6/Jx129/sv mice			o	When compared to vehicle-treated -/- mice	Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
Mutant mice+Ad-1AP sense	5-HT_{1A} knockout	Elevated plus-maze	Female C57BL/6J background mice (5-8-month-old)			-	Knockout mice displayed increased anxiety-like behavior despite 5-HT_{1A} receptor restauration in the hypothalamus	Li et al., 2004	J. Neurosci. 24:10868-10877
Mutant mice+alcohol (2-4 g/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background			+	The anxiolytic-like activity seen in WT mice was still present in knockout animals	Pattij et al., 2002	Eur. J. Pharmacol. 447:67-74
Mutant mice+alprazolam (1-3 mg/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background			+	The anxiolytic-like activity seen in WT mice was still present in knockout animals	Pattij et al., 2002	Eur. J. Pharmacol. 447:67-74
Mutant mice+Buspirone (0.05-2.5 mg/kg)	5-HT_{1A} knockout	Open-field	Female and male C57BL6/Jx129/sv mice			o	When compared to vehicle-treated -/- mice	Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
Mutant mice+diazepam (0.1-1 mg/kg)	5-HT_{1A} knockout	Open-field	129SVxSwiss-Webster background mice			(o)	Diazepam lost its ability to produce anxiolytic-like activity	Sibille et al., 2000	J. Neurosci. 20:2758-65
Mutant mice+diazepam (0.1-1 mg/kg)	5-HT_{1A} knockout	Elevated plus-maze	129SVxSwiss-Webster background mice			(o)	Diazepam lost its ability to produce anxiolytic-like activity	Sibille et al., 2000	J. Neurosci. 20:2758-65
Mutant mice+diazepam (0.2-1 mg/kg)	5-HT_{1A} knockout	Elevated plus-maze	Swiss background mice (2- to 5-month-old)			(o)	The anxiolytic-like activity seen in WT mice was	Bailey and Toth, 2004	J. Neurosci. 24:6343-6351

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							lost in knockout animals		
Mutant mice+diazepam (0.2-1 mg/kg)	5-HT_{1A} knockout	Elevated plus-maze	Swiss/B6 background mice (2- to 5-month-old)			(o)	The anxiolytic-like activity seen in WT mice was lost in knockout animals	Bailey and Toth, 2004	J. Neurosci. 24:6343-6351
Mutant mice+diazepam (1 mg/kg)	5-HT_{1A} knockout	Elevated plus-maze	129/Sv background			+	The anxiolytic-like activity seen in WT mice was still present in knockout animals	Pattij et al., 2002	Eur. J. Pharmacol. 447:67-74
Mutant mice+diazepam (1 mg/kg)	5-HT_{1A} knockout	Elevated plus-maze	B6 background mice (2- to 5-month-old)			+	The anxiolytic-like activity seen in WT mice was still present in knockout animals	Bailey and Toth, 2004	J. Neurosci. 24:6343-6351
Mutant mice+Diazepam (1-4 mg/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv-ter background mice			+	The anxiolytic-like activity seen in WT mice was still present in knockout animals	Pattij et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S275
Mutant mice+Diazepam (4 mg/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background (12-week-old)			+		Pattij et al., 2002	Neuropsychopharmacology 27:380-390
Mutant mice+doxycycline (during development)	5-HT_{1A} knockout	Novelty-suppressed feeding	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (during development)	5-HT_{1A} knockout rescue	Novelty-suppressed feeding	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Reversal of anxious phenotype of 5-HT_{1A} knockout mice was no longer seen	Gross et al., 2002	Nature 416:396-400

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice+doxycycline (during development)	5-HT_{1A} knockout	Open-field	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (during development)	5-HT_{1A} knockout rescue	Open-field	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Reversal of anxious phenotype of 5-HT_{1A} knockout mice was no longer seen	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (during development)	5-HT_{1A} knockout	Elevated plus-maze	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (during development)	5-HT_{1A} knockout rescue	Elevated plus-maze	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Reversal of anxious phenotype of 5-HT_{1A} knockout mice was no longer seen	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (for 2 months)	5-HT_{1A} knockout	Novelty-suppressed feeding	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (for 2 months)	5-HT_{1A} knockout rescue	Novelty-suppressed feeding	Female and male 129/svxC57BL/6J mice (80-140-day-old)			(o)	Anxious phenotype of 5-HT_{1A} knockout mice was no longer seen despite 5-HT_{1A} turning off	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (for 2 months)	5-HT_{1A} knockout	Open-field	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (for 2 months)	5-HT_{1A} knockout rescue	Open-field	Female and male 129/svxC57BL/6J mice (80-140-day-old)			(o)	Anxious phenotype of 5-HT_{1A} knockout mice was no longer seen	Gross et al., 2002	Nature 416:396-400

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							despite 5-HT_{1A} turning off		
Mutant mice+doxycycline (for 2 months)	5-HT_{1A} knockout	Elevated plus-maze	Female and male 129/svxC57BL/6J mice (80-140-day-old)			-	Knockout animals were more anxious than WT mice	Gross et al., 2002	Nature 416:396-400
Mutant mice+doxycycline (for 2 months)	5-HT_{1A} knockout rescue	Elevated plus-maze	Female and male 129/svxC57BL/6J mice (80-140-day-old)			(o)	Anxious phenotype of 5-HT_{1A} knockout mice was no longer seen despite 5-HT_{1A} turning off	Gross et al., 2002	Nature 416:396-400
Mutant mice+Emx1-Cre	5-HT_{2A} knockout	Open-field	Mice			(o)	(1) Emx1-Cre restored 5-HT_{2A} function in the cortex; (2) Anxiolytic-like phenotype was lost	Weisstaub et al., 2006	Science 313:536-540
Mutant mice+Emx1-Cre	5-HT_{2A} knockout	Light/dark test	Mice			(o)	(1) Emx1-Cre restored 5-HT_{2A} function in the cortex; (2) Anxiolytic-like phenotype was lost	Weisstaub et al., 2006	Science 313:536-540
Mutant mice+Emx1-Cre	5-HT_{2A} knockout	Novelty-suppressed feeding	Mice			(o)	(1) Emx1-Cre restored 5-HT_{2A} function in the cortex; (2) Anxiolytic-like phenotype was lost	Weisstaub et al., 2006	Science 313:536-540
Mutant mice+Flesinoxan (0.3-3 mg/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv-ter background mice			o	The anxiolytic-like activity seen in WT mice was lost in knockout	Pattij et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S275

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							animals		
Mutant mice+flumazenil (3-30 mg/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background			o	No difference between genotypes	Pattij et al., 2002	Eur. J. Pharmacol. 447:67-74
Mutant mice+inhibition of neurons in the CeA+8-OH-DPAT (0.2-0.5 mg/kg)	5-HT_{1A} knockout	Conditioned fear	Mixed (C57BL6/J x CBA/J) x C57BL/6J background mice (>5-week-old)			(o)	Mice showed enhanced fear conditioning to ambiguous stimuli, which was suppressed by neuron inhibition in the central amygdala	Tsetsenis et al., 2007	Nat. Neurosci. 10:896-902
Mutant mice+inhibition of neurons in the DG+8-OH-DPAT (0.2-0.5 mg/kg)	5-HT_{1A} knockout	Conditioned fear	Mixed (C57BL6/J x CBA/J) x C57BL/6J background mice (>5-week-old)			(o)	Mice showed enhanced fear conditioning to ambiguous stimuli, which was suppressed by neuron inhibition in the dentate gyrus	Tsetsenis et al., 2007	Nat. Neurosci. 10:896-902
Mutant mice+mCPP (0.3-3 mg/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv-ter background mice			o	WT animals and knockout mice displayed similar phenotype	Pattij et al., 2000	Int. J. Neuropsychopharmacol. 3 (Suppl 1):S275
Mutant mice+pargyline (70 mg/kg for 3 weeks)	VMAT2	Ultrasound-induced defensive behaviors	VMAT2lox/loxxC57B6/6Jx SERTcre mice (2-3-month-old)			(o)		Narboux-Nême et al., 2011	Neuropsychopharmacology 36:2538-2550
Mutant mice+paroxetine (10 mg/kg)	5-HTT overexpression	Elevated plus-maze	CBAxC57BL/6J background mice (3-6-month-old)			(o)	Paroxetine normalized low anxiety in transgenic mice	Jennings et al., 2006	J. Neurosci. 26:8955-8964

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice+pentylenetetrazole (7.5-30 mg/kg)	5-HT_{1A} knockout	Stress-induced hyperthermia	129/Sv background			o	No difference between genotypes	Pattij et al., 2002	Eur. J. Pharmacol. 447:67-74
Mutant mice+WAY 100635 (0.03-0.3 mg/kg)	5-HT_{1A} knockout	Open-field	Female and male C57BL6/Jx129/sv mice			o	When compared to vehicle-treated -/- mice	Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
Mutant mice+WAY 100635 (0.05-0.3 mg/kg)	5-HT transporter knockout	Elevated plus-maze	Female C57BL/6J background mice (3-7-month old)			+		Holmes et al., 2003	Neuropsychopharmacology 28:2077-2088
Mutant rats	5-HT_{1B} overexpression in the DRN	Open-field	Sprague-Dawley rats (180-250g)		dorsal raphe nucleus, 3 days	+	Overexpression was achieved by using herpes simplex virus gene transfer	Clark et al., 2002	J. Neurosci. 22:4550-4562
Mutant rats	5-HT_{1B} overexpression in the DRN	Open-field	Sprague-Dawley rats (180-250g)		dorsal raphe nucleus, 3 days	-	(1) Following restraint stress; (2) Overexpression was achieved by using herpes simplex virus gene transfer	Clark et al., 2002	J. Neurosci. 22:4550-4562
Mutant rats	5-HT_{1B} overexpression in the DRN	Elevated plus-maze	Sprague-Dawley rats (180-250g)		dorsal raphe nucleus, 3 days	-	(1) Following restraint stress; (2) Overexpression was achieved by using herpes simplex virus gene transfer	Clark et al., 2002	J. Neurosci. 22:4550-4562
NAD-299	5-HT_{1A} antagonist	Conditioned fear	C57BL/6J (9-11-week-old)	0.3-1	sc, 20	-	(1) Shocks of 0.7 mA/2 s were applied; (2) The drug affected both context- and tone-dependent fear conditioning	Youn et al., 2009	Neuropharmacology 5:567-576

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NAN-190	5-HT_{1A} antagonist	Geller-Seifter conflict test	Wistar rats (250-300g)	0.06-2	ip, 30	+	Modified test and FR1/FR8	Hascoët et al., 1994	J. Psychopharmacol. 8:227-237
NAN-190	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (180-220g)	0.25-1	ip, 60	o	Modified Vogel test	Chojnacka-Wójcik and Przegalinski, 1991	Neuropharmacology 30:711-717
NAN-190	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (180-220g)	0.25-0.5	ip, 90	o	0.5 mA	Przegalinski et al., 1994	Pharmacol. Biochem. Behav. 47:873-878
NAN-190	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (230-270g)	0.5-1	ip, 60	o		Przegalinski et al., 1994	Neuropharmacology 33:1109-1115
NAN-190	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (230-270g)	0.1-1g	hippocampus, 20	o		Przegalinski et al., 1994	Neuropharmacology 33:1109-1115
NAN-190	5-HT_{1A} antagonist	Conflict test	White Carneau Pigeons	1-3	im, 15	o	FR30	Ahlers et al., 1992	J. Pharmacol. Exp. Ther. 260:474-481
NAN-190	5-HT_{1A} antagonist	Conflict test	Pigeons	0.16-2.5	im, 5	o	FR30	Colpaert et al., 1992	Drug Dev. Res. 26:21-48
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	o		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	CD rats (160-200g)	0.003-3	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
NAN-190	5-HT_{1A} antagonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	0.01-10	sc, 30	o		Bill and Fletcher, 1994	Br. J. Pharmacol. 111:151P
NAN-190	5-HT_{1A} antagonist	Passive-avoidance test	Wistar rats (220-240g)	2	ip, 30	-		Sanger and Joly, 1989	Behav. Pharmacol. 1:153-160
NAN-190	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.015	sc, 30	+	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
NAN-190	5-HT_{1A} antagonist	DPAG stimulation	Wistar rats (200-250g)	40 nmol	dorsal PAG, 10	o		Nogueira and Graeff, 1995	Pharmacol. Biochem. Behav. 52:1-6

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NAN-190	5-HT_{1A} antagonist	Conditioned fear	Sprague-Dawley rats (250-300g)	1	sc, 40	o		Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
NAN-190	5-HT_{1A} antagonist	Isolation-induced aggression	CDY mice (18-22g)	ED50=0.98	ip, 20	+		Chamberlain, 1996	Soc. Neurosci. Abstr. 22:1584
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-240g)	1 µg	right CA1 hippocampal area	-		Belcheva et al., 1997	Gen. Pharmacol. 28:435-441
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-240g)	1 µg	left CA1 hippocampal area	-		Belcheva et al., 1997	Gen. Pharmacol. 28:435-441
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-240g)	1 µg	bilateral CA1 hippocampal area	-		Belcheva et al., 1997	Gen. Pharmacol. 28:435-441
NAN-190	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (200-240g)	1 µg	right CA1 hippocampal area	-	Shocks of 0.5 mA/0.2 s	Belcheva et al., 1997	Gen. Pharmacol. 28:435-441
NAN-190	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (200-240g)	1 µg	left CA1 hippocampal area	-	Shocks of 0.5 mA/0.2 s	Belcheva et al., 1997	Gen. Pharmacol. 28:435-441
NAN-190	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (200-240g)	1 µg	bilateral CA1 hippocampal area	-	Shocks of 0.5 mA/0.2 s	Belcheva et al., 1997	Gen. Pharmacol. 28:435-441
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster (8-9 week-old)	0.1-10	ip, 30	o		Cao and Rodgers, 1997	Pharmacol. Biochem. Behav. 58:593-603
NAN-190	5-HT_{1A} antagonist	Conditioned fear	Sprague-Dawley rats (230-270g)	0.1-10	ip, 75	o	Rats received inescapable electric footshocks (2.5 mA, 10 ms every 100 ms)	Cao and Rodgers, 1998	Psychopharmacology 139:185-194
NAN-190	5-HT_{1A} antagonist	Conflict test	White Carneau pigeons (500-650g)	0.02-2	im, 5	o		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NAN-190	5-HT_{1A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3-3	ip, 30	+		Griebel et al., 1999	Psychopharmacology 144:121-130
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (25-30g)	5.6-10 nmol/0.4 µl	amygdala, 3	o		Nunes-de-Souza et al., 2000	Psychopharmacology 150:300-10
NAN-190	5-HT_{1A} antagonist	Stress-induced analgesia	Swiss mice (25-30g)	5.6-10 nmol/0.4 µl	amygdala, 3	o		Nunes-de-Souza et al., 2000	Psychopharmacology 150:300-10
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	0.25-0.5	ip, 45	o		Clénet et al., 2005	Behav. Brain Res. 158:339-348
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Female Wistar rats (180-200g)	0.1	ip, for 14 days, o.d.	+	Rats were tested either in the metestrus, diestrus, proestrus or estrus phase of the cycle	Fedotova et al., 2004	Acta Physiologica Hungarica 91:175-184
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Ovariectomized female Wistar rats (180-200g)	0.1	ip, for 14 days, o.d.	o	Rats were tested in presence or not of 17b-estradiol (0.5 µg i.m./rat/day)	Fedotova et al., 2004	Acta Physiologica Hungarica 91:175-184
NAN-190	5-HT_{1A} antagonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	0.3	ip, for 28 days	-		Zhang et al., 2010	J. Neurosci. 30:2433-2441
NAN-190	5-HT_{1A} antagonist	Novelty-suppressed feeding	NOS KO (B6x129-$NOS1^{tm1plh}$, 6-7-week-old)	0.3	ip, for 28 days	-		Zhang et al., 2010	J. Neurosci. 30:2433-2441
NAN-190	5-HT_{1A} antagonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	4.74 µg/1 µl	hippocampus, 30	-		Zhang et al., 2010	J. Neurosci. 30:2433-2441
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	B6129SF2 mice (6-7-week-old)	4.74 µg/1 µl	hippocampus, 21 days	-		Zhang et al., 2010	J. Neurosci. 30:2433-2441
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	o	Rats were tested during their	Fedotova, 2010	Ross. Fiziol. Zh. Im. I. M. Sechenova 96:426-432

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							estrous cycle		
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	o	Rats were tested during their proestrous cycle	Fedotova, 2010	Ross. Fiziol. Zh. Im. I. M. Sechenova 96:426-432
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	-	Rats were tested during their estrous cycle	Fedotova and Ordyan, 2010	Bull. Exp. Biol. Med. 150:165-167
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Female rats	0.1	ip, for 14 days	+	Rats were tested during their proestrous cycle	Fedotova and Ordyan, 2010	Bull. Exp. Biol. Med. 150:165-167
NAN-190	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (30g)	1.3 µmol	ip, 30	o		de Brito et al., 2012	Life Sci. 90:910-916
NAN-190+7-NI (16.31 µg/1µl)	5-HT_{1A} antagonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	4.74 µg/1 µl	hippocampus, 21 days	(o)		Zhang et al., 2010	J. Neurosci. 30:2433-2441
NAN-190+7-NI (16.31 µg/1µl)	5-HT_{1A} antagonist	Elevated plus-maze	B6129SF2 mice (6-7-week-old)	4.74 µg/1 µl	hippocampus, 21 days	(o)		Zhang et al., 2010	J. Neurosci. 30:2433-2441
NAN-190+7-NI (30 mg/kg for 28 days)	5-HT_{1A} antagonist	Novelty-suppressed feeding	B6129SF2 mice (6-7-week-old)	0.3	ip, for 28 days	(o)		Zhang et al., 2010	J. Neurosci. 30:2433-2441
NAN-190+EO (500 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (30g)	0.5	ip, 30	(o)	NAN-190 blocked the anxiolytic-like effects of essential oil	Galdino et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 38:276-284
NAN-190+EO (500 mg/kg)	5-HT_{1A} antagonist	Light/dark test	Swiss mice (30g)	0.5	ip, 30	(o)	NAN-190 blocked the anxiolytic-like effects of essential oil	Galdino et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 38:276-284
NAN-190+LQFM008 (100 µmol/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (30g)	1.3 µmol	ip, 30	(o)	Antagonism of the anxiolytic-like effects of LQFM008	de Brito et al., 2012	Life Sci. 90:910-916
NAN-190+β-caryophyllene (200 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (30g)	0.5	ip, 30	+	NAN-190 did not block the anxiolytic-like effects of β-	Galdino et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 38:276-284

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							caryophyllene		
NAN-190+β-caryophyllene (200 mg/kg)	5-HT_{1A} antagonist	Light/dark test	Swiss mice (30g)	0.5	ip, 30	+	NAN-190 did not block the anxiolytic-like effects of β-caryophyllene	Galdino et al., 2012	Prog. Neuropsychopharmacol. Biol. Psychiatry 38:276-284
NDO 008	5-HT_{1A} agonist	Elevated plus-maze	Rats	1-4		-		Kostowski et al., 1990	Psychopharmacology 101:S31
NDO 008	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (345-445g)	0.06-0.125, 2-4	ip, 30	-		Kostowski et al., 1992	Pharmacol. Toxicol. 71:24-30
NDO 008	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (345-445g)	0.125	ip, 30	+		Kostowski et al., 1992	Pharmacol. Toxicol. 71:24-30
NDO 008	5-HT_{1A} agonist	Open-field	Rats (180-220g)	1-5 µg	nucleus accumbens, 5	o		Plaznik et al., 1991	Pharmacol. Biochem. Behav. 39:43-48
Noname ((+)-11a)	5-HT_{1A} full agonist	Light/dark test	Mice	MED=7.5	ip	+		Comoy et al., 1996	J. Med. Chem. 39:4285-4298
Noname ((+)-11a)	5-HT_{1A} full agonist	Elevated plus-maze			ip	o		Comoy et al., 1996	J. Med. Chem. 39:4285-4298
Noname (1h)	5-HT_{1A} agonist	Social interaction	Mice	ED50=3.58	sc, 30	+		López-Rodríguez et al., 1996	J. Med. Chem. 39:4439-4450
Noname (4j)	5-HT_{1A} agonist	Social interaction	Mice	ED50=1.25	sc, 30	+		López-Rodríguez et al., 1996	J. Med. Chem. 39:4439-4450
Olanzapine	Non selective 5-HT_{2A} antagonist	Conflict test	White Carneau pigeons	0.03-0.3	im, 15	+	FR30/FR30	Benvenga and Leander, 1995	Psychopharmacology 119:133-138
Olanzapine	Non selective 5-HT_{2A} antagonist	Marble burying	NMRI mice (20-22g)	2.5	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
Olanzapine	Non selective 5-HT_{2A} antagonist	Passive-avoidance test	Wistar rats (175-220g)	0.1-3	ip, 30	o		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Olanzapine	Non selective 5-HT_{2A} antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (180-200g)	3	ip, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
Olanzapine	Non selective 5-HT_{2A} antagonist	Social interaction	Sprague-Dawley rats (180-200g)	0.3-1	ip, 30	o		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
Olanzapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Conditioned avoidance	Sprague-Dawley rats (275-325g)	2	ip, for 7 days	+	Shocks of 0.8 mA/5 s were applied	Mead et al., 2008	Pharmaco. Biochem Behav. 90:551-562
Olanzapine	Non selective 5-HT_{2A} antagonist	Open-field	BALB/c ByJ mice (7-8-week-old)	2.5	ip, for 5 weeks	+		Mutlu et al., 2012	Life Sci. 91:1252-1262
Olanzapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Open-field	BALB/c ByJ mice (7-8-week-old)	2.5	ip, for 5 weeks	+	Mice were subjected to unpredictable chonic mild stress for 7 weeks	Mutlu et al., 2012	Life Sci. 91:1252-1262
Olanzapine	Non selective 5-HT_{2A} antagonist	Novelty-suppressed feeding	BALB/c ByJ mice (7-8-week-old)	2.5	ip, for 5 weeks	o		Mutlu et al., 2012	Life Sci. 91:1252-1262
Olanzapine	Non-selective 5-$HT_{2A/2C}$ antagonist	Novelty-suppressed feeding	BALB/c ByJ mice (7-8-week-old)	2.5	ip, for 5 weeks	o	Mice were subjected to unpredictable chonic mild stress for 7 weeks	Mutlu et al., 2012	Life Sci. 91:1252-1262
Ondansetron	5-HT_3 antagonist	Geller-Seifter conflict test	Lister rats (200-250g)	0.0005-5	po	o		Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P
Ondansetron	5-HT_3 antagonist	Geller-Seifter conflict test	Rats	0.01-0.1		o		Dunn et al., 1990	FASEB J. 4:A812
Ondansetron	5-HT_3 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	0.001-0.1	sc, 30	o		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Rats	0.0005-1.6	ip	o		Jones et al., 1987	Br. J. Pharmacol. 90 (Suppl.):88P
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Lister rats	0.01-0.1	ip, 30	o		Jones et al., 1988	Br. J. Pharmacol. 93:985-993
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Lister rats (200-250g)	0.0005-5	po	o		Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats (300-350g)	0.05-0.3	ip 30	o	Modified Vogel test	Dunn et al., 1991	J. Neurochem. 57:1615-1622
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Lister rats (210-280g)	0.0001-0.01	amygdala, 5	o	Modified Vogel test	Higgins et al., 1991	Psychopharmacology 104:545-551
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats	0.00001-0.015	nucleus accumbens	o		Stefanski et al., 1993	Neuropharmacology 32:987-993
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Rats		accumbens	+		Cutler, 1991	Neuropharmacology 30:299-306
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats (180-220g)	0.1-1.5	ip, 30	+	Modified Vogel test	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Rats	1.5		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats	0.001-0.0025	hippocampus	+		Stefanski et al., 1993	Neuropharmacology 32:987-993
Ondansetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats (180-220g)	0.25-1	ip, 30	+	0.1 mA, 2 s	Artaiz et al., 1995	Psychopharmacology 117:137-148
Ondansetron	5-HT_3 antagonist	Conflict test	White Carneau Pigeons	0.001-1	im, 5	-		Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
Ondansetron	5-HT_3 antagonist	Conflict test	Cynomolgus monkeys	0.01-0.1	po	+		Jones et al., 1987	Br. J. Pharmacol. 90 (Suppl.):88P
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Rats	0.01-1	po, 60	o		Johnston and File,	Psychiatry Res. 25:81-90

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								1988	
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (150-200g)	0.1	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Lister rats (200-270g)	0.01-1	ip, 30	o		Wright et al., 1992	Psychopharmacology 107:405-414
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats	0.0075-0.015	sc, 25	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats	0.0075-0.015	sc, 45	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (180-220g)	0.1-2	ip, 30	o		Artaiz et al., 1995	Psychopharmacology 117:137-148
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	0.001-0.1	ip, 45	o	Additional measures of anxiety	Rodgers et al., 1995	Psychopharmacology 117:306-312
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Rats	0.01-0.1		+		Dunn et al., 1990	FASEB J. 4:A812
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Lister rats	0.000001	amygdala	+	Observartions during 10 min	Tomkins et al., 1990	J. Psychopharmacol. 4: 262P
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.05-0.1	ip, 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar CFY rats (250-300g)	0.0001-0.1	po, 30	+		Upton and Blackburn, 1991	Br. J. Pharmacol. 102 (Suppl.):253P
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Lister rats (200-270g)	0.01	ip, for 2 weeks (b.i.d.)	+		Wright et al., 1992	Psychopharmacology 107:405-414
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Long-Evans Rats 240-260g)	0.04	ip, 60	+		Prather et al., 1993	J. Pharmacol. Exp. Ther. 264:622-630
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Female rats (160-180g)	0.01	ip, 30	+		Vasar et al., 1993	Psychopharmacology 110:213-218
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (180-200g)	0.1	ip, for 14 days (b.i.d.)	+		Bhattachary a et al., 1995	Neurosci. Lett. 199:103-106
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	+		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	Elevated zero-maze	Sprague-Dawley rats	0.01	sc, 30	+		Grewal et al., 1993	In: British Association for Psychopharmacology, A19
Ondansetron	5-HT_3 antagonist	Light/dark test	Wistar rats (21-day-old)	0.001-1	ip, 50	o		Morinan, 1989	Br. J. Pharmacol. 97 (Suppl.):457P
Ondansetron	5-HT_3 antagonist	Light/dark test	DAP mice	0.001-10	po, 30	o	Asymmetric compartments	Mos et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 389-395
Ondansetron	5-HT_3 antagonist	Light/dark test	Wistar rats (150-200g)	0.1	30	o	Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Ondansetron	5-HT_3 antagonist	Light/dark test	Mice	0.00005-0.01	ip	+	Asymmetric compartments and rears	Costall et al., 1987	Br. J. Pharmacol. 92:881-894
Ondansetron	5-HT_3 antagonist	Light/dark test	Mice	0.00005-0.01	ip	+	Asymmetric compartments	Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68
Ondansetron	5-HT_3 antagonist	Light/dark test	Mice	0.00005-0.01	ip	+	Asymmetric compartments	Costall et al., 1988	Rev. Neurosci. 2:41-65
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice	0.00005-0.01	ip, 45	+	Asymmetric compartments	Jones et al., 1988	Br. J. Pharmacol. 93:985-993
Ondansetron	5-HT_3 antagonist	Light/dark test	Mice	0.0001-1	ip	+		Young and Johnson, 1988	Soc. Neurosci. Abstr. 14:207
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (25-30g)	0.0000001-0.00001	dorsal raphe	+	Asymmetric compartments	Costall et al., 1989	Br. J. Pharmacol. 96:325-332
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (25-30g)	0.0000001-0.00001	amygdala	+	Asymmetric compartments	Costall et al., 1989	Br. J. Pharmacol. 96:325-332
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (25-30g)	0.0001	median raphe	+	Asymmetric compartments and weak effect	Costall et al., 1989	Br. J. Pharmacol. 96:325-332
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice	0.5-5	ip, 45	+	Asymmetric compartments and rears	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (25-30g)	0.00005-1	ip, 45	+	Asymmetric compartments	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	Light/dark test	DAP mice	0.1	sc, 30	+	Asymmetric compartments	Mos et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 389-395
Ondansetron	5-HT_3 antagonist	Light/dark test	Mice	0.00005-0.01	ip, 30	+	Asymmetric compartments	Costall and Naylor, 1991	Therapie 46:437-444
Ondansetron	5-HT_3 antagonist	Light/dark test	Female ICR-DUB mice (17-35g)	0.01-0.1	ip, 30	+	Asymmetric compartments	Young and Johnson, 1991	Pharmacol. Biochem. Behav. 40:739-743
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.00001-0.1	ip, 45	+	Asymmetric compartments	Barnes et al., 1992	Eur. J. Pharmacol. 218:15-25
Ondansetron	5-HT_3 antagonist	Light/dark test	Female T/O mice (22-30g)	0.001-01	sc, 30	+	Asymmetric compartments	Bill et al., 1992	Eur. J. Pharmacol. 218:327-334
Ondansetron	5-HT_3 antagonist	Light/dark test	C57 mice	0.001-3	po, 30	+	Asymmetric compartments	Fontana et al., 1992	Pharmacol. Biochem. Behav. 43:697-704
Ondansetron	5-HT_3 antagonist	Light/dark test	CD1 mice (20-22g)	0.001	ip, 45	+	Asymmetric compartments	Borsini et al., 1993	Pharmacol. Res. 27:151-164
Ondansetron	5-HT_3 antagonist	Light/dark test	Mice	0.0001-0.1	ip, 40	+		Costall and Naylor, 1993	Int. Clin. Psychopharmacol. 8 Suppl 2:11-18
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (30-36g)	0.01-0.1	ip, 40	+	Asymmetric compartments	Cheng et al., 1994	Eur. J. Pharmacol. 255:39-49
Ondansetron	5-HT_3 antagonist	Light/dark test	C57BL/6 mice (18-25g)	0.0000003-3	po, 30	+	Asymmetric compartments	Eglen et al., 1994	Neuropharmacology 33:227-234
Ondansetron	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	0.0005-0.004	ip, 45	+	Asymmetric compartments	Artaiz et al., 1995	Psychopharmacology 117:137-148
Ondansetron	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	0.004-0.1	po, 60	+	Asymmetric compartments	Artaiz et al., 1995	Psychopharmacology 117:137-148
Ondansetron	5-HT_3 antagonist	Light/dark test	Lundbeck mice strain (30-35g)	3-15 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Ondansetron	5-HT_3 antagonist	Holeboard	Wistar rats (150-200g)	0.1	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Ondansetron	5-HT_3 antagonist	Open-field	Wistar rats (250-270g)	0.25-20	ip, 60	o		Papp and Przegalinski, 1989	J. Psychopharmacol. 3:14-20
Ondansetron	5-HT_3 antagonist	Open-field	Wistar rats	0.0005-0.005	hippocampus	o		Stefanski et al., 1993	Neuropharmacology 32:987-993

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	Open-field	Rats		accumbens	+		Plaznik et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 190
Ondansetron	5-HT_3 antagonist	Open-field	Wistar rats (180-220g)	0.1-1.5	ip, 30	+	65 dB noise	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Ondansetron	5-HT_3 antagonist	Open-field	Rats	0.001-0.1		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Ondansetron	5-HT_3 antagonist	Open-field	Wistar rats	0.001-0.0025	nucleus accumbens	+		Stefanski et al., 1993	Neuropharmacology 32:987-993
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.01-1	po, 60	o	HLU	Johnston and File, 1988	Psychiatry Res. 25:81-90
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (250g)	0.1-1	po, 60	o		File and Johnston, 1989	Psychopharmacology 99:248-251
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.1-1	po, 60	o	HLU	File, 1990	In: Neurobiology of Panic Disorder, pp. 31-48
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.1-1	po, 60	o	LLF	File, 1990	In: Neurobiology of Panic Disorder, pp. 31-48
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (210-280g)	0.0001-0.001	amygdala, 5	o	LLF	Higgins et al., 1991	Psychopharmacology 104:545-551
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (210-280g)	0.00005-0.005	dorsal raphe, 5	o	HLU	Higgins et al., 1991	Psychopharmacology 104:545-551
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.00005-0.01	ip	+		Costall et al., 1987	Br. J. Pharmacol. 92:881-894
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (180-230g)	0.0005-0.1	po, 45	+	HLU	Jones et al., 1987	Br. J. Pharmacol. 90 (Suppl.):88P
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.0005-0.1	po, 45	+	HLU	Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (200-250g)	0.001-1	po, 45	+		Jones et al., 1988	Br. J. Pharmacol. 93:985-993
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (200-250g)	0.1-10	po	+	HLU	Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (200-250g)	0.0005-0.1	po, 45	+	HLU	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.01-1		+		Dunn et al., 1990	FASEB J. 4:A812
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.01-1	ip, 45	+		Costall and Naylor, 1991	Therapie 46:437-444
Ondansetron	5-HT_3 antagonist	Social interaction	Wistar rats (250-300g)	0.05	ip, 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622
Ondansetron	5-HT_3 antagonist	Social interaction	Lister rats (210-280g)	0.0000001-0.0001	amygdala, 5	+	HLU	Higgins et al., 1991	Psychopharmacology 104:545-551
Ondansetron	5-HT_3 antagonist	Social interaction	Rats	0.001-0.1	ip, 40	+		Costall and Naylor, 1993	Int. Clin. Psychopharmacol. 8 Suppl 2:11-18
Ondansetron	5-HT_3 antagonist	Social interaction	Lister-hooded rats (5 and 20 months)	0.001-0.01		+		Cheng et al., 1995	Br. J. Psychiatry 166:265-266
Ondansetron	5-HT_3 antagonist	Defense test battery	Female and male Long-Evans rats (154-253 day-old)	0.001-0.1	ip, 45	o		Shepherd et al., 1993	J. Psychopharmacol. 7:72-81
Ondansetron	5-HT_3 antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	0.001-1	ip, 45	o	0.5 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254
Ondansetron	5-HT_3 antagonist	Fear-potentiated startle reflex	Lister rats (375-415g)	0.01-0.1	ip, 45	+		Glenn and Green, 1989	Behav. Pharmacol. 1:91-94
Ondansetron	5-HT_3 antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	0.001-1	ip, 45	+	0.25 mA	Nevins and Anthony, 1994	J. Pharmacol. Exp. Ther. 268:248-254
Ondansetron	5-HT_3 antagonist	Novelty-suppressed feeding	Rats	0.001		+		Rex et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 147
Ondansetron	5-HT_3 antagonist	Ultrasonic distress	Rats	0.001-1	ip, 30	o		Mos et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 389-395

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		vocalizations							
Ondansetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Ondansetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Ondansetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats	0.00001-0.01	ip, 15	o		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Ondansetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats (180-280g)	0.001-0.1	ip, 30	o	0.8 mA, 8 s electric shock	Molewijk et al., 1995	Psychopharmacology 117:32-40
Ondansetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	2.5-5	30	+		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487
Ondansetron	5-HT_3 antagonist	Marble burying	Female MF1 mice (23-35g)	0.01-1	ip, 30	o		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Ondansetron	5-HT_3 antagonist	Stress-induced hyperthermia	Swiss mice (25-30g)	0.0001-0.1	ip, 45	o		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230
Ondansetron	5-HT_3 antagonist	Stress-induced hyperthermia	CD1 mice	0.01-0.1	ip, 30	o		Borsini et al., 1993	Pharmacol. Res. 27:151-164
Ondansetron	5-HT_3 antagonist	Stress-induced hyperthermia	NMRI mice (12-14g)	0.001-0.1	ip, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Ondansetron	5-HT_3 antagonist	Four-plate test	Female DAP mice	0.001-10	po, 30	o		Mos et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 389-395

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	Four-plate test	Female DAP mice	0.001	sc, 30	+		Mos et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 389-395
Ondansetron	5-HT_3 antagonist	Free observation	Cynomolgus monkeys (3.1-5.4 kg)	0.01-0.1	po	+		Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68
Ondansetron	5-HT_3 antagonist	Free observation		0.01-0.1	po	+		Jones et al., 1988	Br. J. Pharmacol. 93:985-993
Ondansetron	5-HT_3 antagonist	Free observation		0.01-0.1	po	+	Weak effect	Piper et al., 1988	Br. J. Pharmacol. 94 (Suppl.):314P
Ondansetron	5-HT_3 antagonist	Agonistic behavior	Cynomolgus monkeys	0.1	po, for 5 h	+		Borsini et al., 1993	Pharmacol. Res. 27:151-164
Ondansetron	5-HT_3 antagonist	Human threat	Marmoset Callithrix jacchus (350-400g)	0.0001-0.01	sc, 45	+		Jones et al., 1988	Br. J. Pharmacol. 93:985-993
Ondansetron	5-HT_3 antagonist	Human threat		0.001	ip	+		Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68
Ondansetron	5-HT_3 antagonist	Human threat	Marmoset	0.0001-0.001		+		Costall et al., 1988	Rev. Neurosci. 2:41-65
Ondansetron	5-HT_3 antagonist	Human threat	Marmoset Callithrix jacchus (295-335g)	0.1-1	sc, 45	+		Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Ondansetron	5-HT_3 antagonist	Human threat	Cynomolgus monkeys	0.01-0.1	po, for 15 days (o.d.)	+		Piper et al., 1992	In: 2nd International Symposium on Serotonin, from Cell Biology to Pharmacology and Therapeutics, p. 16
Ondansetron	5-HT_3 antagonist	Passive-avoidance test	Wistar rats (250-270g)	0.125-1	ip, 60	+		Papp and Przegalinski, 1989	J. Psychopharmacol. 3:14-20
Ondansetron	5-HT_3 antagonist	Passive-avoidance test	Wistar rats (220-240g)	0.0625-0.5	ip, 30	+	Weak effect	Sanger and Joly, 1989	Behav. Pharmacol. 1:153-160
Ondansetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.22	sc, 30	o	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	DPAG stimulation	Wistar rats (370-450g)	0.1-10	ip, 35	o		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
Ondansetron	5-HT_3 antagonist	Distress vocalizations	Guinea pig pups (5 day-old)	0.001-0.1	ip	o		Molewijk et al., 1996	Psychopharmacology 128:31-38
Ondansetron	5-HT_3 antagonist	Social interaction	CD1 mice (23-45g)	0.1-100 µg/kg	ip, for 21 days (o.d.)	o		Cutler et al., 1997	Pharmacol. Biochem. Behav. 56:287-293
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	CD1 mice (23-45g)	0.1-100 µg/kg	ip, for 21 days (o.d.)	o		Rodgers et al., 1997	Pharmacol. Biochem. Behav. 57:127-136
Ondansetron	5-HT_3 antagonist	Mirrored chamber	Female and male BALB/c mice (20-25g)	0.01-1	ip, 30	+		Roychoudhury and Kulkarni, 1997	Methods Find. Exp. Clin. Pharmacol. 19:107-111
Ondansetron	5-HT_3 antagonist	Light/dark test	Wistar rats (200-250g)	1-3	sc, 30	+	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.01	sc, 30	+		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.1-10 µg	ip, 40	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
Ondansetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	0.1	ip, 30	o	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
Ondansetron	5-HT_3 antagonist	Pinch-induced catalepsy	Female and male Swiss mice (25-30g)	0.1	ip, 30	+	The drug shortened the duration of catalepsy	Fundaro, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:147-158
Ondansetron	5-HT_3 antagonist	Open-field	Wistar rats (175-225g)	0.0003	ip, 0	+	Latency to eat in the open-field was reduced	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
Ondansetron	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	0.004-0.02	ip, 30	+	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron	5-HT_3 antagonist	Light/dark test	BKW mice (25-30g)	0.0001	ip, 40	+	The latency to enter the dark compartment was increased	Costall and Naylor, 1998	Br. J. Pharmacol. 123:243P
Ondansetron	5-HT_3 antagonist	Light/dark test	Wistar rats (180-220g)	0.1-0.3	ip, 60	+		Nowakowska et al., 1998	Pharmacol. Biochem. Behav. 59:935-938
Ondansetron	5-HT_3 antagonist	Conflict test	Adult Columbia libia pigeons	0.1	im, 0	+	Low shock intensity (ie punished rate was 10% of unpunished rate)	Castejón and Cubeddu, 1998	Pharmacol. Biochem. Behav. 61:451-457
Ondansetron	5-HT_3 antagonist	Conflict test	Adult Columbia libia pigeons	0.1	im, 0	o	High shock intensity (ie punished rate was 5% of unpunished rate)	Castejón and Cubeddu, 1998	Pharmacol. Biochem. Behav. 61:451-457
Ondansetron	5-HT_3 antagonist	Social interaction	Sprague-Dawley rats	0,16	sc, 30	o		Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (300-350g)	4	ip, 30	+		Skrebuhhova-Malmros et al., 1999	Med. Sci. Res. 27:835-837
Ondansetron	5-HT_3 antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.16	sc, 45	o	HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Ondansetron	5-HT_3 antagonist	Social interaction	Wistar rats (200-350g)	1	po, 60	+	HLU conditions	Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (200-350g)	0.001-1	po, 60	o		Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Swiss mice (4-week-old)	0.01	ip, 45	o		Bourin et al., 2001	Behav. Brain Res. 124:87-95
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Albino mice (22-25g)	0.5	ip, 30	+		Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
Ondansetron	5-HT_3 antagonist	Open-field	Albino mice (22-25g)	0.5	ip, 30	+		Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
Ondansetron	5-HT_3 antagonist	Elevated plus-maze	Female Swiss mice (25-35g)	0.1	ip, 30	o		Brüning et al., 2009	Behav. Brain Res. 205:511-517

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ondansetron+desipramine (10 mg/kg)	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (300-350g)	4	ip, 30	(-)	Potentiation of the anti-exploratory effects of desipramine	Skrebuhhova-Malmros et al., 1999	Med. Sci. Res. 27:835-837
Ondansetron+*m*-CF_3-$C_6H_4Se)_2$ (100 mg/kg)	5-HT_3 antagonist	Elevated plus-maze	Female Swiss mice (25-35g)	0.1	ip, 30	(o)	Blockade of the anxiolytic-like effects of m-CF_3-$C_6H_4Se)_2$	Brüning et al., 2009	Behav. Brain Res. 205:511-517
Ondansetron+mCPBG (1 mg/kg ip)	5-HT_3 antagonist	Social interaction	Wistar rats (200-350g)	1	po, 60	(o)	(1) Antagonism of the anxiolytic-like effects; (2) HLU conditions	Eguchi et al., 2001	Pharmacol. Biochem. Behav. 68:677-683
Ondansetron+trimyristin (10-100 mg/kg)	5-HT_3 antagonist	Elevated plus-maze	Albino mice (22-25g)	0.5	ip, 30	(o)	Blockade of the anxiolytic-like effects of ondansetron	Sonavane et al., 2002	Pharmacol. Biochem. Behav. 71:247-252
OPC-14523	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Stress-suppressed feeding	Rats	30	po, 60	+	Tail-pinch stress	Yamada et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S9
OPC-14523	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Marble burying	Mice	30-100	po, 60	+		Yamada et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S9
Org 12962	5-HT_{2C} full agonist	DPAG stimulation	Wistar rats (300g)	1-3	ip, 30	+		Jenck et al., 1998	Eur. Neuropsychopharmacol. 8:161-168
P_{1A}-5-HT_{1A}-AS-Ad	5-HT_{1A} antisense	Open-field	C57BL/6 mice (8-week-old, 20-25g)	10^{10} active viral particle/ml	amygdala, 6 days	-		Li et al., 2012	Neuropharmacology 62:474-484

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
P_{1A}-5-HT_{1A}-AS-Ad	5-HT_{1A} antisense	Elevated plus-maze	C57BL/6 mice (8-week-old, 20-25g)	10^{10} active viral particle/ml	amygdala, 6 days	-		Li et al., 2012	Neuropharmacology 62:474-484
P_{2C}-5-HT_{2C}-AS-Ad	5-HT_{2C} antisense	Open-field	C57BL/6 mice (8-week-old, 20-25g)	10^{10} active viral particle/ml	amygdala, 6 days	-		Li et al., 2012	Neuropharmacology 62:474-484
P_{2C}-5-HT_{2C}-AS-Ad	5-HT_{2C} antisense	Elevated plus-maze	C57BL/6 mice (8-week-old, 20-25g)	10^{10} active viral particle/ml	amygdala, 6 days	-		Li et al., 2012	Neuropharmacology 62:474-484
Paroxetine	5-HT reuptake inhibitor	Vogel conflict test	Wistar rats (220g)	5	ip, 30	o	Modified Vogel test	Petersen and Lassen, 1981	Psychopharmacology 75:236-239
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Lister rats (200-250g)	3	po, for 3 weeks (o.d.)	+		Cadogan et al., 1992	Neurosci. Lett. 42:S8
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (300g)	0.3-10	po, 60	o		Lightowler et al., 1994	Neuropharmacology 33:1581-1588
Paroxetine	5-HT reuptake inhibitor	Social interaction	CD rats	3	po, for 3 weeks (o.d.)	+		Lightowler et al., 1992	Br. J. Pharmacol. 106:44P
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (300g)	3	po, for 3 weeks (o.d.)	+		Lightowler et al., 1994	Neuropharmacology 33:1581-1588
Paroxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	1	sc	+		Winslow and Insel, 1991	Psychopharmacology 105:513-520
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250g)	10	po, for 21 days (o.d.)	o		Kennett et al., 1996	Br. J. Pharmacol. 117:1443-1448

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (200-250g)	0.0027 µmol/kg	sc, 30	+		Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Paroxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=0.86	sc, 30	+	Four 1.0 mV inescapable footshocks, each 10 s.	Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Paroxetine	5-HT reuptake inhibitor	Mirrored chamber	Mice	5		-		Fundarò and Ricci-Gamalero, 1997	Behav. Pharmacol. 8:647
Paroxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (180-200g)	3-10	ip, 60	+	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-220g)	2-8	30	-		Vasar et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S89
Paroxetine	5-HT reuptake inhibitor	Open-field	Wistar-Kyoto rats	10	ip, for 10 days (o.d.)	o		Paré et al., 1999	Soc. Neurosci. Abstr. 25:1583
Paroxetine	5-HT reuptake inhibitor	Open-field	Sprague-Dawley rats	10	ip, for 10 days (o.d.)	o		Paré et al., 1999	Soc. Neurosci. Abstr. 25:1583
Paroxetine	5-HT reuptake inhibitor	Open-field	Wistar rats	10	ip, for 10 days (o.d.)	o		Paré et al., 1999	Soc. Neurosci. Abstr. 25:1583
Paroxetine	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-16	ip, 30	+	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-350g)	3	po, o.d. for 21 days	+	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-350g)	3	po, o.d. for 14 days	o	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-350g)	3	po, o.d. for 7 days	o	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-350g)	3	po, 60	o	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
Paroxetine	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-16	ip, 30	+	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine	5-HT reuptake inhibitor	Light/dark test	Swiss mice (20-24g)	4-8	ip, 30	+		Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-220g)	0.1-2	ip, 30	o		Kõks et al., 2001	Psychopharmacology 153:365-372
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-220g)	0.5	ip, 30	-	Rats were handled prior to testing for 3 consecutive days in the experimental room	Kõks et al., 2001	Psychopharmacology 153:365-372
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Female Mongolian gerbils (30-50g)	3-10	po, 60	+	High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:357-370
Paroxetine	5-HT reuptake inhibitor	Tonic immobility	Dunkin Hartley guinea-pigs (600-800g)	0.55-8.8	sc, 30	o		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
Paroxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats			+	Four footshocks were delivered	Sanchez, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S66
Paroxetine	5-HT reuptake inhibitor	Light/dark test	NMRI mice	4.4	sc	+		Mork and Hogg, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S69
Paroxetine	5-HT reuptake inhibitor	Light/dark test	NMRI mice	8.8	sc, o.d. for 14 days	+		Mork and Hogg, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S69
Paroxetine	5-HT reuptake inhibitor	Schedule-induced polydipsia	Wistar rats	17.5	po, o.d. for 2 days	o		Hogg and Mork, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S65
Paroxetine	5-HT reuptake inhibitor	DPAG stimulation	Sprague-Dawley rats	ED50=2.9	ip, 30	+		Hogg and Jessa, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S151
Paroxetine	5-HT reuptake inhibitor	Mouse defense test battery	Swiss mice (30-45g)	5	po, 60	o		Beijamini and Andreatini, 2003	Pharmacol. Biochem. Behav. 74:1015-1024

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine	5-HT reuptake inhibitor	Mouse defense test battery	Swiss mice (30-45g)	5	po, for 7 days (o.d.)	o		Beijamini and Andreatini, 2003	Pharmacol. Biochem. Behav. 74:1015-1024
Paroxetine	5-HT reuptake inhibitor	Mouse defense test battery	Swiss mice (30-45g)	5	po, for 21 days (o.d.)	+	Flight, defensive aggression, but not risk assessment, were reduced	Beijamini and Andreatini, 2003	Pharmacol. Biochem. Behav. 74:1015-1024
Paroxetine	5-HT reuptake inhibitor	Stress-induced hyperthermia	ICR mice (7-week-old)	4-16	po, 60	o		Liu et al., 2003	J. Psychiat. Res. 37:249-259
Paroxetine	5-HT reuptake inhibitor	Balance control and posture	BALB/c mice (3-month-old)	5-10	sc, o.d. for 3 weeks	+	The drug reduced imbalances	Venault et al., 2001	Neuroreport 12:3091-3094
Paroxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-320g)	5	po, 24, 18 and 1h	+	The drug impaired inhibitory avoidance	Beijamini and Andreatini, 2003	Pharmacol. Res. 48:199-207
Paroxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-320g)	5	po, o.d. for 7 days	+	The drug impaired inhibitory avoidance	Beijamini and Andreatini, 2003	Pharmacol. Res. 48:199-207
Paroxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-320g)	5	po, o.d. for 7 days	+	The drug increased the latency to leave the open arm	Beijamini and Andreatini, 2003	Pharmacol. Res. 48:199-207
Paroxetine	5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	2-8	ip, 30	+	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Paroxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	ED50=0.17	sc, 45	+	To elicit ultrasonic vocalizations, pups were	Fish et al., 2004	J. Pharmacol. Exp. Ther. 308:474-480

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							placed on a 19°C surface for 4 min		
Paroxetine	5-HT reuptake inhibitor	Avoidance test	Wistar rats (7-week-old)		o.d.s for 2 weeks	+	The drug reduced hypervigilant behavior during the task session	Sawamura et al., 2004	Neurosci. Lett. 357:37-40
Paroxetine	5-HT reuptake inhibitor	Compulsive lever-pressing	Wistar rats (400-500g)	3-15	ip, 30	+	The drug reduced the number of compulsive lever-presses	Joel et al., 2004	Behav. Pharmacol. 15:241-252
Paroxetine	5-HT reuptake inhibitor	Conditioned avoidance	Wistar rats		for 2 weeks	+	(1) Animals were tested 2 weeks after inescapable footshocks; (2) The drug only reduced hyperarousal behaviors, but not avoidance	Shimizu et al., 2004	Nihon Shinkei Seishin Yakurigaku Zasshi 24:283-290
Paroxetine	5-HT reuptake inhibitor	Conditioned emotional response	Lister hooded rats (250-300g)	1-10	po, 40	o		Mirza et al., 2005	Psychopharmacology 180:159-168
Paroxetine	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-8	ip, 30	+	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2005	Psychopharmacology 180:73-83
Paroxetine	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-8	ip, 30	o	(1) Animals were exposed to the four-plate test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2005	Psychopharmacology 180:73-83

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	1-30	ip, 30	o		Troelsen et al., 2005	Psychopharmacology 181:741-750
Paroxetine	5-HT reuptake inhibitor	Marble burying	NIH Swiss mice (25-30g)	ED50=1.51	ip, 30	+		Saadat et al., 2006	J. Psychopharmacology 20:264-271
Paroxetine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Female and male Sprague-Dawley rat pups (9- to 11-day-old, 21-30g)	0.3-3	ip, 30	+		Iijima and Chaki, 2005	Pharmacol. Biochem. Behav. 82:652-657
Paroxetine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (260-280g)	ED50=2.9	ip, 30	+		Hogg et al., 2006	Neuropharmacology 51:141-145
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	CBAxC57BL/6J background mice (3-6-month-old)			o		Jennings et al., 2006	J. Neurosci. 26:8955-8964
Paroxetine	5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	10	po, b.i.d. for 28 days	+		Mirza et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:858-866
Paroxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (8-week-old)	0.03-0.1 mg/mL	drinking fluid, for 15 days	+	(1) Rats were subjected to single prolonged stress 14 days prior to testing; (2) Electric shocks of 0.8 mA/4 s were applied	Takahashi et al., 2006	Psychopharmacology 189:165-173
Paroxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (8-week-old)	2.5-10	po, b.i.d.	o	Electric shocks of 0.8 mA/4 s were applied	Takahashi et al., 2006	Psychopharmacology 189:165-173
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (265-384g)	3	po, for 4 days, o.d.	o		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (265-384g)	3	po, for 7 days, o.d.	o		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
Paroxetine	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (265-384g)	3	po, for 21 days, o.d.	+		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-300g)	3-12	ip, 30	-		Drapier et al., 2007	Behav. Brain Res. 176:202-209
Paroxetine	5-HT reuptake inhibitor	Holeboard	DBA/2OlaHsd mice (8-9-week-old)	10	po, for 29 days, b.i.d.	+	The holeboard was a modified version	Sillaber et al., 2008	Psychopharmacology 200:557-572
Paroxetine	5-HT reuptake inhibitor	Light/dark test	DBA/2OlaHsd mice (8-9-week-old)	10	po, for 29 days, b.i.d.	+	The holeboard was a modified version	Sillaber et al., 2008	Psychopharmacology 200:557-572
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	4	sc, for 3 weeks, o.d.	+	The drug prevented anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Light/dark test	C57BL/6J mice (18-23g)	4	sc, for 3 weeks, o.d.	+	The drug prevented anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	5 nmol/0.3 µl	cingulate cortex, for 3 days, o.d.	+	The drug prevented anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	4	sc, for 3 weeks, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Light/dark test	C57BL/6J mice (18-23g)	4	sc, for 3 weeks, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	5 nmol/0.3 µl	cingulate cortex, for 3 days, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	5 nmol/0.3 µl	basolateral amygdala, for 3 days, o.d.	+	The drug prevented anxiogenic-like effects induced	Matsuzawa-Yanagida et al., 2008	Neuropsychopharmacology 33:1952-1965

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							by chonic neuropathic pain		
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	5 nmol/0.3 µl	basolateral amygdala, for 3 days, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	5 nmol/0.3 µl	primary sensory cortex, for 3 days, o.d.	o	The drug did not prevent anxiogenic-like effects induced by chonic neuropathic pain	Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-300g)	5 nmol/0.3 µl	primary sensory cortex, for 3 days, o.d.	o		Matsuzawa-Yanagida et al., 2008	Neuropsychoparmacology 33:1952-1965
Paroxetine	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-350g)	10-20	ip, 30	+	(1) The drug reduced freezing when tested one but not 14 days after footshock; (2) Shocks of 2.5 mA/30 s were applied	Nishikawa et al., 2007	Eur. Neuropsychopharmacol. 17:643-450
Paroxetine	5-HT reuptake inhibitor	Open-field	Swiss mice (7-8-week-old, 23-25 g)	4	ip, 75	o		Deltheil et al., 2009	Int. J. Neuropsychopharmacol. 12:905-915
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Swiss mice (7-8-week-old, 23-25 g)	4	ip, 75	o		Deltheil et al., 2009	Int. J. Neuropsychopharmacol. 12:905-915
Paroxetine	5-HT reuptake inhibitor	Stress-induced hyperthermia	C57BL/6J mice (18-22g)	1-10	ip, 60	o		Rogacki et al., 2011	Pharmacol. Biochem. Behav. 98:405-411

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine	5-HT reuptake inhibitor	Distress vocalizations	Female Dunkan Hartley guinea pigs (350-500g, 6-week pregnant)	MED=10	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
Paroxetine	5-HT reuptake inhibitor	Marble burying	NMRI mice (25-30g)	ID_{50}=3.9	sc, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
Paroxetine	5-HT reuptake inhibitor	Social interaction	Mongolian gerbils (50-70g)	MED=0.63	sc, 30	-		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
Paroxetine	5-HT reuptake inhibitor	Vogel conflict test	Wistar rats (225-300g)	MED>40	ip, 30	o		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
Paroxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (55-day-old, 230-250g)	3	ig, 5	+		Roncon et al., 2011	Planta Med. 77:236-241
Paroxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (55-day-old, 230-250g)	3	ig, 5	o		Roncon et al., 2011	Planta Med. 77:236-241
Paroxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	0.5-3	ip, 90	o		Sela et al., 2010	Life Sci. 87:445-450
Paroxetine	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	3	ip, 90	+		Sela et al., 2010	Life Sci. 87:445-450
Paroxetine	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	3	po, 90	o		Sela et al., 2010	Life Sci. 87:445-450
Paroxetine	5-HT reuptake inhibitor	Escape behavior in the elevated	Wistar rats (230-250g)	3	po, 90	o		Sela et al., 2010	Life Sci. 87:445-450

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		T-maze							
Paroxetine	5-HT reuptake inhibitor	Stress-induced cognitive impairment	Swiss mice (20-22g)	20	ip, 60	+	Shocks of 1.5 mA/2 s were applied 2 weeks prior to testing in the object recognition procedure	Philbert et al., 2012	Pharmacol. Biochem. Behav. 102:415-422
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (220-250g)	10	ip, for 7 days, o.d.	o		Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
Paroxetine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (220-250g)	10	ip, for 7 days, o.d.	+	Animals were exposed a cat for 10 min, 7 days prior to testing	Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
Paroxetine	5-HT reuptake inhibitor	Stress-induced hyperthermia	C57BL/6 (17-22g)	0.3-3	po, 60	o		Hughes et al., 2012	Neuropharmacology doi: 10.1016/j.Neuropharmacology2012.04.007
Paroxetine	5-HT reuptake inhibitor	Ultrasound-induced defensive behaviors	Lister hooded rats (250-350g)	5-15	ip, 30	+	Rats received ultrasound pulse of 65, 72 and 75 dB	Graham et al., 1997	Br. J. Pharmacol. 120 (Suppl. 1):256P
Paroxetine	5-HT reuptake inhibitor	Ultrasound-induced defensive behaviors	Lister hooded rats (190-150g)	10	ip, for 6 weeks (o.d.)	+	Rats received ultrasound pulse of 91, 98 or 101 dB SPL	Graham et al., 1997	Br. J. Pharmacol. 120 (Suppl. 1):295P
Paroxetine+1-PP (0.06-0.5 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-16	ip, 30	(o)	(1) Blockade of the effects of paroxetine; (2) Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
Paroxetine+1-PP (0.06-0.5 mg/kg)	5-HT reuptake inhibitor	Light/dark test	Swiss mice (20-24g)	16	ip, 30	+	No interaction	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
Paroxetine+8-OH-DPAT (0.1 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-220g)	0.5	ip, 30	(o)	(1) Antagonism of the effects of paroxetine; (2) Rats were handled prior to	Kõks et al., 2001	Psychopharmacology 153:365-372

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							testing for 3 consecutive days in the experimental room		
Paroxetine+BDNF (100 ng/0.2 µl)	5-HT reuptake inhibitor	Open-field	Swiss mice (7-8-week-old, 23-25 g)	4	ip, 75	(o)	Blockade of the anxiogenic-like effects of intra-hippocampal BDNF	Deltheil et al., 2009	Int. J. Neuropsychopharmacol. 12:905-915
Paroxetine+BDNF (100 ng/0.2 µl)	5-HT reuptake inhibitor	Elevated plus-maze	Swiss mice (7-8-week-old, 23-25 g)	4	ip, 75	(o)	Blockade of the anxiogenic-like effects of intra-hippocampal BDNF	Deltheil et al., 2009	Int. J. Neuropsychopharmacol. 12:905-915
Paroxetine+buspirone (0.06-0.5 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-16	ip, 30	(+)	(1) Potentiation of the effects of paroxetine; (2) Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
Paroxetine+buspirone (0.06-0.5 mg/kg)	5-HT reuptake inhibitor	Light/dark test	Swiss mice (20-24g)	8	ip, 30	(+)	Potentiation of the effects of paroxetine	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 67:45-53
Paroxetine+BW 723C86 (0.5 and 2 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.25-1	ip, 30	(+)	(1) The effects of paroxetine were potentiated by BW 723C86; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Paroxetine+Deramciclane ((0.5-2 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-220g)	0.5	ip, 30	-	(1) No antagonism of the anxiogenic-like effects of paroxetine; (2) Rats were handled prior to testing for 3 consecutive days in the	Kõks et al., 2001	Psychopharmacology 153:365-372

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							experimental room		
Paroxetine+dexamethasone (0.5 mg/kg)	5-HT reuptake inhibitor	Stress-induced cognitive impairment	Swiss mice (20-22g)	20	ip, 60	+	(1) No interaction; (2) Shocks of 1.5 mA/2 s were applied 2 weeks prior to testing in the object recognition procedure	Philbert et al., 2012	Pharmacol. Biochem. Behav. 102:415-422
Paroxetine+DOI (0.06 and 0.25 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.25-1	ip, 30	o	The effects of paroxetine were not potentiated by DOI	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Paroxetine+Eplivanserin (0.1 and 1 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	8	ip, 30	(o)	(1) The effects of paroxetine were antagonized by SR 46349B; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Paroxetine+irindalone (0.9 mg/kg)	5-HT reuptake inhibitor	Light/dark test	NMRI mice	4.4	sc	(+)	Potentiation of the effects of paroxetine	Mork and Hogg, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S69
Paroxetine+irindalone (0.9 mg/kg)	5-HT reuptake inhibitor	Light/dark test	NMRI mice	8.8	sc, o.d. for 14 days	(+)	Potentiation of the effects of paroxetine	Mork and Hogg, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S69
Paroxetine+irindalone (3.6 mg/kg)	5-HT reuptake inhibitor	Schedule-induced polydipsia	Wistar rats	17.5	po, o.d. for 2 days	(+)	The combination yielded positive effects	Hogg and Mork, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S65
Paroxetine+LY288513 (1 mg/kg)	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-220g)	2	30	(o)	Antagonism of the effects of paroxetine	Vasar et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S89

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine+metergoline (2 mg/kg)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (55-day-old, 230-250g)	3	ip, 5	(o)	Metergoline blocked the effects of paroxetine	Roncon et al., 2011	Planta Med. 77:236-241
Paroxetine+metergoline (2 mg/kg)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (55-day-old, 230-250g)	3	ip, 5	o	No interaction	Roncon et al., 2011	Planta Med. 77:236-241
Paroxetine+pindolol (5 mg/kg)	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.5	ip, 90	o		Sela et al., 2010	Life Sci. 87:445-450
Paroxetine+pindolol (5 mg/kg)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1.5	ip, 90	(+)		Sela et al., 2010	Life Sci. 87:445-450
Paroxetine+pindolol (5 mg/kg)	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	3	po, 90	o	No interaction	Sela et al., 2010	Life Sci. 87:445-450
Paroxetine+pindolol (5 mg/kg)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	3	po, 90	(+)		Sela et al., 2010	Life Sci. 87:445-450
Paroxetine+pindolol (5 mg/kg)	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.5	ip, 40	o		Sela et al., 2011	Neurosci. Lett. 495:63-66
Paroxetine+pindolol (5 mg/kg)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1.5	ip, 40	(+)		Sela et al., 2011	Neurosci. Lett. 495:63-66

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine+pindolol (5 mg/kg)+WAY 100635 (0.4 µg/0.2 µl)	5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	1.5	ip, 40	o	No interaction	Sela et al., 2011	Neurosci. Lett. 495:63-66
Paroxetine+pindolol (5 mg/kg)+WAY 100635 (0.4 µg/0.2 µl)	5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	1.5	ip, 40	(o)		Sela et al., 2011	Neurosci. Lett. 495:63-66
Paroxetine+Ro 60-0175 (0.25 and 1 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.25-1	ip, 30	(+)	(1) The effects of paroxetine were potentiated by Ro 60-0175; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Paroxetine+RS 102221 (0.1 and 1 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	8	ip, 30	+	(1) No blockade of the effects of paroxetine; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Paroxetine+RS 102221 (2.5 mg/kg)	5-HT reuptake inhibitor	Schedule-induced polydipsia	Wistar rats	17.5	po, o.d. for 2 days	(+)	The combination yielded positive effects	Hogg and Mork, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S65
Paroxetine+SB 206553 (0.1 and 1 mg/kg)	5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	8	ip, 30	+	(1) No blockade of the effects of paroxetine; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Paroxetine+tandospirone (0,3 mg/kg)	5-HT reuptake inhibitor	Conditioned fear	Sprague-Dawley rats (250-350g)	5	ip, 4 h	(+)	(1) The combination reduced freezing when tested 14 days after footshock; (2) Shocks of 2.5 mA/30 s were applied	Nishikawa et al., 2007	Eur. Neuropsychopharmacol. 17:643-450

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Paroxetine+WAY 100635 (0.03 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-350g)	3	po, 60	o	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
Paroxetine+WAY 100635 (1 mg/kg for 7 days)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (250-350g)	3	po, o.d. for 7 days	+	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
PCA	5-HT neurotoxin	Vogel conflict test	Wistar rats (180-220g)	10	ip, 9 and 8 days	o	Modified Vogel test	Chojnacka-Wójcik and Przegalinski, 1991	Neuropharmacology 30:711-717
PCA	5-HT neurotoxin	Vogel conflict test	Wistar rats (180-220g)	10	ip, 9 and 8 days	o	Modified Vogel test	Przegalinski et al., 1992	J. Pharm. Pharmacol. 44:780-782
PCA	5-HT neurotoxin	Vogel conflict test	Wistar rats (180-220g)	10	ip, b.i.d., 9 and 8 days	o	0.5 mA	Przegalinski et al., 1994	Pharmacol. Biochem. Behav. 47:873-878
PCA	5-HT neurotoxin	Fear-potentiated startle reflex	Sprague-Dawley rats (250-300g)	5	ip, 2-15 h	-		Davis and Sheard, 1976	Eur. J. Pharmacol. 35:261-273
PCA	5-HT neurotoxin	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	5	ip, 15	o		Davis et al., 1988	Psychopharmacology 94:14-20
PCA	5-HT neurotoxin	Fear-potentiated startle reflex	Sprague-Dawley rats (250-300g)	5	ip, 15	+		Davis and Sheard, 1976	Eur. J. Pharmacol. 35:261-273
PCA	5-HT neurotoxin	Open-field	Wistar rats (286-360g)	2	ip, 21 days	o		Harro et al., 2001	Brain Res. 899:227-239
PCA	5-HT neurotoxin	Social interaction	Wistar rats (286-360g)	2	ip, 21 days	-		Harro et al., 2001	Brain Res. 899:227-239
PCA	5-HT neurotoxin	Vogel conflict test	Wistar rats (240-260g)	10	ip,on 2 consecutive days	o	Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
PCA	5-HT neurotoxin	Four-plate test	Swiss mice (18-22g)	300	ip, o.d. for 3 days	o	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2006	Psychopharmacology 183:471-481

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PCA	5-HT neurotoxin	Marble burying	NIH Swiss mice (25-30g)	ED50=0.62	ip, 30	+		Saadat et al., 2006	J. Psychopharmacology 20:264-271
PCA	5-HT neurotoxin	Marble burying	NIH Swiss mice (25-30g)	2.5	ip, 28 days	+		Saadat et al., 2006	J. Psychopharmacology 20:264-271
PCA	5-HT neurotoxin	Social interaction	Sprague-Dawley rats (234-354g)	2	ip, 21 days	-		Tõnissar et al., 2008	Prog Neuropsychopharmacol Biol Psychiatry 32:164-177
PCA	5-HT neurotoxin	Social interaction	Sprague-Dawley rats (234-354g)	2	ip, 21 days	-	Animals we submitted to chonic variable stress for 20 days	Tõnissar et al., 2008	Prog Neuropsychopharmacol Biol Psychiatry 32:164-177
PCA+chronic variable stress	5-HT neurotoxin	Open-field	Wistar rats (286-360g)	2	ip, 21 days	o		Harro et al., 2001	Brain Res. 899:227-239
PCA+chronic variable stress	5-HT neurotoxin	Social interaction	Wistar rats (286-360g)	2	ip, 21 days	-		Harro et al., 2001	Brain Res. 899:227-239
PCA+citalopram (10 mg/kg, for 2 weeks)	5-HT neurotoxin	Social interaction	Sprague-Dawley rats (234-354g)	2	ip, 21 days	(-)	Potentiation of the anxiogenic-like effects	Tõnissar et al., 2008	Prog Neuropsychopharmacol Biol Psychiatry 32:164-177
PCA+citalopram (10 mg/kg, for 2 weeks)	5-HT neurotoxin	Social interaction	Sprague-Dawley rats (234-354g)	2	ip, 21 days	(-)	(1) Potentiation of the anxiogenic-like effects; (2) Animals we submitted to chonic variable stress for 20 days	Tõnissar et al., 2008	Prog Neuropsychopharmacol Biol Psychiatry 32:164-177
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Long-Evans rats	340	ip, 1, 3 and 9 days	o	FR12	Blakely and Parker, 1973	Pharmacol. Biochem. Behav. 1:609-613
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Long-Evans rats	200	po, 30 min to 6 days	+	VI2	Robichaud and Sledge, 1969	Life Sci. 8:965-969
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict	Sprague-Dawley rats	200	po, 24 h	+		Geller and Blum, 1970	Eur. J. Pharmacol. 9:319-324

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Rats	100-400		+		Wise et al., 1972	Science 177:180-183
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Rats	100-400		+		Stein et al., 1973	In: The Benzodiazepines, pp. 299-326
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Rats	300	po, 40	+		Cook and Sepinwall, 1975	In: Emotions - Their Parameters and Measurements, pp. 379-404
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Sprague-Dawley rats (200-300g)	100	ip, for 3 days	+		Tye et al., 1979	Neuropharmacology 18:689-695
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Rats	100	ip, for 2 days	+		Shephard et al., 1982	Pharmacol. Biochem. Behav. 16:741-744
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Wistar rats (250-350g)	150	ip, for 3 days	+	Modified Geller-Seifter test	Thiébot et al., 1991	Psychopharmacology 103:415-424
PCPA	5-HT synthesis inhibitor	Geller-Seifter conflict test	Rats	150-350	ip, for 2 days	+		Schreiber et al., 1993	Psychopharmacology 112:100-110
PCPA	5-HT synthesis inhibitor	Vogel conflict test	Wistar rats (220g)	200-400	ip, sc, 72 h	o		Petersen and Lassen, 1981	Psychopharmacology 75:236-239
PCPA	5-HT synthesis inhibitor	Vogel conflict test	Sprague-Dawley rats (200g)	400	ip, 0	+		Kilts et al., 1982	Psychopharmacology 78:156-164
PCPA	5-HT synthesis inhibitor	Vogel conflict test	Sprague-Dawley rats (200g)	200	ip, for 3 days	+		Kilts et al., 1982	Psychopharmacology 78:156-164
PCPA	5-HT synthesis inhibitor	Vogel conflict	Sprague-Dawley rats (190-210g)	300	ip, for 3 days	+		Engel et al., 1984	Eur. J. Pharmacol. 105:365-368

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
PCPA	5-HT synthesis inhibitor	Vogel conflict test	Sprague-Dawley rats (250-350g)	300	ip, for 3 days	+		Söderpalm and Engel, 1989	Prog. Neuropsychopharmacol. Biol. Psychiatry 13:269-283
PCPA	5-HT synthesis inhibitor	Vogel conflict test	Wistar rats (180-220g)	375	ip, for 2 days	+		Plaznik et al., 1994	Eur. J. Pharmacol. 257:293-296
PCPA	5-HT synthesis inhibitor	Elevated plus-maze	Wistar rats (150-200g)	200	72 h	+		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
PCPA	5-HT synthesis inhibitor	Elevated plus-maze	Wistar rats (180-220g)	300	ip, for 3 days	+		Handley et al., 1993	Behav. Brain Res. 58:203-210
PCPA	5-HT synthesis inhibitor	Elevated plus-maze	Sprague-Dawley rats (250-350g)	130	ip, for 4 days	+		Treit et al., 1993	Behav. Brain Res. 54:23-34
PCPA	5-HT synthesis inhibitor	Light/dark test	Lundbeck mice strain (30-35g)	1200 µmol/kg	sc, for 2 days	o		Sánchez, 1995	Asymmetric compartments
PCPA	5-HT synthesis inhibitor	Light/dark test	Wistar rats (150-200g)	200	72 h	+		Kshama et al., 1990	Asymmetric compartments
PCPA	5-HT synthesis inhibitor	Light/dark test	BKW mice (30-35g)	50-100	ip, for 3 days	+		Barnes et al., 1992	Asymmetric compartments
PCPA	5-HT synthesis inhibitor	Light/dark test	BKW mice (30-35g)	100	ip, for 3 days	+		Barnes et al., 1992	Asymmetric compartments
PCPA	5-HT synthesis inhibitor	Light/dark test	Swiss mice (10-week-old)	75-300	ip, for 3 days	+		Griebel, 1993	In: Thesis, Université Louis Pasteur, Strasbourg, France
PCPA	5-HT synthesis inhibitor	Open-field	Long-Evans rats (260-300g)	500-1000	for 2 days (b.i.d., 3 days before testing)	-		Dringenberg et al., 1995	Behav. Brain Res. 68:229-237
PCPA	5-HT synthesis inhibitor	Holeboard	Wistar rats (150-200g)	200	72 h	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
PCPA	5-HT synthesis inhibitor	Social interaction	Rats			o		File, 1981	Prog. Neuropsychopharmacol. Biol. Psychiatry 5:245-255
PCPA	5-HT synthesis inhibitor	Social interaction	Rats	100-400		+		Ellison, 1977	Pharmacol. Biochem. Behav. 7:87-90

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PCPA	5-HT synthesis inhibitor	Social interaction	Rattus norvegicus rats (200-250g)	400	ip, 3 days	+		File et Hyde, 1977	J. Pharm. Pharmacol. 29:735-738
PCPA	5-HT synthesis inhibitor	Social interaction	Rats			+		File, 1981	Prog. Neuropsychopharmacol. Biol. Psychiatry 5:245-255
PCPA	5-HT synthesis inhibitor	Social interaction	Lister rats (250-300g)	100	ip, for 3 days	+		Barnes et al., 1992	Eur. J. Pharmacol. 218:15-25
PCPA	5-HT synthesis inhibitor	Shock-probe burying test	Sprague-Dawley rats (250-350g)	130	ip, for 4 days	+		Treit et al., 1993	Behav. Brain Res. 54:23-34
PCPA	5-HT synthesis inhibitor	Stress-suppressed drinking	Sprague-Dawley rats (300g)	100	po, for 3 days	+		Tenen, 1967	Psychopharmacologia 10:204-219
PCPA	5-HT synthesis inhibitor	Stress-induced freezing	Rats (15-25 day-old)	300	ip, for 4 days	+		Hård et al., 1982	Scand. J. Psychol. (Suppl 1):90-96
PCPA	5-HT synthesis inhibitor	Ultrasonic distress vocalizations	Rats (4-16 day-old)	100	ip, for 3 days	+		Hård et al., 1982	Scand. J. Psychol. (Suppl 1):90-96
PCPA	5-HT synthesis inhibitor	Ultrasonic distress vocalizations	Rats	150-350	ip, for 2 days	+		Schreiber et al., 1993	Psychopharmacology 112:100-110
PCPA	5-HT synthesis inhibitor	Ultrasonic distress vocalizations	Wistar rats (220-250g)	150-350	ip, for 2 days	+		Schreiber and De Vry, 1993	Prog. Neuropsychopharmacol. Biol. Psychiatry 17:87-104
PCPA	5-HT synthesis inhibitor	Fear-potentiated startle reflex	Long-Evans rats (70 day-old)	300	sc, 1-4 days	-		Conner et al., 1970	Physiol. Behav. 5:1215-1219
PCPA	5-HT synthesis inhibitor	Fear-potentiated startle reflex	Sprague-Dawley rats (175-200g)	100	ip, 1-4 days	-		Carlton and Advokat, 1973	Pharmacol. Biochem. Behav. 1:657-663
PCPA	5-HT synthesis inhibitor	Fear-potentiate	Rats	320-900	ip, for 3 days	o		Fechter, 1974	Pharmacol. Biochem. Behav. 2:161-171

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		d startle reflex							
PCPA	5-HT synthesis inhibitor	Fear-potentiated startle reflex	Sprague-Dawley rats (300-400g)	300	ip, for 2 days	o		Davis et al., 1988	Psychopharmacology 94:14-20
PCPA	5-HT synthesis inhibitor	Stress-induced hyperthermia	Swiss mice (25-30g)	75-150	ip, for 3 days	o		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230
PCPA	5-HT synthesis inhibitor	Stress-induced defecation	Wistar rats (200g)	300	24 h	-	Open-field and Shuttle box	Kameyama et al., 1980	Pharmacol. Biochem. Behav. 12:875-882
PCPA	5-HT synthesis inhibitor	DPAG stimulation	Rats (250g)	316	ip, 3-18 days	-		Kiser and Lebovitz, 1975	Physiol. Behav. 15:47-53
PCPA	5-HT synthesis inhibitor	Conditioned fear	Sprague-Dawley rats (250-300g)	200	ip, 15h	+	Inescapable footshock of 2.5 mA	Inoue et al., 1996	Pharmacol. Biochem. Behav. 53:825-831
PCPA	5-HT synthesis inhibitor	Light/dark test	Wistar rats (200-250g)	300	sc, 24h and 2h	+	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
PCPA	5-HT synthesis inhibitor	Light/dark test	BKW mice (30-35g)	200	ip, for 3 days (o.d.)	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
PCPA	5-HT synthesis inhibitor	Open-field	Sprague-Dawley rats (350-650g)	100	ip, 5 daily injections	+	(1) Weak effects; (2) Animals were tested on 5 consecutive days	Angrini et al., 1998	Pharmacol. Biochem. Behav. 59:387-397
PCPA	5-HT synthesis inhibitor	Light/dark test	Swiss mice (20-25g)	300	ip, for 3 days (o.d.)	+	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
PCPA	5-HT synthesis inhibitor	Light/dark test	Wistar rats (280-320g)	150	ip, o.d. for 3 days	+		Koprowska et al., 1999	Acta Neurobiol. Exp. 59:15-22
PCPA	5-HT synthesis inhibitor	Open-field	Wistar rats (180-200g)	50-300	ip, b.i.d. for 2 days	o		Nazar et al., 1999	J. Neural Transm. 106:355-368

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PCPA	5-HT synthesis inhibitor	Vogel conflict test	Wistar rats (180-200g)	300	ip, b.i.d. for 2 days	+	Shock of 0.4 mA	Nazar et al., 1999	J. Neural Transm. 106:355-368
PCPA	5-HT synthesis inhibitor	Vogel conflict test	Wistar rats (180-200g)	150	ip, b.i.d. for 2 days	+	Shock of 0.4 mA	Nazar et al., 1999	J. Neural Transm. 106:369-381
PCPA	5-HT synthesis inhibitor	Open-field	Wistar rats (180-200g)	150	ip, b.i.d. for 2 days	o		Nazar et al., 1999	J. Neural Transm. 106:369-381
PCPA	5-HT synthesis inhibitor	Elevated plus-maze	Wistar rats (300-350g)	350	ip, for 3 days (o.d.)	-		Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
PCPA	5-HT synthesis inhibitor	Four-plate test	Swiss mice (4-week-old)	300	ip, 3 injections for 3 days	o	Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
PCPA	5-HT synthesis inhibitor	Novelty-suppressed feeding	Sprague-Dawley rats (225-250g)	150	for 2 days, o.d.	o		Bechtholt et al., 2007	Psychopharmacology 190:531-540
PCPA	5-HT synthesis inhibitor	Elevated open-platform	ICR mice (6-8-week-old)	250	ip, for two days, b.i.d.	+		Miyata et al., 2007	J. Pharmacol. Sci. 105:272-278
PCPA	5-HT synthesis inhibitor	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	300	ip b.i.d. daily for 3 days	o		Wierońska et al., 2010	Neuropharmacology 59:627-634
PCPA	5-HT synthesis inhibitor	Elevated plus-maze	Female Swiss mice (30-45g)	100	ip, for 4 days	o		de Carvalho et al., 2011	Behav. Brain. Res. 221:75-82
PCPA	5-HT synthesis inhibitor	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	300	ip, for 3 days	o		Sławińska et al., 2013	Neuropharmacology 66:225-235
PCPA	5-HT synthesis inhibitor	Marble burying	Swiss mice (22-25g)	10	ip, for 3 days	o		Dixit et al., 2012	Behav. Pharmacol. 23:716-721
PCPA+baicalein (0.2 pmol/2 µl icv)	5-HT synthesis inhibitor	Elevated plus-maze	Female Swiss mice (30-45g)	100	ip, for 4 days	+	No interaction	de Carvalho et al., 2011	Behav. Brain. Res. 221:75-82
PCPA+berberine (5 mg/kg)	5-HT synthesis inhibitor	Marble burying	Swiss mice (22-25g)	300	ip, for 3 days	+	No blockade of the anxiolytic-like effects of berberine	Dixit et al., 2012	Behav. Pharmacol. 23:716-721

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PCPA+Desipramine (10 mg/kg)	5-HT synthesis inhibitor	Elevated plus-maze	Wistar rats (300-350g)	350	ip, for 3 days (o.d.)	(-)	No blockade of the anti-exploratory effects of PCPA	Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
PCPA+Desipramine (10 mg/kg)	5-HT synthesis inhibitor	Elevated plus-maze	Wistar rats (300-350g)	350	ip, for 3 days (o.d.)	(-)	No blockade of the anti-exploratory effects of PCPA	Skrebuhhova et al., 1999	Methods Find. Exp. Clin. Pharmacol .21:483-490
PCPA+diazepam (5 mg/kg)	5-HT synthesis inhibitor	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	300	ip b.i.d. daily for 3 days	o		Wierońska et al., 2010	Neuropharmacology 59:627-634
PCPA+Picrotoxin (0,1 µg)	5-HT synthesis inhibitor	Vogel conflict test	Wistar rats (180-200g)	150	ip, b.i.d. for 2 days	(o)	(1) Antagonism of the effects of PCPA; (2) Shock of 0.4 mA	Nazar et al., 1999	J. Neural Transm. 106:369-381
PCPA+Picrotoxin (0,1 µg)	5-HT synthesis inhibitor	Open-field	Wistar rats (180-200g)	150	ip, b.i.d. for 2 days	o	No interaction	Nazar et al., 1999	J. Neural Transm. 106:369-381
Perospirone	D_2/5-HT_2 antagonist	Conditioned fear	Rats			+		Ohno et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S88
Perospirone	D_2/5-HT_2 antagonist	Shock-probe burying test	Rats			+		Ohno et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S88
Perospirone	D_2/5-HT_2 antagonist	Social interaction	Rats			+		Ohno et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S88
Perospirone	D_2/5-HT_2 antagonist	Shock-probe burying test	Lister hooded rats (180.5-317.5g)	0.3-1	po, 60	+	5 mA electric shock	Sakamoto et al., 1998	Pharmacol. Biochem. Behav. 60:873-878
Perospirone	D_2/5-HT_2 antagonist	Social interaction	Lister hooded rats (180.5-317.5g)	0.1	po, 60	+		Sakamoto et al., 1998	Pharmacol. Biochem. Behav. 60:873-878
Perospirone	D_2/5-HT_2 antagonist	Conditioned fear	Sprague-Dawley rats (175-255g)	3	po, 60	+	Animals were subjected to a 2 mA of scramble footshock, 30	Ishida-Tokuda et al., 1996	Jpn. J. Pharmacol. 72:119-126

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							min)		
Perospirone	D_2/5-HT_2 antagonist	Conditioned fear	Sprague-Dawley rats (175-255g)	1-10	po, for two weeks (o.d.)	+	Animals were subjected to a 2 mA of scramble footshock, 30 min)	Ishida-Tokuda et al., 1996	Jpn. J. Pharmacol. 72:119-126
Pet-1-deficient mice	Defective development of 5-HT system	Elevated plus-maze	C57BL/6-129Sv background mice (17-21-week-old)			-	Mutant mice displayed heighened anxiety	Hendricks et al., 2003	Neuron 37:233-247
Pet-1-deficient mice	Defective development of 5-HT system	Open-field	C57BL/6-129Sv background mice (17-21-week-old)			-	Mutant mice displayed heighened anxiety	Hendricks et al., 2003	Neuron 37:233-247
Phenylbiguanide	5-HT_3 agonist	Light/dark test	Female ICR-DUB mice (17-35g)	1-31.6	ip, 30	o	Asymmetric compartments	Young and Johnson, 1991	Pharmacol. Biochem. Behav. 40:739-743
Pindobind-5-HT_{1A}	5-HT_{1A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	1	sc, 15	+		Griebel et al., 1999	Psychopharmacology 144:121-130
Pindobind-5-HT_{1A}	5-HT_{1A} antagonist	Conflict test	Wistar rats (400-500g)	0.3-3	sc, 15	o		Griebel et al., 2000	Neuropharmacology 39:1848-57
Pindobind-5-HT_{1A}	5-HT_{1A} antagonist	Vogel conflict test	Sprague-Dawley rats (180-200g)	0.1-5	sc, 15	o		Griebel et al., 2000	Neuropharmacology 39:1848-57
Pindobind-5-HT_{1A}	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (180-200g)	0.1-3	sc, 15	+	Weak effect	Griebel et al., 2000	Neuropharmacology 39:1848-57
Pinoline	5-HT reuptake inhibitor	Open-field	Wistar rats (270-350g)	15	ip, 30	-		Pähkla et al., 1996	Pharmacol. Res. 34:73-78
Pinoline	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (270-350g)	2	ip, 30	-		Pähkla et al., 1996	Pharmacol. Res. 34:73-78
Pinoline	5-HT reuptake inhibitor	Elevated zero-maze	Wistar rats (240-320g)	10-20	ip, 30	-		Pähkla et al., 2000	Pharmacol. Biochem. Behav. 65:737-42
Pirenperone	5-HT_2 antagonist	Geller-Seifter conflict	Sprague-Dawley rats (330-370g)	0.03-3	ip	o	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Pirenperone	5-HT_2 antagonist	Conflict test	Squirrel monkeys (550-900g)	0.001-0.3	im	o	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112
Pirenperone	5-HT_2 antagonist	Mouse defense test battery	Swiss-Webster mice (60-75-day-old)	0.25-1	ip, 30	+		Griebel et al., 1995	Pharmacol. Biochem. Behav. 51:235-244
Pirenperone	5-HT_2 antagonist	DPAG stimulation	Wistar rats (370-450g)	0.1-1	ip, 35	+		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
Pirenperone	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.01-0.1	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Pirenperone	5-HT_2 antagonist	Elevated plus-maze	Mouse	0.5-4		-		Nic Dhonnchadha et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S63
Pitozifen	Antagonist	Social interaction	Sprague-Dawley rats (250-320g)	0.5-1	sc, 30	+		Kennett, 1992	Psychopharmacology 107:379-384
Pitozifen	Antagonist	Shock-probe burying test	Wistar rats (250-280g)	40	sc, 60	+		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Pizotifen	Non-selective 5-HT antagonist	Open-field	Wistar rats (200-220g)	0.63-10	sc, 60	o		Meert et al., 1997	Behav. Pharmacol. 8:353-363
p-MPPF	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (150-250g)	10	ip	o	Electric footshock of 0.20-0.25 mA	Lopez and Frazer, 1996	Soc. Neurosci. Abstr. 22:477
p-MPPI	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (8-9 week-old)	0.5-4.5	ip, 30	+		Cao and Rodgers, 1997	Pharmacol. Biochem. Behav. 58:583-591
p-MPPI	5-HT_{1A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3-3	sc, 15	+		Griebel et al., 1999	Psychopharmacology 144:121-130

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
p-MPPI	5-HT_{1A} antagonist	Conflict test	Wistar rats (400-500g)	0.3-3	sc, 15	o		Griebel et al., 2000	Neuropharmacology 39:1848-57
p-MPPI	5-HT_{1A} antagonist	Vogel conflict test	Sprague-Dawley rats (180-200g)	1	sc, 15	+		Griebel et al., 2000	Neuropharmacology 39:1848-57
p-MPPI	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (180-200g)	0.3-10	sc, 15	+	Weak effect	Griebel et al., 2000	Neuropharmacology 39:1848-57
p-MPPI	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (18-25g)	0.5	ip, 30	o		Peng et al., 2004	Life Sci. 75:2451-2462
Polyclonal anti-5-HT-moduline	Decreases 5-HT release	Open-field	Swiss mice (28-32g)	5 µl	icv, 2-6 h	+		Grimaldi et al., 1999	Neuroscience 93:1223-1225
Polyclonal anti-5-HT-moduline	Decreases 5-HT release	Elevated plus-maze	Swiss mice (28-32g)	5 µl	icv, 6 h	+		Grimaldi et al., 1999	Neuroscience 93:1223-1225
Propranolol	Non-selective 5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (220g)	10-30	ip, 30	o	Modified Vogel test	Petersen and Lassen, 1981	Psychopharmacology 75:236-239
Propranolol	Non-selective 5-HT_{1A} antagonist	Vogel conflict test	Sprague-Dawley rats (250g)	5	ip, 30	o	(-) isomer	Kataoka et al., 1991	Neuropharmacology 30:475-480
Propranolol	Non-selective 5-HT_{1A} antagonist	Conflict test	White Carneau Pigeons	1-5.6	im	+	FR30	Durel et al., 1986	Pharmacol. Biochem. Behav. 25:371-374
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Lister rats (250-350g)	5-10	ip, 30	-	(-) isomer	Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (150-200g)	10	30	o	10-min exposure	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	CD1 mice (25-32g)	2.5	ip, 30	o		Gorman and Dunn, 1993	Pharmacol. Biochem. Behav. 45:1-7
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-250g)	20 nmol	hippocampus	o	After 2h forced restraint	Padovan and Guimarães, 1993	Braz. J. Med. Biol. Res. 26:1085-1089
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Rats	10 nmol	dorsal PAG	+		Graeff et al., 1990	Neurosci. Biobehav. Rev. 14:501-506

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-250g)	10 nmol	dorsal PAG, 10	+	D,L isomer	Audi et al., 1991	Psychopharmacology 105:553-557
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-250g)	5 nmol	dorsal PAG, 10	+		Audi et al., 1991	Psychopharmacology 105:553-557
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Rats	10 nmol	dorsal PAG	+	D,L isomer	Graeff et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 117
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Rats	5 nmol	dorsal PAG	+		Graeff et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 117
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Female CD1 mice (22-24g)	5-10	ip,30	+	(±) isomer	De Angelis, 1992	Methods Find. Exp. Clin. Pharmacol. 14:767-771
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	CD1 mice (25-32g)	2.5	ip, 30	+	Stressed mice	Gorman and Dunn, 1993	Pharmacol. Biochem. Behav. 45:1-7
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	PVG rats (180-260g)	5-10	ip, 30	+	10-min exposure	Njung'e et al., 1993	J. Psychopharmacol. 7:173-180
Propranolol	Non-selective 5-HT_{1A} antagonist	Light/dark test	CD-COBS rats (200-300g)	0.1 µg	icv, 5	o	Transitions only	Carli et al., 1989	Br. J. Pharmacol. 96:829-836
Propranolol	Non-selective 5-HT_{1A} antagonist	Light/dark test	Wistar rats (150-200g)	10	30	o	D,L isomer, Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Propranolol	Non-selective 5-HT_{1A} antagonist	Light/dark test	CD1 mice (32-40g)	12.4-24.9 mg/l	po, for 12-15 days (o.d.)	o	Asymmetric compartments	Gao and Cutler, 1992	Neuropharmacology 31:749-756
Propranolol	Non-selective 5-HT_{1A} antagonist	Light/dark test	CD1 mice (32-40g)	1.5	ip, 30	+	D,L isomer, Asymmetric compartments	Gao and Cutler, 1992	Neuropharmacology 31:749-756
Propranolol	Non-selective 5-HT_{1A} antagonist	Holeboard	Wistar rats (150-200g)	10	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Propranolol	Non-selective 5-HT_{1A} antagonist	Social interaction	Wistar rats (180-200g)	10-40	po, 30	o		Guy and Gardner, 1985	Neuropsychobiology 13:194-200
Propranolol	Non-selective 5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (200-250g)	16	sc, 40	o		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Propranolol	Non-selective 5-HT_{1A} antagonist	Social interaction	CD1 mice (32-40g)	1.5-6	ip, 30	+	D,L isomer, Asymmetric compartments	Gao and Cutler, 1992	Neuropharmacology 31:749-756
Propranolol	Non-selective 5-HT_{1A} antagonist	Social interaction	CD1 mice (32-40g)	12.4-24.9 mg/l	po, for 12-15 days (o.d.)	+	D,L isomer, Asymmetric compartments	Gao and Cutler, 1992	Neuropharmacology 31:749-756
Propranolol	Non-selective 5-HT_{1A} antagonist	Social interaction	CD1 mice	1.5-6	ip, 30	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Propranolol	Non-selective 5-HT_{1A} antagonist	Social interaction	CD1 mice	6	ip, 30	+	Neutral cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Propranolol	Non-selective 5-HT_{1A} antagonist	Social interaction	CD1 mice	1.5	drinking fluid for 12-15 days	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Propranolol	Non-selective 5-HT_{1A} antagonist	Open-field	Swiss-Webster mice (6-8-week-old)	10	sc, 60	-	Latency to emerge after restraint stress	Stone et al., 1995	Pharmacol. Biochem. Behav. 51:297-300
Propranolol	Non-selective 5-HT_{1A} antagonist	Open-field	Sprague-Dawley rats (200-250g)	10	ip, 60	+	Locomotion increased	Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
Propranolol	Non-selective 5-HT_{1A} antagonist	Fear-potentiated startle reflex	Rats	20		+		Davis et al., 1979	Psychopharmacology 65:111-118
Propranolol	Non-selective 5-HT_{1A} antagonist	Novelty-suppressed feeding	Rats	1		+		Rex et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 147
Propranolol	Non-selective 5-HT_{1A}	Shock-probe	Wistar rats (250-280g)	10-40	sc, 60	+		Meert and Colpaert,	Psychopharmacology 89:S23

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	burying test						1986	
Propranolol	Non-selective 5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11 day-old)	1-10	sc, 30	o		Winslow and Insel, 1991	Psychopharmacology 105:513-520
Propranolol	Non-selective 5-HT_{1A} antagonist	Defensive withdrawal	CD1 mice (25-32g)	2.5	ip, 30	+		Gorman and Dunn, 1993	Pharmacol. Biochem. Behav. 45:1-7
Propranolol	Non-selective 5-HT_{1A} antagonist	Stress-induced gastric lesion	Wistar rats (200g)	50-100	po, 60	+	(±) isomer	Al-Bekairi et al., 1993	Arch. Int. Pharmacodyn. Ther. 323:97-113
Propranolol	Non-selective 5-HT_{1A} antagonist	Stress-induced hyperthermia	NMRI mice		po	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Propranolol	Non-selective 5-HT_{1A} antagonist	Stress-induced changes in blood pressure	Wistar rats (160-180g)	5-50	drinking fluid for 28-35 days	+	2 h daily immobilization for 2 weeks	Takita et al., 1995	Pharmacol. Biochem. Behav. 50:225-232
Propranolol	Non-selective 5-HT_{1A} antagonist	DPAG stimulation	Wistar rats (200-250g)	2.2-8.8 nmol	dorsal PAG, 10 or 20	+		Audi et al., 1988	J. Psychopharmacol. 2:26-32
Propranolol	Non-selective 5-HT_{1A} antagonist	Isolation-induced aggression	CDY mice (18-22g)	ED50=17.06	ip, 20	+		Chamberlain, 1996	Soc. Neurosci. Abstr. 22:1584
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar mice (25-30g)	5	ip, 30	o		Bhattacharya and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (180-220g)	10	ip, 30	o		Biro et al., 1995	Neuropeptides 29:215-220
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (180-220g)	10	ip, 30	o		Biro et al., 1996	Neuropeptides 30:59-65

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.25-2	ip, 30	o	(±) isomer	Jackson et al., 1994	?
Propranolol	Non-selective 5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-250g)	10	ip, 30	o		Biró et al., 1997	Neuropeptides 31:281-285
Propranolol	Non-selective 5-HT_{1A} antagonist	Defensive withdrawal	Sprague-Dawley rats (60-100 day-old)	5	ip, 15	o		White et al., 1997	Soc. Neurosci. Abstr. 23:1354
Propranolol	Non-selective 5-HT_{1A} antagonist	Defensive withdrawal	Sprague-Dawley rats (60-100 day-old)	5	ip, 15	o	Animals were prenatally stressed	White et al., 1997	Soc. Neurosci. Abstr. 23:1354
Propranolol	Non-selective 5-HT_{1A} antagonist	Open-field	Sprague-Dawley rats (350-650g)	5-20	ip, 5 daily injections	+	(1) The D,L isomer was used; (2) animals were tested on 5 consecutive days	Angrini et al., 1998	Pharmacol. Biochem. Behav. 59:387-397
Propranolol	Non-selective 5-HT_{1A} antagonist	Open-field	Wistar rats (175-225g)	0.3-1	ip, 0	+	Latency to eat in the open-field was reduced	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
Propranolol	Non-selective 5-HT_{1A} antagonist	Light/dark test	AT_2-deficient mice	1-3	ip, 30	o	No antagonism of anxiogenic-like effects of AT_2 knockout	Okuyama et al., 1999	Brain Res. 821:150-159
Propranolol	Non-selective 5-HT_{1A} antagonist	Stress-induced hyperthermia	ICR mice (7-week-old)	20	ip, 30	+		Liu et al., 2003	J. Psychiat. Res. 37:249-259
Propranolol	Non-selective 5-HT_{1A} antagonist	Novelty-suppressed feeding	CD1 mice (10-week-old)	2	ip, 20	+		Merali et al., 2003	Biol. Psychiatry 54:552-565
PRX-00023	5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rat pups (P11)	0.01-0.05	ip, 30	+		Brunelli et al., 2009	Pharmacol. Biochem. Behav. 94:8-15
PRX-00023	5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rat pups (P11)	0.01-0.05	ip, 30	+	High line ultrasonic vocalizations was used	Brunelli et al., 2009	Pharmacol. Biochem. Behav. 94:8-15

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Psychollatine (umbellatine)	5-$HT_{2A/C}$ agonist	Holeboard	CF1 mice (2-month-old)	7.5-15	ip, 30	+		Both et al., 2005	J. Nat. Prod. 68:374-380
Psychollatine (umbellatine)	5-$HT_{2A/C}$ agonist	Light/dark test	CF1 mice (2-month-old)	7.5	ip, 30	+		Both et al., 2005	J. Nat. Prod. 68:374-380
Psychollatine (umbellatine)+picrotoxin (1 mg/kg)	5-$HT_{2A/C}$ agonist	Holeboard	CF1 mice (2-month-old)	7.5	ip, 30	+	No antagonism	Both et al., 2005	J. Nat. Prod. 68:374-380
Psychollatine (umbellatine)+picrotoxin (1 mg/kg)	5-$HT_{2A/C}$ agonist	Light/dark test	CF1 mice (2-month-old)	7.5	ip, 30	+	No antagonism	Both et al., 2005	J. Nat. Prod. 68:374-380
Psychollatine (umbellatine)+ritanserin (2 mg/kg)	5-$HT_{2A/C}$ agonist	Holeboard	CF1 mice (2-month-old)	7.5	ip, 30	(o)	Antagonism	Both et al., 2005	J. Nat. Prod. 68:374-380
Psychollatine (umbellatine)+ritanserin (2 mg/kg)	5-$HT_{2A/C}$ agonist	Light/dark test	CF1 mice (2-month-old)	7.5	ip, 30	(o)	Antagonism	Both et al., 2005	J. Nat. Prod. 68:374-380
Quipazine	Non selective ligand	Vogel conflict test	Sprague-Dawley rats (200-225g)	2-4	ip, 10	-	Also decreased non-punished responses	Commissaris and Rech, 1982	Psychopharmacology 76:282-285
Quipazine	Non selective ligand	Elevated plus-maze	Rats	2-4		-		File et al., 1987	Br. J. Pharmacol. 90:265P
Quipazine	Non selective ligand	Elevated plus-maze	Lister rats (250-350g)	2-4	ip, 30	-		Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
Quipazine	Non selective ligand	Elevated plus-maze	Lister hooded rats (180-280g)	0.5-2	ip, 30	-	10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210
Quipazine	Non selective ligand	Elevated plus-maze	Wistar rats (150-200g)	5	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Quipazine	Non selective ligand	Light/dark test	Wistar rats (150-200g)	5	30	-	Asymmetric compartments and weak effect	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Quipazine	Non selective ligand	Light/dark test	Swiss mice (10-week-old)	5-20	ip, 30	-		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Quipazine	Non selective ligand	Free-exploration test	Swiss mice (10-week-old)	5-20	ip, 30	-		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
Quipazine	Non selective ligand	Open-field	Rats (180-220g)	10-20 µg	nucleus accumbens, 5	-		Plaznik et al., 1991	Pharmacol. Biochem. Behav. 39:43-48
Quipazine	Non selective ligand	Holeboard	Wistar rats (150-200g)	5	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Quipazine	Non selective ligand	Fear-potentiated startle reflex	CD rats (9-13-week-old)	5-10	sc, 60	+		Nanry and Tilson, 1989	Psychopharmacology 97:507-513
Quipazine	Non selective ligand	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	2-4	20	-		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487
Quipazine	Non selective ligand	Elevated plus-maze	Wistar mice (25-30g)	5	ip, 30	o		Bhattachary a and Acharya, 1993	Indian J. Exp. Biol. 31:902-907
R 56413	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	1-30	ip	o	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
R 56413	5-HT_2 antagonist	Vogel conflict test	Wistar rats (250-280g)	25-40	sc, 60	+	Modified Vogel test	Colpaert et al., 1985	Psychopharmacology 86:45-54
R 56413	5-HT_2 antagonist	Light/dark test	Wistar rats (250-280g)	0.16	sc, 60	+	Transitions and Asymmetric compartments	Colpaert et al., 1985	Psychopharmacology 86:45-54
R 56413	5-HT_2 antagonist	Open-field	Rats	0.01-0.63		+		Meert and Colpaert, 1986	Psychopharmacology 89:S23
R 56413	5-HT_2 antagonist	Shock-probe burying test	Rats	2.5		+		Meert and Colpaert, 1986	Psychopharmacology 89:S23

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Rats	5-10 µg	Septum	o		Menard and Treit, 1996	Soc. Neurosci. Abstr. 1136
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Rats	5-10 µg	Septum	+		Menard and Treit, 1996	Soc. Neurosci. Abstr. 1136
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Rats	5-10 µg	Septum	+		Treit and Menard, 1996	Soc. Neurosci. Abstr. 22:1136
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Rats	5-10 µg	amygdala	+		Treit and Menard, 1996	Soc. Neurosci. Abstr. 22:1136
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Swiss-Webster mice (32-41g)	0.03-1	sc, 20	o		Cao and Rodgers, 1996	Behav. Pharmacol. 7:810-819
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Mice	0.03-0.1	sc	+		Helton et al., 1995	Soc. Neurosci. Abstr. 21:1367
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	10 µg	septum	o		Menard and Treit, 1998	Behav. Pharmacol. 9:93-101
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Sprague-Dawley rats (250-300g)	10 µg	septum	+		Menard and Treit, 1998	Behav. Pharmacol. 9:93-101
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.1-0.5 µg/side	hippocampus	+		Menard and Treit, 1998	Behav. Pharmacol. 9:93-101
R(+)-8-OH-DPAT	5-HT_{1A} full agonist	Shock-probe burying test	Sprague-Dawley rats (250-300g)	0.1-0.5 µg/side	hippocampus	o		Menard and Treit, 1998	Behav. Pharmacol. 9:93-101
R-(+)-8-OSO_2CF_3-PAT	5-HT_{1A} agonist	Shock-probe burying test	Wistar rats (300-495g)	1	ip, 30	+	Shock of 1.5 mA	Barf et al., 1996	Eur. J. Pharmacol. 297:205-211
R-(+)-8-OSO_2CF_3-PAT	5-HT_{1A} agonist	Elevated plus-maze	Wistar rats (300-495g)	3	ip, 30	+	Pre-exposure to compartment associated with uncontrollable	Barf et al., 1996	Eur. J. Pharmacol. 297:205-211

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							stressor		
R-(+)-8-OSO_2CF_3-PAT	5-HT_{1A} agonist	Conditioned fear	Wistar rats (300-495g)	1-3	ip, 30	o	Footshock of 0.6 mM	Barf et al., 1996	Eur. J. Pharmacol. 297:205-211
R-citalopram	5-HT reuptake inhibitor	DPAG stimulation	Sprague-Dawley rats	ED50>34	ip, 30	o		Hogg and Jessa, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S151
R-citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	3.9-7.8	sc, 30	+	Four footshocks of 1 mA were delivered	Sánchez et al., 2003	Psychopharmacology 167:353-362
R-citalopram	5-HT reuptake inhibitor	Light/dark test	Mice derived from Bradford strain (30-35g)	2	sc, 30	o		Sánchez et al., 2003	Psychopharmacology 167:353-362
R-citalopram	5-HT reuptake inhibitor	Conditioned fear	Wistar rats (200-230g)	7.8	ip, 30	+	Electric shock of 0.5 mA/200 ms was applied on day 1	Sánchez et al., 2003	Pharmacol. Biochem. Behav. 75:903-907
R-citalopram	5-HT reuptake inhibitor	Elevated plus-maze	Rats	10		o		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37
R-citalopram	5-HT reuptake inhibitor	Vogel conflict test	Rats	10		o		Bien et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S37
R-citalopram	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	ED50=6	sc, 45	+	To elicit ultrasonic vocalizations, pups were placed on a 19°C surface for 4 min	Fish et al., 2004	J. Pharmacol. Exp. Ther. 308:474-480
Risperidone	Non selective 5-HT_{2A} antagonist	Conflict test	White Carneau pigeons	1	im, 15	+	FR30/FR30	Benvenga and Leander, 1995	Psychopharmacology 119:133-138
Risperidone	Non-selective 5-HT_2 antagonist	Geller-Seifter conflict test	Ovariectomized female Long-Evans CD	0.1-0.4	po, 60	o	multi VI 2-minute (food) FR1 (food+shock)	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Risperidone	Non-selective 5-HT_2 antagonist	Conflict test	White Carneau pigeons	1 and 10	im, 15	+	1.5 to 5.5 mA, 250 msec	Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Risperidone	Non-selective 5-HT_2 antagonist	Cork gnawing	Ovariectomized female Long-Evans CD	0.1	po, 60	+		Rigdon et al., 1996	Neuropsychopharmacology 15:231-242
Risperidone	Non-selective 5-HT_2 antagonist	Marble burying	NMRI mice (20-22g)	0.16-0.63	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	10	ip, 25	o		Deacon and Gardner, 1986	Br. J. Pharmacol. 88:330P
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-370g)	0.1-10	ip	o	FR30/FR10	Witkin and Perez, 1990	Behav. Pharmacol. 1:247-254
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Wistar rats (250-270g)	0.16-40	sc, 60	o	VI30	Brocco et al., 1990	Behav. Pharmacol. 1:403-418
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Lister Hooded rats (120-140g)	1.25-5	ip, 30	o	FR10	Moore et al., 1994	Behav. Pharmacol. 5:196-202
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Lister Hooded rats (120-140g)	1.25-5	ip, 30	o	VI30	Moore et al., 1994	Behav. Pharmacol. 5:196-202
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Wistar rats	3	po	+		Amrick and Bennett, 1986	Soc. Neurosi. Abstr. 12:907
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict test	Rats	2		+	FR8, weak effect	Hascoët et al., 1992	J. Psychopharmacol. 6:129
Ritanserin	5-HT_2 antagonist	Geller-Seifter conflict	Sprague-Dawley rats (300-325g)	2	sc, 60	+		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		test							
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (220-240g)	0.16-40	sc, 60	o	Modified Vogel test	Brocco et al., 1990	Behav. Pharmacol. 1:403-418
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (180-220g)	0.25-0.5	ip, 60	o	Modified Vogel test	Chojnacka-Wójcik and Przegalinski, 1991	Neuropharmacology 30:711-717
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (250-280g)	2.5	sc, 60	+	Modified Vogel test	Colpaert et al., 1985	Psychopharmacology 86:45-54
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (180-220g)	1-5	ip, 30	+	Modified Vogel test	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Rats	2.5-5		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Ritanserin	5-HT_2 antagonist	Conflict test	White Carneau Pigeons	0.03-10	im, 5	+		Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
Ritanserin	5-HT_2 antagonist	Conflict test	White Carneau Pigeons (500-600g)	0.16-2.5	im, 5	+	FR30	Brocco et al., 1990	Behav. Pharmacol. 1:403-418
Ritanserin	5-HT_2 antagonist	Conflict test	White Carneau pigeons	0.3-3	im, 15	+	FR30/FR30	Benvenga and Leander, 1995	Psychopharmacology 119:133-138
Ritanserin	5-HT_2 antagonist	Conflict test	White Carneau Pigeons (500-650g)	0.04-0.16	im, 5	+	FR30:FR30	Kleven and Koek, 1996	J. Pharmacol. Exp. Ther. 276:388-397
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Rats	0.25-10		-		File et al., 1987	Br. J. Pharmacol. 90:265P
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats (250-350g)	0.25-10	ip, 30	-		Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats (200-270g)	0.05-0.25	ip, 30	o		Wright et al., 1992	Psychopharmacology 107:405-414
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (292-368)	0.05-1	ip, 30	o	Rats were well-nourished	Almeida et al., 1991	Psychopharmacology 103:513-518
Ritanserin	5-HT_2	Elevated	CD-COBS mice (24g)	0.25-4	po, 90	o		Stutzmann	Neurosci. Lett. 128:4-8

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	plus-maze						et al., 1991	
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats (240-300g)	0.05-0.25	ip, 30	o		Wright et al., 1992	Psychopharmacology 107:405-414
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats	0.63-10	sc, 30	o		Millan and Brocco, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 153
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Ovariectomized female Wistar rats (8-week-old)	0.25	ip,60	o		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Ovariectomized female Wistar rats (8-week-old)	0.25	ip,60	o	with testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Castrated Wistar rats (8-week-old)	0.25	ip,60	o		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Castrated Wistar rats (8-week-old)	0.25	ip,60	o	with testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (210-230g)		ip, 30	o		Petkov et al., 1995	Methods Find. Exp. Clin. Pharmacol. 17:659-668
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	DBA/2 mice (10-13-week-old)	0.5-5	ip, 30	o	Additional measures of anxiety	Rodgers et al., 1995	J. Psychopharmacol. 9:38-42
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	PVG rats (200-280g)	0.025-5	ip, 30	+	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats	0.1	ip	+		Tomkins et al., 1990	Psychopharmacology 101:S57
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (144-196g)	0.05-0.1 and 1	ip, 30	+	Rats were malnourished	Almeida et al., 1991	Psychopharmacology 103:513-518
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats (200-270g)	0.25	ip, for 2 weeks (b.i.d.)	+		Wright et al., 1992	Psychopharmacology 107:405-414
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats (200-250g)	10 nmol	dorsal PAG, 10	+		Audi et al., 1991	Psychopharmacology 105:553-557
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Lister rats (200-270g)	0.25	ip, for 2 weeks (b.i.d.)	+		Wright et al., 1992	Psychopharmacology 107:405-414

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Light/dark test	Rats	1		+		Onaivi, 1993	Soc. Neurosci. Abstr. 19:755
Ritanserin	5-HT_2 antagonist	Light/dark test	Mice (25-35g)	0.05-10	ip, 40	-	Sedation, ataxia and Asymmetric compartments	Costall et al., 1988	J. Pharm. Pharmacol. 40:494-500
Ritanserin	5-HT_2 antagonist	Light/dark test	Lundbeck mice strain (30-35g)	2.1 µmol/kg	sc, 30	-	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Ritanserin	5-HT_2 antagonist	Light/dark test	CD1 mice	0.1-0.6	ip, 30	o	Asymmetric compartments	Gao and Cutler, 1993	Neuropharmacology 32:265-272
Ritanserin	5-HT_2 antagonist	Light/dark test	CD1 mice	0.32-0.7	po, 12-15 days	o	Asymmetric compartments	Gao and Cutler, 1993	Neuropharmacology 32:265-272
Ritanserin	5-HT_2 antagonist	Light/dark test	Swiss mice (10-week-old)	0.12-4	ip, 30	o		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
Ritanserin	5-HT_2 antagonist	Light/dark test	BKW mice (30-25g)	0.01-10	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Ritanserin	5-HT_2 antagonist	Light/dark test	Wistar rats (250-280g)	0.04-10	sc, 60	+	Transitions and Asymmetric compartments	Colpaert et al., 1985	Psychopharmacology 86:45-54
Ritanserin	5-HT_2 antagonist	Light/dark test	BKW mice (30-35g)	1	ip, 45	+	Asymmetric compartments	Barnes et al., 1992	Eur. J. Pharmacol. 218:15-25
Ritanserin	5-HT_2 antagonist	Light/dark test	BKW mice (30-36g)	0.1-1	ip, 40	+	5-HTP pretreatment and Asymmetric compartments	Cheng et al., 1994	Eur. J. Pharmacol. 255:39-49
Ritanserin	5-HT_2 antagonist	Open-field	Wistar rats (220-240g)	2.5-10	sc, 60	-	Sedation ?	Meert, 1992	Behav. Pharmacol. 3:149-154
Ritanserin	5-HT_2 antagonist	Open-field	Wistar rats (250-280g)	0.01-40	sc, 60	+		Meert, 1986	Drug Dev. Res. 8:197-204
Ritanserin	5-HT_2 antagonist	Open-field	Rats	0.04-10		+		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Ritanserin	5-HT_2 antagonist	Open-field	Wistar rats (220-240g)	0.04-0.63	sc, 60	+		Meert, 1992	Behav. Pharmacol. 3:149-154
Ritanserin	5-HT_2 antagonist	Open-field	Wistar rats (180-220g)	1-5	ip, 30	+	65 dB noise	Stefanski et al., 1992	Neuropharmacology 31:1251-1258

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Open-field	Rats	5		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Ritanserin	5-HT_2 antagonist	Holeboard	Castrated Wistar rats (8-week-old)	0.25	ip,60	-		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Holeboard	Ovariectomized female Wistar rats (8-week-old)	0.25	ip,60	o		Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Holeboard	Ovariectomized female Wistar rats (8-week-old)	0.25	ip,60	o	with testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Holeboard	Castrated Wistar rats (8-week-old)	0.25	ip,60	o	with testosterone implant	Gonzalez et al., 1994	Pharmacol. Biochem. Behav. 47:591-601
Ritanserin	5-HT_2 antagonist	Social interaction	Rats			o	LLF	Critchley et al., 1987	Psychopharmacology 93:502-506
Ritanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (200-250g)	0.6	sc, 40	o		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Ritanserin	5-HT_2 antagonist	Social interaction	Lister hooded rats (250-300g)	0.05-5	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Ritanserin	5-HT_2 antagonist	Social interaction	CD1 mice	0.1-0.6	ip, 30	+	Unfamilar and neutral box	Gao and Cutler, 1993	Neuropharmacology 32:265-272
Ritanserin	5-HT_2 antagonist	Social interaction	CD1 mice	0.32-0.7	po, 12-15 days	+	Unfamilar and neutral box	Gao and Cutler, 1993	Neuropharmacology 32:265-272
Ritanserin	5-HT_2 antagonist	Social interaction	CD1 mice	0.3	ip, 30	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Ritanserin	5-HT_2 antagonist	Social interaction	CD1 mice	0.1-0.3	ip, 30	+	Neutral cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Ritanserin	5-HT_2 antagonist	Social interaction	CD1 mice	0.3	drinking fluid for 12-15 days	+	Home cage	Cutler, 1994	In: Ethology and Psychopharmacology, pp. 45-58
Ritanserin	5-HT_2 antagonist	Social competition	Rats	1.25-20		o		Sanger and Joly, 1992	J. Psychopharmacol. 6:141

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Novelty-suppressed feeding	Rats	0.25		+		Rex et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 147
Ritanserin	5-HT_2 antagonist	Shock-probe burying test	Rats			o		Meert and Colpaert, 1986	Psychopharmacology 89:S23
Ritanserin	5-HT_2 antagonist	Shock-probe burying test	Wistar rats (250-280g)	2.5	sc, 60	+		Meert and Colpaert, 1986	Psychopharmacology 88:445-450
Ritanserin	5-HT_2 antagonist	Marble burying	Female MF1 mice (23-35g)	1-20	ip, 30	+	Locomotion decreased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11 day-old)	0.3-3	sc, 30	-		Winslow and Insel, 1991	Psychopharmacology 105:513-520
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar rats	0.3-10	sc, 30	o		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50>5.2	sc, 30	o	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (11 day-old)	0.1-3	sc, 30	o		Albinsson et al., 1994	Eur. J. Pharmacol. 261:285-294

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	AP mice (4-6 day-old)	2.5-5	30	+		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487
Ritanserin	5-HT_2 antagonist	Stress-induced analgesia	ddY mice (18-20g)	1-5	ip, 30	+		Tokuyama et al., 1993	Jpn. J. Pharmacol. 61:237-242
Ritanserin	5-HT_2 antagonist	Stress-induced hyperthermia	Swiss mice (25-30g)	0.1-0.2	ip, 60	o		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230
Ritanserin	5-HT_2 antagonist	Passive-avoidance test	Wistar rats (220-240g)	2.5-20	ip, 30	o		Sanger and Joly, 1990	Pharmacopsychiatry 23 (Suppl 2):70-74
Ritanserin	5-HT_2 antagonist	Defense test battery	Female and male Long-Evans rats (100-103 day-old)	0.1-10	ip, 30	o		Shepherd et al., 1992	Physiol. Behav. 51:277-285
Ritanserin	5-HT_2 antagonist	Stress-induced stretched approach posture	Wistar rats (180-220g)	3,10	ip, 30	o	Elicited by electrified prod	Molewijk et al., 1995	Psychopharmacology 121:81-90
Ritanserin	5-HT_2 antagonist	DPAG stimulation	Rats			-		Jenck et al., 1989	Psychopharmacology 97:489-495
Ritanserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (200-250g)	10 nmol	dorsal PAG	o		Audi et al., 1988	J. Psychopharmacol. 2:26-32
Ritanserin	5-HT_2 antagonist	DPAG stimulation	Rats	10 nmol	dorsal PAG	o		Graeff, 1988	In: Animal Models of Psychiatric Disorders, pp. 115-141
Ritanserin	5-HT_2 antagonist	DPAG stimulation	Wistar rats (180-250g)	10 nmol	dorsal PAG	o		Nogueira and Graeff, 1991	Behav. Pharmacol. 2:73-77
Ritanserin	5-HT_2 antagonist	Partition test behavior	Mice	2	ip, 30	o		Kudryavtseva et al., 1996	Zh. Vyss. Nerv. Deyat. Pavl. 46:370-377

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (16-day-old)	0.25	sc, for 8 days (o.d.)	o		Gonzalez et al., 1996	Brain Res. 732:145-153
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Female wistar rats (16 day-old)	0.25	sc, for 8 days (o.d.)	+		Gonzalez et al., 1996	Brain Res. 732:145-153
Ritanserin	5-HT_2 antagonist	Holeboard	Female and male wistar rats (16 day-old)	0.25	sc, for 8 days (o.d.)	o		Gonzalez et al., 1996	Brain Res. 732:145-153
Ritanserin	Non-selective 5-HT_{2A2C} antagonist	Conditioned fear	Sprague-Dawley rats	1	po, 60	+	Electric footshock-induced freezing	Ohno et al., 1996	Soc. Neurosci. Abstr. 22:480
Ritanserin	5-HT_2 antagonist	Light/dark test	Wistar rats (200-250g)	0.01-10	sc, 30	+	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	1-10	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Ritanserin	5-HT_2 antagonist	Open-field	Wistar rats (200-220g)	0.63-10	sc, 60	o		Meert et al., 1997	Behav. Pharmacol. 8:353-363
Ritanserin	5-HT_2 antagonist	Free-exploration test	BALB/c mice (22-26g)	0.25-4	ip, 30	o		Belzung and Berton, 1997	Behav. Pharmacol. 8:541-548
Ritanserin	5-HT_2 antagonist	Light/dark test	BKW mice (30-35g)	0.05-1	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Long-Evans rats	0.3-3	po, 30	o	Animals received an electric shock of 2.0 mA, 1 s	Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Ritanserin	5-HT_2 antagonist	Social interaction	Wistar rats	1	ip, 30	o	Rats were tested in a HLU condition	Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Ritanserin	5-HT_2 antagonist	Marble burying	NMRI mice	ED50=7.7 µmol/kg	po, 60	+		Gacsályi et al., 1997	Drug Dev. Res. 40:333-348
Ritanserin	5-HT_2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	0.3-3	ip, 25	+		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	0.3-3	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	3	ip, 30	o	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
Ritanserin	5-HT_2 antagonist	Open-field	Wistar rats (175-225g)	0.125-0.25	ip, 0	+	Latency to eat in the open-field was reduced	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
Ritanserin	5-HT_2 antagonist	Light/dark test	Swiss mice (20-25g)	0.05	ip, 30	+	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
Ritanserin	5-HT_2 antagonist	Light/dark test	BKW mice (25-30g)	1	ip, 40	o	The latency to enter the dark compartment was not affected	Costall and Naylor, 1998	Br. J. Pharmacol. 123:243P
Ritanserin	5-HT_2 antagonist	Light/dark test	Wistar rats (180-220g)	0.25-8	ip, 20	+		Bilkei-Gorzó et al., 1998	Psychopharmacology 136:291-298
Ritanserin	5-HT_2 antagonist	Conditioned fear	Rats			+		Ohno et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S88
Ritanserin	5-HT_2 antagonist	Shock-probe burying test	Rats			+		Ohno et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S88
Ritanserin	5-HT_2 antagonist	Social interaction	Rats			+		Ohno et al., 1998	Int. J. Neuropsychopharmacol. 1 (Suppl. 1):S88
Ritanserin	5-HT_2 antagonist	Conditioned fear	Sprague-Dawley rats (175-255g)	1	po, 60	+	Animals were subjected to a 2 mA of scramble footshock, 30 min)	Ishida-Tokuda et al., 1996	Jpn. J. Pharmacol. 72:119-126

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-300g)	3	ip, 30	o		Skrebuhhova et al., 1999	Med. Sci. Res. 27:277-280
Ritanserin	5-HT_2 antagonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)	5	sc, 45	o	Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
Ritanserin	5-HT_2 antagonist	Free-exploration test	BALB/c mice (8-week-old)	0.3-10	ip, 30	o		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Long Evans hooded rats (330g)	0.16-5	ip, 30	o	No reversal of the anxiogenic-like behavior induced by ethanol withdrawal	Gatch et al., 2000	Alcohol 21:11-17
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Long Evans hooded rats (330g)	0.08-0.64	ip, b.i.d. for 5 days	+	Reversal of the anxiogenic-like behavior induced by ethanol withdrawal	Gatch et al., 2000	Alcohol 21:11-17
Ritanserin	5-HT_2 antagonist	PTZ drug discrimination	Long Evans hooded rats (320-350g)	0.32	ip, b.i.d. for 7 days	o	No reversal of the anxiogenic-like behavior induced by ethanol withdrawal	Gatch et al., 2000	Alcohol 21:11-17
Ritanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 30	-	Activity was reduced at this dose	Overstreet et al., 2003	Psychopharmacology 167:344-352
Ritanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 5 and 10 days	+	The drug was given after the first and second cycles	Overstreet et al., 2003	Psychopharmacology 167:344-352
Ritanserin	5-HT_2 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 4.5 h	o	The drug was given after removal of ethanol on the	Overstreet et al., 2003	Psychopharmacology 167:344-352

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							third cycle		
Ritanserin	5-HT_2 antagonist	Holeboard	CF1 mice (30-40g)	2	ip, 30	o		Costa-Campos et al., 2004	Pharmacol. Biochem. Behav. 77:481-489
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	ICR mice (18-25g)	0.01	ip, 30	o		Peng et al., 2004	Life Sci. 75:2451-2462
Ritanserin	5-HT_2 antagonist	Holeboard	CF1 mice (2-month-old)	2	ip, 30	o		Both et al., 2005	J. Nat. Prod. 68:374-380
Ritanserin	5-HT_2 antagonist	Light/dark test	CF1 mice (2-month-old)	2	ip, 30	o		Both et al., 2005	J. Nat. Prod. 68:374-380
Ritanserin	5-HT_2 antagonist	Social interaction	Wistar rats (200-250g)	1	ip, 60	+	Rats were withdrawn from a 14-day diazepam (4 mg/kg) treatment	Begg et al., 2005	Behav. Brain Res. 161:286-290
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-250g)	1	ip, 60	+	Rats were withdrawn from a 14-day diazepam (4 mg/kg) treatment	Begg et al., 2005	Behav. Brain Res. 161:286-290
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-290g)	0.5-5 µg/0.2 µl	basolateral amygdala, 15	o		de Mello Cruz et al. 2005	Psychopharmacology 182:345-354
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (200-250g)	0,5	ip, 60	o	The shock intensity was 0.5 mA	Stachowicz et al., 2007	Neuropharmacology 52:306-312
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (230-270g)	0.5	ip, 60	o	Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (280-350g)	2	ip, 30	o		Ghisleni et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1508-1515
Ritanserin	5-HT_2 antagonist	Marble burying	NMRI mice (20-22g)	0.63-2.5	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
Ritanserin	5-HT_2 antagonist	Open-field	C57BL/6J	5	ip, 45	o		Yoshida et al., 2009	J. Neurosci. 29:2259-2271

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin	5-HT_2 antagonist	Elevated plus-maze	Female Swiss mice (25-35g)	2	ip, 30	o		Brüning et al., 2009	Behav. Brain Res. 205:511-517
Ritanserin	5-HT_2 antagonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	0.5	ip, 60	o		Wierońska et al., 2010	Neuropharmacology 59:627-634
Ritanserin	5-HT_2 antagonist	Vogel conflict test	Wistar rats (250-300g)	0.5	ip, 60	o	Shocks of 0.1 to 0.5 mA were applied	Stachowicz et al., 2011	Pharmacol. Rep. 63:880-887
Ritanserin	5-HT_2 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	o		Wierońska et al., 2012	Neuropharmacology 62:322-331
Ritanserin	5-HT_2 antagonist	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	0.5	ip, 60	o		Sławińska et al., 2013	Neuropharmacology 66:225-235
Ritanserin+$(PhSe)_2$ (50 nμmol/kg)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (280-350g)	2	ip, 30	(o)	Antagonism of the anxiolytic-like effects of $(PhSe)_2$	Ghisleni et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1508-1515
Ritanserin+alstonine (1 mg/kg)	5-HT_2 antagonist	Holeboard	CF1 mice (30-40g)	2	ip, 30	(o)	Blockade of the anxiolytic-like effects of alstonine	Costa-Campos et al., 2004	Pharmacol. Biochem. Behav. 77:481-489
Ritanserin+alstonine (1 mg/kg)	5-HT_2 antagonist	Light/dark test	CF1 mice (30-40g)	2	ip, 30	(o)	Blockade of the anxiolytic-like effects of alstonine	Costa-Campos et al., 2004	Pharmacol. Biochem. Behav. 77:481-489
Ritanserin+citalopram (5 mg/kg)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-300g)	3	ip, 30	o	Decrease of activity	Skrebuhhova et al., 1999	Med. Sci. Res. 27:277-280
Ritanserin+desipramine (10 mg/kg)	5-HT_2 antagonist	Elevated plus-maze	Wistar rats (200-300g)	3	ip, 30	o	Decrease of activity	Skrebuhhova et al., 1999	Med. Sci. Res. 27:277-280
Ritanserin+diazepam (5 mg/kg)	5-HT_2 antagonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	0.5	ip, 60	+	No interaction	Wierońska et al., 2010	Neuropharmacology 59:627-634

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ritanserin+*m*-CF_3-$C_6H_4Se)_2$ (100 mg/kg)	5-HT_2 antagonist	Elevated plus-maze	Female Swiss mice (25-35g)	0.1	ip, 30	(o)	Blockade of the anxiolytic-like effects of m-CF_3-$C_6H_4Se)_2$	Brüning et al., 2009	Behav. Brain Res. 205:511-517
Ro 60-0175	5-HT_{2C} full agonist	DPAG stimulation	Wistar rats (300g)	1-10	ip, 30	+		Jenck et al., 1998	Eur. Neuropsychopharmacol. 8:161-168
Ro 60-0175	5-HT_{2C} full agonist	Schedule-induced polydipsia	Adult female RORO rats	1-10	po, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0175	5-HT_{2C} full agonist	8-OH-DPAT-induced scratching	Adult squirrel monkeys	ID_{50}=0.8	po, 0	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0175	5-HT_{2C} full agonist	8-OH-DPAT-induced scratching	Adult squirrel monkeys	1	po, for 15 days (o.d.)	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0175	5-HT_{2C} full agonist	Marble burying	Adult Swiss mice	ED50=3.8	sc, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0175	5-HT_{2C} full agonist	Excessive eating of palatable food	Adult female RORO rats	10	po, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0175	5-HT_{2C} full agonist	Elevated plus-maze	Sprague-Dawley rats (110-200g)	1.5	ip, 30	o		Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0175	5-HT_{2C} full agonist	Elevated plus-maze	Sprague-Dawley rats (110-200g)	1.5	ip, for 5 days (o.d.)	o		Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0175	5-HT_{2C} full agonist	Elevated zero-maze	Rats	30	po	o	Sedation	Weiss et al., 1998	Soc. Neurosci. Abstr. 24:943
Ro 60-0175	5-HT_{2C} full agonist	Schedule-induced polydipsia	Sprague-Dawley rats (250-300 g)	3-30	sc, 10	+	VI60 operant was used	Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
Ro 60-0175	5-HT_{2C} full agonist	Four-plate test	Swiss mice (20-24g)	0.25-4	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ro 60-0175	5-HT_{2C} full agonist	Light/dark test	Swiss mice (20-24g)	0.06-4	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
Ro 60-0175	5-HT_{2C} full agonist	Elevated plus-maze	Swiss mice (20-24g)	4	ip, 30	+		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
Ro 60-0175	5-HT_{2C} full agonist	Social interaction	Sprague-Dawley rats (160-180g)	0.3	ip, 5 and 10 days	-	The drug was given after the first and second cycles	Overstreet et al., 2003	Psychopharmacology 167:344-352
Ro 60-0175	5-HT_{2C} full agonist	Social interaction	Sprague-Dawley rats	0.3	30	-		Overstreet et al., 2003	Pharmacol. Biochem. Behav. 75:619-625
Ro 60-0175	5-HT_{2C} full agonist	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.25-1	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Ro 60-0175	5-HT_{2C} full agonist	Four-plate test	Swiss mice (20-24g)	0.25-4	ip, 30	o	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
Ro 60-0175	5-HT_{2C} full agonist	Four-plate test	Swiss mice (20-24g)	0.25-4	ip, 30	o	(1) Animals were exposed to the test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
Ro 60-0175	5-HT_{2C} full agonist	Four-plate test	Swiss mice (18-22g)	0.25-1	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
Ro 60-0175	5-HT_{2C} full agonist	Elevated plus-maze	Swiss mice (18-22g)	0.06-0.25	ip, 45	o		Massé et al., 2007	Behav. Brain Res. 177:214-226
Ro 60-0175	5-HT_{2C} receptor agonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	40 nmol/0.2 µl	dorsal PAG, 10	o		Yamashita et al., 2011	Neuropharmacology 60:216-222

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ro 60-0175	5-HT_{2C} receptor agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	40 nmol/0.2 µl	dorsal PAG, 10	-		Yamashita et al., 2011	Neuropharmacology 60:216-222
Ro 60-0175	5-HT_{2C} full agonist	DPAG stimulation	Wistar rats (270-300g)	40 nmol/0.2 µl	dorsal PAG, 10	+		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
Ro 60-0175+ SB 242084 (0.3 mg/kg)	5-HT_{2C} full agonist	Schedule-induced polydipsia	Sprague-Dawley rats (250-300 g)	15	sc, 10	(o)	(1) Antagonism of the effects of Ro 60-0175; (2) VI60 operant was used	Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
Ro 60-0175+alprazolam (0,03-0,125 mg/kg)	5-HT_{2C} full agonist	Four-plate test	Swiss mice (18-22g)	0.125	ip, 45	o	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
Ro 60-0175+alprazolam (0,03-0.06 mg/kg)	5-HT_{2C} full agonist	Elevated plus-maze	Swiss mice (18-22g)	0.06	ip, 45	(+)	Potentiation of the anxiolytic-like effects of alprazolam	Massé et al., 2007	Behav. Brain Res. 177:214-226
Ro 60-0175+bicuculline (5 pmol/0.2 µl)	5-HT_{2C} full agonist	DPAG stimulation	Wistar rats (270-300g)	40 nmol/0.2 µl	dorsal PAG, 10	(o)		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
Ro 60-0175+diazepam (0,03 mg/kg)	5-HT_{2C} full agonist	Four-plate test	Swiss mice (18-22g)	1	ip, 45	o	(1) Potentiation of the anxiolytic-like effects of diazepam; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
Ro 60-0175+diazepam (0,03-0.06 mg/kg)	5-HT_{2C} full agonist	Elevated plus-maze	Swiss mice (18-22g)	0.06-0.25	ip, 45	o	No interaction	Massé et al., 2007	Behav. Brain Res. 177:214-226

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ro 60-0175+ketanserin (10 pmol/0.2 µl)	5-HT_{2C} full agonist	DPAG stimulation	Wistar rats (270-300g)	40 nmol/0.2 µl	dorsal PAG, 10	(o)		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
Ro 60-0175+NPI-031G (puerarin, 150 mg/kg)	5-HT_{2C} full agonist	Social interaction	Sprague-Dawley rats	0.3	30	(o)	Antagonism of the anxiogenic-like effects of Ro 60-0175	Overstreet et al., 2003	Pharmacol. Biochem. Behav. 75:619-625
Ro 60-0175+SB 242084 (10 pmol/0.2 µl)	5-HT_{2C} full agonist	DPAG stimulation	Wistar rats (270-300g)	40 nmol/0.2 µl	dorsal PAG, 10	+	No interaction	de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
Ro 60-0332	5-HT_{2C} full agonist	DPAG stimulation	Wistar rats (300g)	1-10	ip, 30	+		Jenck et al., 1998	Eur. Neuropsychopharmacol. 8:161-168
Ro 60-0332	5-HT_{2C} full agonist	Schedule-induced polydipsia	Adult female RORO rats	10	po, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0332	5-HT_{2C} full agonist	8-OH-DPAT-induced scratching	Adult squirrel monkeys	ID_{50}=1.1	po, 0	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0332	5-HT_{2C} full agonist	Marble burying	Adult Swiss mice	ED50=4.4	sc, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0332	5-HT_{2C} full agonist	Excessive eating of palatable food	Adult female RORO rats	30-60	po, 30	+	Anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0332	5-HT_{2C} full agonist	Elevated plus-maze	Sprague-Dawley rats (110-200g)	7.5	ip, 30	o		Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0332	5-HT_{2C} full agonist	Elevated plus-maze	Sprague-Dawley rats (110-200g)	7.5	ip, for 5 days (o.d.)	o		Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
Ro 60-0332+SB 200646A (30 mg/kg)	5-HT_{2C} full agonist	Schedule-induced polydipsia	Adult female RORO rats	10	po, 30	(o)	Antagonism of the anticompulsive effects	Martin et al., 1998	J. Pharmacol. Exp. Ther. 286:913-924
RP 62203	5-HT_{2A} antagonist	Elevated plus-maze	Mice CD-COBS (24g)	0.25-4	po, 90	+		Stutzmann et al., 1991	Neurosci. Lett. 128:4-8

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
RP 62203	5-HT_{2A} antagonist	Light/dark test	BKW mice (30-25g)	0.05-5	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
RP 62203	5-HT_{2A} antagonist	Social interaction	Lister hooded rats (250-300g)	0.0001-1	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
RP 62203	5-HT_{2A} antagonist	Light/dark test	BKW mice (30-35g)	0.05-1	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
RP 62203	5-HT_{2A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	0.25-4	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
RP 62203	5-HT_{2A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	0.25-4	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
RP 62203	5-HT_{2A} antagonist	Elevated plus-maze	Wistar rats (190-240g)	0,25-4	ip, 30	o		Setem et al., 1999	Pharmacol. Biochem. Behav. 62:515-521
RS 102221	Non-selective 5-HT_{2C} antagonist	Schedule-induced polydipsia	Wistar rats	2.5	sc, o.d. for 2 days	o		Hogg and Mork, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S65
RS 102221	Non-selective 5-HT_{2C} antagonist	Four-plate test	Swiss mice (20-24g)	0.06-16	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
RS 102221	Non-selective 5-HT_{2C} antagonist	Light/dark test	Swiss mice (20-24g)	0.06-16	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
RS 102221	Non-selective 5-HT_{2C} antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.06-16	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
RS 102221	Non-selective 5-HT_{2C} antagonist	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.1-1	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al.,	Psychopharmacology 179:418-429

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								2005	
RS 102221	Non-selective 5-HT_{2C} antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	Shocks of 0.6 mA/0.5 s were applied	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
RS 102221	Non-selective 5-HT_{2C} antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.1-1	ip, 45	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
RS 102221	Non-selective 5-HT_{2C} antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
RS 102221	Non-selective 5-HT_{2C} antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	(1) Animals were exposed to the test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
RS 102221	Non-selective 5-HT_{2C} antagonist	Light/dark test	CBA/LacIcg mice (2,5-month-old)	2	ip, 20	+		Kuznetsova et al., 2006	Bull. Exp. Biol. Med. 142:76-79
RS 102221	Non-selective 5-HT_{2C} antagonist	Acoustic startle reflex	CBA/LacIcg mice (2,5-month-old)	2	ip, 20	+		Kuznetsova et al., 2006	Bull. Exp. Biol. Med. 142:76-79
RS 102221	Non-selective 5-HT_{2C} antagonist	Four-plate test	Swiss mice (18-22g)	0.1-1	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
RS 102221	Non-selective 5-HT_{2C} antagonist	Elevated plus-maze	Swiss mice (18-22g)	0.1-1	ip, 45	o		Massé et al., 2007	Behav. Brain Res. 177:214-226
RS 102221+diazepam (1 mg/kg)	Non-selective 5-HT_{2C} antagonist	Four-plate test	Swiss mice (18-22g)	0.1-1	ip, 45	o	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
RS 102221+diazepam (1 mg/kg)	Non-selective 5-HT_{2C} antagonist	Elevated plus-maze	Swiss mice (18-22g)	0.1-1	ip, 45	o	No interaction	Massé et al., 2007	Behav. Brain Res. 177:214-226

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
RS 67333	5-HT_4 agonist	Novelty-suppressed feeding	Sprague-Dawley rats	1.5	for 3 days, o.d.	o		Lucas et al., 2007	Neuron 55:712-725
RS-23597-190	5-HT_4 antagonist	Light/dark test	Swiss mice (20-25g)	10	ip, 30	+	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
RS-30199	5-HT_{1A} ligand	Elevated plus-maze	Sprague-Dawley rats	0.3-30	ip	-		Redfern et al., 1989	Br. J. Pharmacol. 98 (Suppl.):682P
RS-30199	5-HT_{1A} ligand	Elevated plus-maze	Lister rats (300-400g)	3	ip, 40	-		Moulton and Morinan, 1990	Br. J. Pharmacol. 101 (Suppl.):516P
RS-42359-197	5-HT_3 antagonist	Elevated plus-maze	Lister rats (295-335g)	0.0000001-0.0001	ip, 40	+		Costall et al., 1993	Eur. J. Pharmacol. 234:91-99
RS-42359-197	5-HT_3 antagonist	Light/dark test	C57 mice	0.000003-3	po, 30	+	Asymmetric compartments	Fontana et al., 1992	Pharmacol. Biochem. Behav. 43:697-704
RS-42359-197	5-HT_3 antagonist	Light/dark test	Mice	0.000001-10	po, 40	+	Asymmetric compartments	Costall et al., 1993	Eur. J. Pharmacol. 234:91-99
RS-42359-197	5-HT_3 antagonist	Light/dark test	Mice	0.000001-10	ip, 40	+	Asymmetric compartments	Costall et al., 1993	Eur. J. Pharmacol. 234:91-99
RS-42359-197	5-HT_3 antagonist	Social interaction	Lister rats (295-335g)	0.000001-1	ip, 40	+		Costall et al., 1993	Eur. J. Pharmacol. 234:91-99
RS-42359-197	5-HT_3 antagonist	Human threat	Marmoset	0.00001-0.001	sc, 40	+		Costall et al., 1993	Eur. J. Pharmacol. 234:91-99
RU 24969	Non selective agonist	Geller-Seifter conflict test	Rats	2	po, 25	o		Deacon and Gardner, 1986	Br. J. Pharmacol. 88:330P
RU 24969	Non selective agonist	Vogel conflict test	Wistar rats (200-250g)	0.5-2	ip, 30	+	Modified Vogel test	Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
RU 24969	Non selective agonist	Conflict test	Squirrel monkeys (800-1050g)	0.003-0.1	im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
RU 24969	Non selective agonist	Conflict test	White Carneau Pigeons	0.03-3	im, 5	+		Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
RU 24969	Non selective agonist	Elevated plus-maze	Rats (250-280g)	0.08-3.6		-	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506
RU 24969	Non selective agonist	Elevated plus-maze	PVG rats (200-280g)	0.5-3	ip, 30	-	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506
RU 24969	Non selective agonist	Elevated plus-maze	Rats	0.1875-1.5		-		File et al., 1987	Br. J. Pharmacol. 90:265P
RU 24969	Non selective agonist	Elevated plus-maze	Lister rats (250-350g)	0.1875-1.5	ip, 30	-		Pellow et al., 1987	J. Pharm. Pharmacol. 39:917-928
RU 24969	Non selective agonist	Elevated plus-maze	PVG rats (180-260g)	0.5-2	ip, 30	-	Observations during 10-min	Critchley et al., 1992	Psychopharmacology 106:484-490
RU 24969	Non selective agonist	Social interaction	Rats			-	LLF	Critchley et al., 1987	Psychopharmacology 93:502-506
RU 24969	Non selective agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
RU 24969	Non selective agonist	Ultrasonic distress vocalizations	Rats			+		Gardner, 1985	In: Neuropharmacology of Serotonin, pp. 281-325
RU 24969	Non selective agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	1-3	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
RU 24969	Non selective agonist	Marble burying	Female MF1 mice (23-35g)	0.1-10	ip, 30	+	Locomotion increased	Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
RU 24969	Non selective agonist	Shock-probe burying test	Wistar rats (280-350g)	0.25-0.75	ip, 15	+		Fernández-Guasti and Hong, 1989	In: Behavioural Pharmacology of 5-HT, pp. 377-382

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
RU 24969	Non selective agonist	Hot-plate	Wistar rats (200-250g)	2-5	ip, 30	+		Korneyev and Seredenin, 1993	Life Sci. 52:997-1004
RU 24969	Non selective agonist	Ultrasonic distress vocalizations	Mice			+	Distress vocalizations were produced by isolation	Brunner et al., 1997	Soc. Neurosci. Abstr. 23:518
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Rats	0.3-3	sc	+		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Conflict test	Pigeon	0.04-0.16	im	+		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Elevated plus-maze	Rats	0.01-2.5	sc	o		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Ultrasonic distress vocalizations	Rats	0.16-10	sc	+	Electric shocks 0.6 mA	Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Isolation-induced aggression	Mice	0.63-10	sc	+		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Isolation-induced aggression	Mice	2.5-40	po	+		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Ultrasonic distress vocalizations	Rats	0.63-2.5	sc	+		Brocco et al., 1996	Soc. Neurosci. Abstr. 22:236
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Conflict test	Pigeons	MED=0.04	sc	+		Brocco et al., 1996	Soc. Neurosci. Abstr. 22:236
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Sprague-Dawley CD-COBS rats (370-375g)	10-30	po, 60	+	VI20	Samanin et al., 1996	Soc. Neurosci. Abstr. 22:607

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Sprague-Dawley CD-COBS rats (370-375g)	3	sc, 30	+	VI20	Samanin et al., 1996	Soc. Neurosci. Abstr. 22:607
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Sprague-Dawley CD-COBS rats (280-300g)	0.3-3	sc, 30	+	VI20	Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Conflict test	White Carneau pigeons (500-600g)	0.04-0.63	im, 5	+		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Elevated plus-maze	Wistar rats (220-240g)	0.002-10	sc, 30	o		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Ultrasonic distress vocalizations	Wistar rats (220-240g)	0.16-2.5	sc, 30	+		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Isolation-induced aggression	CD1 mice (20-25g)	0.16-2.5	sc, 30	+		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Isolation-induced aggression	CD1 mice (20-25g)	0.63-10	po, 30	+		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Social interaction	Rats	MED=0.63	sc, 30	+	Rats were tested in a HLU condition	Brocco et al., 1997	Soc. Neurosci. Abstr. 23:1215
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Vogel conflict test	Rats	MED=2.5	sc, 30	+	Animals received an electric shock of 0.3 mA, 0.5 ms	Brocco et al., 1997	Soc. Neurosci. Abstr. 23:1215
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Shock-probe burying test	Rats	0.5-4	sc	+		Munoz et al., 1997	Soc. Neurosci. Abstr. 23:1216
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Rats	2.5 µg/0.5 µl	dorsal raphe	+		Cervo et al., 1997	Soc. Neurosci. Abstr. 23:1223

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Rats	0.5-5 µg/1 µl	dorsal hippocampus	o		Cervo et al., 1997	Soc. Neurosci. Abstr. 23:1223
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	2.5 µg/0.5 µl	dorsal raphe, 10	+	VI-20 s	Cervo et al., 2000	Neuropharmacology 39:1037-43
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	1-10 µg/0.5 µl	dorsal hippocampus, 10	o	(1) unpunished responding was increased at 10 µg; (2) VI-20 s	Cervo et al., 2000	Neuropharmacology 39:1037-43
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Vogel conflict test	Wistar rats (200-240g)	2.5-40	sc, 30	+	0.3 mA/0.5 s shock	Dekeyne et al., 2000	Psychopharmacology 152:55-66
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.63-40	sc, 30	+	HLU conditions	Dekeyne et al., 2000	Psychopharmacology 152:55-66
S 15535	Mixed 5-HT_{1A} agonist/antagonist	Conditioned fear	C57BL/6J (9-11-week-old)	0.5-5	sc, 20	+	(1) Shocks of 0.7 mA/2 s were applied; (2) The drug affected both context- and tone-dependent fear conditioning	Youn et al., 2009	Neuropharmacology 5:567-576
S 15535+WAY 100635 (0.16 mg/kg)	Mixed 5-HT_{1A} agonist/antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.63-40	sc, 30	(o)	(1) Antagonism of the effects of S15535; (2) HLU conditions	Dekeyne et al., 2000	Psychopharmacology 152:55-66
S 15535+WAY 100635 (0.3 mg/kg)	Mixed 5-HT_{1A} agonist/antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	2.5 µg/0.5 µl	dorsal raphe, 10	(o)	(1) Antagonism of the effects of S 15535; (2) VI-20 s	Cervo et al., 2000	Neuropharmacology 39:1037-43
S 15535+WAY 100635 (0.3 mg/kg)	Mixed 5-HT_{1A} agonist/antagonist	Conditioned fear	C57BL/6J (9-11-week-old)	1-5	sc, 20	(o)	Shocks of 0.7 mA/2 s were applied	Youn et al., 2009	Neuropharmacology 5:567-576
S 15535+WAY 100635 (0.63 mg/kg)	Mixed 5-HT_{1A} agonist/antagonist	Vogel conflict test	Wistar rats (200-240g)	0.63-40	sc, 30	(o)	Antagonism of the effects of S15535	Dekeyne et al., 2000	Psychopharmacology 152:55-66

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
S 21187	5-HT_{1A} antagonist	Mouse defense test battery	Swiss-Webster mice (10-week-old)	2.5-10	ip, 30	+		Griebel et al., 1996	Prog. Neuropsychopharmacol. Biol. Psych. 20:185-205
S 21357	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Light/dark test	Mice	0.25-4	po	+		Diouf et al., 1997	Bioorg. Med. Chem. 7:2579-2584
S 21357	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Mouse defense test battery	Swiss-Webster mice (10-week-old)	0.12-2	ip, 30	+		Griebel et al., 1996	Pharmacol. Biochem. Behav. 54:509-516
S(-)-8-OH-DPAT	5-HT_{1A} partial agonist	Elevated plus-maze	Swiss-Webster mice (32-41g)	0.03-1	sc, 20	+		Cao and Rodgers, 1996	Behav. Pharmacol. 7:810-819
S(-)-8-OH-DPAT	5-HT_{1A} partial agonist	Elevated plus-maze	Mice	0.03-0.3	sc	+	Sedation might be involved	Helton et al., 1995	Soc. Neurosci. Abstr. 21:1367
S14506	5-HT_{1A} full agonist	Conflict test	Pigeons	0.0025-0.63	im, 60	+	FR30	Colpaert et al., 1992	Drug Dev. Res. 26:21-48
S14506	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-600g)	0.00063-0.25	im, 5	+		Schreiber et al., 1995	Pharmacol. Biochem. Behav. 51:211-215
S14506	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats	0.0006-2.5	sc, 30	o		Millan and Brocco, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 153
S14506	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-650g)	0.002-0.01	im, 5	+		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
S14671	5-HT_{1A} full agonist	Conflict test	Pigeons	0.0025-0.16	im, 60	+	FR30	Millan and Brocco, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 153
S14671	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons (500-600g)	0.00063-0.16	im, 5	+		Schreiber et al., 1995	Pharmacol. Biochem. Behav. 51:211-215
S14671	5-HT_{1A} full agonist	Elevated plus-maze	Wistar rats	0.0006-2.5	sc, 30	o		Millan and Brocco, 1993	In: Anxiety - Neurobiological, Clinical and Therapeutic Aspects, p. 153

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
S16924	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	Carneaux pigeons (500-600g)	0.63	im, 5	+		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Wistar rats (220-240g)	0.04-0.16	sc, 30	+		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Ultrasonic distress vocalizations	Wistar rats (220-240g)	0.16-0.63	sc, 30	+		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Elevated plus-maze	Wistar rats (220-240g)	0.01-2.5	sc, 30	o		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Social interaction	Wistar rats (220-240g)	0.04	sc, 30	+	Area highly illuminated (300 lux)	Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Isolation-induced aggression	CD1 mice (22-25g)	0.63-2.5	sc, 30	+		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924+WAY 100635 (0.16 mg/kg)	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Vogel conflict test	Wistar rats (220-240g)	0.04	sc, 30	(o)	Antagonism of the effects of S16924	Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924+WAY 100635 (0.16 mg/kg)	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Social interaction	Wistar rats (220-240g)	0.16	sc, 60	(o)	Antagonism of the effects of S16924	Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924+WAY 100635 (0.16-0.63 mg/kg)	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Isolation-induced aggression	CD1 mice (22-25g)	0.63	sc, 30	+	No antagonism of the effects of S16924	Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
S16924+WAY 100635 (0.63 mg/kg)	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Ultrasonic distress vocalizations	Wistar rats (220-240g)	0.63	sc, 30	(o)	Antagonism of the effects of S16924	Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
S20244	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.1-5.6	im	+		Barrett et al., 1994	Psychopharmacology 116:73-78
S20244	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.05-1	sc, 30	+		Curle et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p.139
S20244	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.1-10	sc, 30	+		Curle et al., 1994	Drug Dev. Res. 32:183-190
S20244	5-HT_{1A} full agonist	Light/dark test	Swiss mice (10-week-old)	1-3	ip, 20	+		Griebel et al., 1992	Neuroreport 3:84-86
S20244	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.01-1	sc, 30	+	LLU	Curle et al., 1994	Drug Dev. Res. 32:183-190
S20244	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.05-0.5	sc, 30	+	HLU	Curle et al., 1994	Drug Dev. Res. 32:183-190
S20244	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.01-1	sc, 30	+	LLF	Curle et al., 1994	Drug Dev. Res. 32:183-190
S20244	5-HT_{1A} full agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.01-0.5	sc, 30	+	HLF	Curle et al., 1994	Drug Dev. Res. 32:183-190
S20500	5-HT_{1A} full agonist	Vogel conflict test	Wistar rats (195-245g)	16	ip, 30	+		Porsolt et al., 1992	Drug Dev. Res. 27:389-402
S20500	5-HT_{1A} full agonist	Conflict test	White Carneau pigeons	0.3-5.6	im	+		Barrett et al., 1994	Psychopharmacology 116:73-78
S20500	5-HT_{1A} full agonist	Elevated plus-maze	BALB/cByJ (8-week-old)		ip, 30	o		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
S20500	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	1-10	po, 30	o		Curle et al., 1994	Drug Dev. Res. 32:183-190
S20500	5-HT_{1A} full agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.25	sc, 30	+		Curle et al., 1994	Drug Dev. Res. 32:183-190
S20500	5-HT_{1A} full agonist	Light/dark test	Swiss mice (10-week-old)	2-4	ip, 20	+		Griebel et al., 1992	Neuroreport 3:84-86
S20500	5-HT_{1A} full agonist	Social interaction	Rats	94 - 940 nmol	po	o		Curle et al., 1994	Drug Dev. Res. 32:183-190

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
S20500	5-HT_{1A} full agonist	Social interaction	Rats	94 - 940 nmol	sc	o		Curle et al., 1994	Drug Dev. Res. 32:183-190
S20500	5-HT_{1A} full agonist	Mirrored chamber	BALB/cByJ (8-week-old)		ip, 30	+		Seale et al., 1992	Clin. Neuropharmacol. 15 (Part B):538B
S32006	5-HT_{2C} antagonist	Marble burying	NMRI mice (22-26g)	10-40	ip, 30	+		Dekeyne et al., 2008	Psychopharmacology 199:549-568
S32006	5-HT_{2C} antagonist	Vogel conflict test	Wistar rats (200-250g)	20-40	ip, 30	+	Shocks of 0.3 mA/0.5 s were delivered	Dekeyne et al., 2008	Psychopharmacology 199:549-568
S32006	5-HT_{2C} antagonist	Vogel conflict test	Wistar rats (200-250g)	40	po, 30	+	Shocks of 0.3 mA/0.5 s were delivered	Dekeyne et al., 2008	Psychopharmacology 199:549-568
S32006	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (200-250g)	0.63-2.5	ip, 30	+	Shocks of 0.3 mA/0.5 s were delivered	Dekeyne et al., 2008	Psychopharmacology 199:549-568
S32006	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (200-250g)	0.63-10	po, 60	+	Shocks of 0.3 mA/0.5 s were delivered	Dekeyne et al., 2008	Psychopharmacology 199:549-568
S32006	5-HT_{2C} antagonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	0.63-10	po, 60	o	Shocks of 800 µA/8 s were delivered the day before	Dekeyne et al., 2008	Psychopharmacology 199:549-568
S3344	5-HT reuptake inhibitor	Social interaction	Rats	2.5-20	ip, 15	-	Weak effect	File, 1984	Pol. J. Pharmacol. Pharm. 36:505-512
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Distress vocalizations	Female Dunkan Hartley guinea pigs (350-500g, 6-week pregnant)	MED=0.63	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	MED>40	ip, 30	o		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Marble burying	NMRI mice (25-30g)	ID_{50}=2.8	sc, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Social interaction	Mongolian gerbils (50-70g)	MED>2.5	sc, 30	o		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Vogel conflict test	Wistar rats (225-300g)	MED=10	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
SB 200646A	$5\text{-HT}_{2C/2B}$ antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	5-40	po, 60	+	VI30/FR5	Kennett et al., 1995	Psychopharmacology 118:178-182
SB 200646A	$5\text{-HT}_{2C/2B}$ antagonist	Conflict test	Female and male marmoset (400-500g)	10-20	po, 60	+		Kennett et al., 1995	Psychopharmacology 118:178-182
SB 200646A	$5\text{-HT}_{2C/2B}$ antagonist	Social interaction	Sprague-Dawley rats (220-250g)	2-40	po, 60	+	HLU	Kennett et al., 1994	Br. J. Pharmacol. 111:797-802
SB 200646A	$5\text{-HT}_{2C/2B}$ antagonist	Conditioned emotional response	Lister hooded rats (250g)	15-60	po, 30	o		Oxley et al., 1995	Br. J. Pharmacol. 116:215P
SB 200646A	$5\text{-HT}_{2B/2C}$ antagonist	Conditioned emotional response	Listed hooded rats (250g)	15-60	po, 30	o		Oxley et al., 1995	Br. J. Pharmacol. 116:215P
SB 200646A	$5\text{-HT}_{2B/2C}$ antagonist	Social interaction	Sprague-Dawley rats (210-230g)	1-2	po, 60	o		Duxon et al., 1997	Neuropharmacology 36:601-608
SB 200646A	$5\text{-HT}_{2B/2C}$ antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	3-30	ip, 25	+		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
SB 200646A	$5\text{-HT}_{2B/2C}$ antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	3-30	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
SB 200646A	$5\text{-HT}_{2C/2B}$ antagonist	Social interaction	Sprague-Dawley rats (250-380g)	40	po, 90	o	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SB 204070	5-HT_4 antagonist	Elevated plus-maze	Sprague-Dawley rats (230-234g)	1	sc, 30	+		Silvestre et al., 1996	Eur. J. Pharmacol. 309:219-222
SB 204070	5-HT_4 antagonist	Light/dark test	BKW mice (30-35g)	0.001-10 µg	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
SB 204070A	5-HT_4 antagonist	Social interaction	Sprague-Dawley rats (220-250g)	0.001-0.1	sc, 30	+		Kennett et al., 1997	Neuropharmacology 36:707-712
SB 204070A	5-HT_4 antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.01 and 1	sc, 30	+		Kennett et al., 1997	Neuropharmacology 36:707-712
SB 204070A	5-HT_4 antagonist	Geller-Seifter conflict test	Sprague-Dawley CFY rats (400-600g)	0.1-1	sc, 30	o		Kennett et al., 1997	Neuropharmacology 36:707-712
SB 204741	5-HT_{2B} antagonist	Social interaction	Rats	MED>10		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 204741	5-HT_{2B} antagonist	Ultrasonic distress vocalizations	Rats	MED>10		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 204741	5-HT_{2B} antagonist	Vogel conflict test	Rats	MED>10		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 204741	5-HT_{2B} antagonist	Elevated plus-maze	Rats	MED=10		+		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 206553	5-$HT_{2A/2B}$ antagonist	Geller-Seifter conflict test	CFY rats (400-600g)	2-40	po, 60	+	VI30/FR5	Kennett et al., 1996	Br. J. Pharmacol. 117:1443-1448
SB 206553	5-$HT_{2A/2B}$ antagonist	Conflict test	Female and male marmoset (400-500g)	15-25	po, 60	+		Kennett et al., 1996	Br. J. Pharmacol. 117:1443-1448
SB 206553	5-$HT_{2A/2B}$ antagonist	Social interaction	Sprague-Dawley rats (220-250g)	2-20	po, 60	+	HLU	Kennett et al., 1996	Br. J. Pharmacol. 117:1443-1448
SB 206553	5-$HT_{2B/2C}$ antagonist	Conflict test	Female and male marmoset (400-500g)	15-20	po, 60	+		Bright et al., 1996	Br. J. Pharmacol. 107:153P
SB 206553	5-$HT_{2B/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (180-230g)	3-30	ip, 30	+	48 h water deprivation and electric shocks	Griebel et al., 1997	Neuropharmacology 36:793-802

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							of 0.3 mA		
SB 206553	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Sprague-Dawley rats (180-230g)	3	ip, 30	+		Griebel et al., 1997	Neuropharmacology 36:793-802
SB 206553	5-$HT_{2B/2C}$ antagonist	Light/dark test	BALB/c mice (7-week-old)	1-20	ip, 30	o		Griebel et al., 1997	Neuropharmacology 36:793-802
SB 206553	5-$HT_{2B/2C}$ antagonist	Mouse defense test battery	Swiss mice (10-week-old)	1-20	ip, 30	o		Griebel et al., 1997	Neuropharmacology 36:793-802
SB 206553	5-$HT_{2B/2C}$ antagonist	Social interaction	Rats	MED=2.5		+		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 206553	5-$HT_{2B/2C}$ antagonist	Ultrasonic distress vocalizations	Rats	MED>10		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 206553	5-$HT_{2B/2C}$ antagonist	Vogel conflict test	Rats	MED>10		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 206553	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Rats	MED>10		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 206553	5-$HT_{2B/2C}$ antagonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	10-20	po, 60	o	Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
SB 206553	5-$HT_{2B/2C}$ antagonist	Social interaction	Sprague-Dawley rats	0,63	sc, 30	o		Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
SB 206553	5-$HT_{2B/2C}$ antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.63	sc, 45	o	HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
SB 206553	5-$HT_{2B/2C}$ antagonist	Vogel conflict test	Wistar rats (200-240g)	10	ip, 30	+	0.3 mA/0.5 s shock	Dekeyne et al., 2000	Psychopharmacology 152:55-66
SB 206553	5-$HT_{2B/2C}$ antagonist	Social interaction	Sprague-Dawley rats (240-260g)	2.5	ip, 30	+	HLU conditions	Dekeyne et al., 2000	Psychopharmacology 152:55-66
SB 206553	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	SHR rats (6-8-week-old)	1.25-5	ip, 30	o	Total arm entries were increased	Takahashi et al., 2001	Braz. J. Med. Biol. Res. 34:675-682

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SB 206553	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Lewis rats (6-8-week-old)	1.25-5	ip, 30	o	Total arm entries were increased	Takahashi et al., 2001	Braz. J. Med. Biol. Res. 34:675-682
SB 206553	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (20-24g)	0.03-4	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
SB 206553	5-$HT_{2B/2C}$ antagonist	Light/dark test	Swiss mice (20-24g)	0.03-4	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
SB 206553	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.03-4	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
SB 206553	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.1-1	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
SB 206553	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	Shocks of 0.6 mA/0.5 s were applied	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
SB 206553	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.1-1	ip, 45	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 147:175-184
SB 206553	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (4-week-old)	0.1-1	ip, 45	o	Shock of 0.6 mA/0.5 s	Bourin et al., 2005	Pharmacol. Biochem. Behav. 81:645-656
SB 206553	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139
SB 206553	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (20-24g)	0.1-1	ip, 45	o	(1) Animals were exposed to the test 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2006	Behav. Brain Res. 166:131-139

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SB 206553	5-$HT_{2B/2C}$ antagonist	Airjet-induced escape responses	Sprague-Dawley rats (270-300g)	0.6	ip, 60	o		Salchner and Singewald, 2006	Psychopharmacology 185:282-288
SB 206553	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (18-22g)	0.1-1	ip, 45	o	Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
SB 206553	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Swiss mice (18-22g)	0.1-1	ip, 45	o		Massé et al., 2007	Behav. Brain Res. 177:214-226
SB 206553+diazepam (1 mg/kg)	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (18-22g)	0.1-1	ip, 45	o	(1) No interaction; (2) Electric shock of 0.6 mA/0.5 s were delivered	Massé et al., 2007	Behav. Brain Res. 177:214-226
SB 206553+diazepam (1 mg/kg)	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Swiss mice (18-22g)	0.1-1	ip, 45	o	No interaction	Massé et al., 2007	Behav. Brain Res. 177:214-226
SB 207266A	5-HT_4 antagonist	Social interaction	Sprague-Dawley rats (220-250g)	0.01, 1 and 10	po, 60	+		Kennett et al., 1997	Neuropharmacology 36:707-712
SB 207266A	5-HT_4 antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1	po, 60	+	Weak effects	Kennett et al., 1997	Neuropharmacology 36:707-712
SB 207266A	5-HT_4 antagonist	Geller-Seifter conflict test	Sprague-Dawley CFY rats (400-600g)	0.1-1	po, 60	o		Kennett et al., 1997	Neuropharmacology 36:707-712
SB 207266A	5-HT_4 antagonist	Stress-induced defecation	Rats (5 week-old)	0.0001-1	po, 60-120	+	Stress was produced using restraint	Sanger et al., 2000	Br. J. Pharmacol. 130:706-12
SB 207266A	5-HT_4 antagonist	Stress-induced watery diarrhoea	Rats (5 week-old)	0.0001-1	po, 60-120	+	(1) weak effect; (2) Stress was produced using restraint	Sanger et al., 2000	Br. J. Pharmacol. 130:706-12
SB 215505	5-HT_{2B} antagonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	5	po, 60	o	Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
SB 215505+BW-723C86 (3 mg/kg)	5-HT_{2B} antagonist	Social interaction	Rats	po, 60	0.3-1	(o)	Antagonism of the anxiolytic-like effects of BW-723C86	Kennett et al., 1998	Soc. Neurosci. Abstr. 24:1371

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SB 216641	5-HT_{1B} antagonist	Vogel conflict test	Wistar rats (250-300g)	2.5-5	ip, 60	+	Shocks of 0.5 mA were applied	Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
SB 216641	5-HT_{1B} antagonist	Elevated plus-maze	Wistar rats (250-300g)	2.5-5	ip, 60	+		Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
SB 216641	5-HT_{1B} antagonist	Four-plate test	Swiss mice (24-28g)	10	ip, 60	+		Tatarczyńska et al., 2004	Behav. Pharmacol. 15:523-534
SB 216641	5-HT_{1B} antagonist	Vogel conflict test	Wistar rats (240-260g)	2.5	ip, 60	+	Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
SB 216641+flumazenil (10 mg/kg)	5-HT_{1B} antagonist	Vogel conflict test	Wistar rats (240-260g)	2.5	ip, 60	(o)	(1) Antagonism; (2) Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
SB 216641+PCA (10 mg/kg, twice)	5-HT_{1B} antagonist	Vogel conflict test	Wistar rats (240-260g)	2.5	ip, 60	+	(1) No antagonism; (2) Shocks of 0.5 mA were applied	Chojnacka-Wójcik et al., 2005	J. Pharm. Pharmacol. 57:253-257
SB 221284	5-$HT_{2C/2B}$ antagonist	Social interaction	Sprague-Dawley rats (250-380g)	1	ip, 90	o	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36
SB 224289	5-HT_{1B} antagonist	Light/dark test	NMRI mice (30-32g)	ip	MED=0.04 mg/kg	+		Chopin et al., 1998	Soc. Neurosci. Abstr. 24:601
SB 224289	5-HT_{1B} antagonist	Open-field	Sprague-Dawley rats (250-300g)	5	ip, 90	-		Hoplight et al., 2005	Physiol. Behav. 84:707-714
SB 224289+cocaine (15 mg/kg)	5-HT_{1B} antagonist	Open-field	Sprague-Dawley rats (250-300g)	5	ip, 90	-	The drug reduced cocaine-induced locomotion, but increased anxiety-like behavior	Hoplight et al., 2005	Physiol. Behav. 84:707-714
SB 242084	5-HT_{2C} antagonist	Social interaction	Rats	MED=0.16		+		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 242084	5-HT_{2C} antagonist	Ultrasonic distress	Rats	MED>2.5		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		vocalizations							
SB 242084	5-HT_{2C} antagonist	Vogel conflict test	Rats	MED>2.5		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 242084	5-HT_{2C} antagonist	Elevated plus-maze	Rats	MED>2.5		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
SB 242084	5-HT_{2C} antagonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	5	po, 60	o	Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats	0,4	ip, 30	o		Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.04	ip, 45	o	HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
SB 242084	5-HT_{2C} antagonist	Vogel conflict test	Wistar rats (200-250g)	15	ip, 30	+	Shock of 0.3 mA/0.5 sec, every 20th lick	Millan et al., 2001	Neuropsychopharmacology 25:585-600
SB 242084	5-HT_{2C} antagonist	Social interaction	Wistar rats (200-250g)	0.16-2.5	ip, 30	+	Unfamiliar cage	Millan et al., 2001	Neuropsychopharmacology 25:585-600
SB 242084	5-HT_{2C} antagonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	0.16-10	ip, 30	o		Millan et al., 2001	Neuropsychopharmacology 25:585-600
SB 242084	5-HT_{2C} antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.16-10	ip, 30	o		Millan et al., 2001	Neuropsychopharmacology 25:585-600
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (240-330g)	0.2-0.5	ip, 30	+	HLU conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
SB 242084	5-HT_{2C} antagonist	Elevated plus-maze	Sprague-Dawley rats (110-140g)	0.1-1	ip, 30	+	Motor activity was increased	Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
SB 242084	5-HT_{2C} antagonist	Geller-Seifter conflict test	Sprague-Dawley rats	0.1-3	ip, 30	o	FR10 schedule was used	Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
SB 242084	5-HT_{2C} antagonist	Conditioned	Sprague-Dawley rats	1-3	ip, 30	+		Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		emotional response							
SB 242084	5-HT_{2C} antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (260 g)	0.1-1	ip, 30	o		Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
SB 242084	5-HT_{2C} antagonist	Schedule-induced polydipsia	Sprague-Dawley rats (250-300 g)	0.1-1	ip, 30	?	(1) The drug increased water consumption; (2) VI60 operant was used	Martin et al., 2002	Pharmacol. Biochem. Behav. 71:615-625
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 30	o	Activity was reduced at this dose	Overstreet et al., 2003	Psychopharmacology 167:344-352
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 5 and 10 days	+	The drug was given after the first and second cycles	Overstreet et al., 2003	Psychopharmacology 167:344-352
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 4.5 h	+	The drug was given after removal of ethanol on the third cycle	Overstreet et al., 2003	Psychopharmacology 167:344-352
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (160-180g)	0.1-1	ip, 5 and 10 days	+	The drug was given after the first and second cycles	Overstreet et al., 2003	Psychopharmacology 167:344-352
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats	1	30	+	The drug counteracted the anxiogenic-like effects of alcohol withdrawal	Overstreet et al., 2003	Pharmacol. Biochem. Behav. 75:619-625
SB 242084	5-HT_{2C} antagonist	Open-field	Sprague-Dawley rats (275-300g)	1	ip	o		Campbell and Merchant, 2003	Brain Res. 993:1-9
SB 242084	5-HT_{2C} antagonist	Elevated plus-maze	Sprague-Dawley rats (160-180g)	1	ip, 30	+	The drug reversed anxiogenic-like	Knapp et al., 2004	Alcohol 32:101-111

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							effects of ethanol withdrawal		
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 30	+	The drug reversed anxiogenic-like effects of ethanol withdrawal	Knapp et al., 2004	Alcohol 32:101-111
SB 242084	5-HT_{2C} antagonist	Social interaction	Sprague-Dawley rats (230-250g)	0.3-1	ip, 20	+	HLU conditions were used	Kantor et al., 2005	J. Pharmacol. Exp. Ther. 315:921-930
SB 242084	5-HT_{2C} antagonist	Social interaction	Lister rats (300-375g)	0,2	ip, 30	o	HLU conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396
SB 242084	5-HT_{2C} antagonist	Condition ed fear	Sprague-Dawley rats (350-400g)	0.2	ip, 60	o	Footshocks of 0.7 mA/0.5 s were delivered during conditioning	Burghardt et al., 2007	Biol. Psychiatry 62:1111-1118
SB 242084	5-$HT_{2C/2B}$ agonist	Social interaction	Sprague-Dawley rats (250-300g)	1	ip, 30	o		Hackler et al., 2007	J. Pharmacol. Exp. Ther. 320:1023-1029
SB 242084	5-HT_{2C} receptor antagonist	Condition ed fear	Fisher rats (247±5.89)	1	ip, 75	o	Shocks of 1.5 mA/5 s were delivered the day before	Greenwood et al., 2008	Psychopharmacology 199:209-222
SB 242084	5-HT_{2C} receptor antagonist	Operant conditioni ng	Fisher rats (247±5.89)	1	ip, 75	o	Shocks of 0.6 mA were delivered and an FR1/FR2 schedule was used	Greenwood et al., 2008	Psychopharmacology 199:209-222
SB 242084	5-HT_{2C} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Yamashita et al., 2011	Neuropharmacology 60:216-222
SB 242084	5-HT_{2C} receptor antagonist	Inhibitory avoidance in the elevated	Wistar rats (230-250g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Yamashita et al., 2011	Neuropharmacology 60:216-222

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		T-maze							
SB 242084	5-HT_{2C} receptor antagonist	Conditioned fear	Fisher rats (250-300g)	50 mM/1 µl/side	dorsal striatum, 15	+	(1) Shocks of 1.5 mA/5 s were delivered the day before; (2) The drug affected stress-induced interference in learning, but not stress-induced fear expression	Strong et al., 2011	Neuroscience 197:132-144
SB 242084	5-HT_{2C} receptor antagonist	Conditioned fear	Fisher rats (250-300g)	50 mM/0.5 µl/side	basolateral amygdala, 15	+	(1) Shocks of 1.5 mA/5 s were delivered the day before; (2) The drug affected stress-induced interference in learning, but not stress-induced fear expression	Strong et al., 2011	Neuroscience 197:132-144
SB 242084	5-HT_{2C} receptor antagonist	DPAG stimulation	Wistar rats (270-300g)	10 nmol/0.2 µl	dorsal PAG, 10	o		de Oliveira Sergio et al., 2011	Psychopharmacology 218:725-732
SB 242084	5-HT_{2C} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (290-310g)	0.1-10 nmol/0.2 µl	basolateral amygdala, 10	o		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
SB 242084	5-HT_{2C} receptor antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (290-310g)	0.1 and 10 nmol/0.2 µl	basolateral amygdala, 10	+		Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SB 242084	5-HT_{2C} receptor antagonist	Vogel conflict test	Wistar rats (290-310g)	0.01 nmol/0.2 µl	basolateral amygdala, 10	o	Shocks of 0.5 mA/2 s were applied	Vicente and Zangrossi, 2012	Int. J. Neuropsychopharmacol. 15:389-400
SB 242084+CP-809101 (6 mM/1 µl/side)	5-HT_{2C} receptor antagonist	Conditioned fear	Fisher rats (250-300g)	50 mM/1 µl/side	dorsal striatum, 15	(o)	(1) Shocks of 1.5 mA/5 s were delivered the day before	Strong et al., 2011	Neuroscience 197:132-144
SB 243213	5-HT_{2C} inverse agonist	Social interaction	Sprague-Dawley rats (160-180g)	3	ip, 60	+	The drug reversed partially anxiety-like behavior induced by repeated ethanol withdrawals	Overstreet et al., 2005	Pharmacol. Biochem. Behav. 81:122-130
SB 243213	5-HT_{2C} inverse agonist	Social interaction	Alcohol-preferring inbred P rats (160-180g)	3	ip, 60	o	The drug did not reverse anxiety-like behavior induced by repeated ethanol withdrawals	Overstreet et al., 2005	Pharmacol. Biochem. Behav. 81:122-130
SB 243213	5-HT_{2C} inverse agonist	Social interaction	Sprague-Dawley rats (240-260g)	0.63-2.5	ip, 30	+	HLU conditions were used	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
SB 243213	5-HT_{2C} inverse agonist	Vogel conflict test	Wistar rats (200-250g)	40	ip, 30	+	Electric shocks of 0.3 mA/0.5 s	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
SB 243213	5-HT_{2C} inverse agonist	Elevated plus-maze	Wistar rats (200-250g)	0.16-40	ip, 30	o		Millan et al., 2005	Psychopharmacology 177:1-12 (?)
SB 243213	5-HT_{2C} inverse agonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	0.16-40	ip, 30	o	Electric shocks of 0.8 mA/8 s	Millan et al., 2005	Psychopharmacology 177:1-12 (?)
SB 243213	5-HT_{2C} inverse agonist	Social interaction	Sprague-Dawley rats (160-180g)	3 µg/µl	amygdala	+	The drug was given after the fifth and tenth cycles of ethanol exposure	Overstreet et al., 2006	Psychopharmacology 187:1-12
SB 243213	5-HT_{2C} inverse agonist	Social interaction	Sprague-Dawley rats (160-180g)	3 µg/µl	dorsal raphe	o	The drug was given after the fifth and tenth	Overstreet et al., 2006	Psychopharmacology 187:1-12

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							cycles of ethanol exposure		
SB 243213	5-HT_{2C} inverse agonist	Social interaction	Sprague-Dawley rats (160-180g)	3 µg/µl	nucleus accumbens	o	The drug was given after the fifth and tenth cycles of ethanol exposure	Overstreet et al., 2006	Psychopharmacology 187:1-12
SB 243213	5-HT_{2C} inverse agonist	Social interaction	Sprague-Dawley rats (160-180g)	3 µg/µl	paraventricular nucleus	o	The drug was given after the fifth and tenth cycles of ethanol exposure	Overstreet et al., 2006	Psychopharmacology 187:1-12
SB 258585	5-HT_6 antagonist	Vogel conflict test	Wistar rats (260-280g)	1 µg/0,5 µl/site	hippocampus, 10	+	Shocks of 0.5 mA were delivered	Wesołowska et al., 2007	Behav. Pharmacol. 18:439-446
SB 269970	5-HT_7 antagonist	Vogel conflict test	Wistar rats (250-300g)	1	ip, 30	+	Electric shocks of 0.5 mA were applied	Wesołowska et al., 2006	Neuropharmacology 51:578-586
SB 269970	5-HT_7 antagonist	Elevated plus-maze	Wistar rats (250-300g)	0.5	ip, 30	+		Wesołowska et al., 2006	Neuropharmacology 51:578-586
SB 269970	5-HT_7 antagonist	Four-plate test	Swiss mice (24-28g)	1	ip, 30	+		Wesołowska et al., 2006	Neuropharmacology 51:578-586
SB 269970	5-HT_7 antagonist	Vogel conflict test	Wistar rats (250-270g)	0.3-1 µg/0.5 µl/site	hippocampus, 10	+	Electric shocks of 0.5 mA were applied	Wesołowska et al., 2006	Eur. J. Pharmacol. 553:185-190
SB 269970	5-HT_7 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	5 nmol/0.05 µl	dorsal tegmental bundle, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
SB 269970	5-HT_7 antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	5 nmol/0.05 µl	dorsal tegmental bundle, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
SB 616234-A	5-HT_{1B} antagonist	Ultrasonic distress	Sprague-Dawley rat pups (9-12-day-old)	1-3	ip, 30	+		Dawson et al., 2006	Neuropharmacology 50:975-983

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		vocalizations							
SB 616234-A	5-HT_{1B} antagonist	Ultrasonic distress vocalizations	Dunkin Hartley guinea pig pups (7-10-day-old)	3-10	ip, 4 h	+		Dawson et al., 2006	Neuropharmacology 50:975-983
SB 616234-A	5-HT_{1B} antagonist	Human threat	Female and male marmosets (Callithrix jacchus) (350-500g)	3-30	po, 6h	+		Arban et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S386
SB 649915-B	5-$HT_{1A/B}$ antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-12-day-old)	0.1-1	ip, 30	+		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
SB 649915-B	5-$HT_{1A/B}$ antagonist	Human threat	Female and male marmosets (300-500g)	3-10	sc, 6 h	+		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
SB 649915-B	5-$HT_{1A/B}$ antagonist	Social interaction	Sprague-Dawley rats (265-384g)	1-7.5	po, for 4 days, t.i.d.	o		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
SB 649915-B	5-$HT_{1A/B}$ antagonist	Social interaction	Sprague-Dawley rats (265-384g)	1-3	po, for 7 days, t.i.d.	+		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
SB 649915-B	5-$HT_{1A/B}$ antagonist	Social interaction	Sprague-Dawley rats (265-384g)	1-7.5	po, for 21 days, t.i.d.	+		Starr et al., 2007	Neuropsychopharmacology 32:2163-21672
SB 699551	5-HT_{5A} antagonist	Open-field	Wistar rats (240-290g)	3-30	ip, 30	o		Kassai et al., 2012	Behav. Pharmacol. 23:397-406
SB 699551	5-HT_{5A} antagonist	Ultrasonic distress vocalizations	Wistar rats (225-360g)	30-60	ip, 30	+	Shocks of 0.6 mA/1 s were applied	Kassai et al., 2012	Behav. Pharmacol. 23:397-406
SB-215505	5-HT_{2B} antagonist	Social interaction	Rats	po, 60	0.3-1	o		Kennett et al., 1998	Soc. Neurosci. Abstr. 24:1371
SB399885	5-HT_6 antagonist	Elevated plus-maze	Syrian hamsters (*M. auratus*, 3-6-month-old)	1	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
SB399885	5-HT_6 antagonist	T-tube	Syrian hamsters (*M. auratus*, 3-6-month-old)	1	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SB399885	5-HT_6 antagonist	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	1	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
SC-48274	5-HT synthesis inhibitor	Stress-induced gastric lesion	ICR mice (7-8-week-old)	25-50	po, 60	+		Ogawa et al., 1993	Jpn. J. Pharmacol. 61:115-121
SC-48274	5-HT synthesis inhibitor	Stress-induced gastric lesion	ICR mice (7-8-week-old)	5-50	po, for 3 days	+		Ogawa et al., 1993	Jpn. J. Pharmacol. 61:115-121
SC-48274	5-HT synthesis inhibitor	Passive-avoidance test	Wistar rats (7-8-week-old)	25	po, 60	+		Ogawa et al., 1993	Jpn. J. Pharmacol. 61:115-121
SDZ 205-557	5-HT_4 antagonist	Light/dark test	Mice	0.0001-0.1	ip, 40	o		Costall and Naylor, 1993	Int. Clin. Psychopharmacol. 8 Suppl 2:11-18
SDZ 205-557	5-HT_4 antagonist	Light/dark test	BKW mice (30-36g)	0.001-0.1	ip, 40	o	Asymmetric compartments	Cheng et al., 1994	Eur. J. Pharmacol. 255:39-49
SDZ 205-557	5-HT_4 antagonist	Social interaction	Rats	0.0001-0.1	ip, 40	o		Costall and Naylor, 1993	Int. Clin. Psychopharmacol. 8 Suppl 2:11-18
SDZ 205-557	5-HT_4 antagonist	Light/dark test	BKW mice (30-35g)	0.001-100 µg	ip, 40	o		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-118
SDZ 21009	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (180-220g)	2-8	ip, 60	o	Modified Vogel test	Chojnacka-Wójcik and Przegalinski, 1991	Neuropharmacology 30:711-717
SDZ 216-525	5-HT_{1A} antagonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	MED=0.1	sc, 30	+		Bill and Fletcher, 1994	Br. J. Pharmacol. 111:151P
SDZ 216-525	5-HT_{1A} antagonist	Agonistic behavior	BSVS mice (25-35g)	0.025-1	sc, 30	+		Bell and Hobson, 1993	Pharmacol. Biochem. Behav. 46:873-880
SDZ 216-525	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster (8-9 week-old)	0.05-0.8	sc, 30	+		Cao and Rodgers, 1997	Pharmacol. Biochem. Behav. 58:593-603

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Seganserin	5-HT_2 antagonist	Elevated plus-maze	PVG rats (200-280g)	0.5	ip, 30	+	Observations during 10-min	Critchley and Handley, 1987	Psychopharmacology 93:502-506
SER 082	5-$HT_{2B/2C}$ antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	0.1-1	ip, 25	+		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
SER 082	5-$HT_{2B/2C}$ antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	0.1-1	ip, 25	o		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
SER 082	5-$HT_{2B/2C}$ antagonist	Four-plate test	Swiss mice (20-24g)	0.06-4	ip, 30	o	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
SER 082	5-$HT_{2B/2C}$ antagonist	Light/dark test	Swiss mice (20-24g)	0.06-4	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
SER 082	5-$HT_{2B/2C}$ antagonist	Elevated plus-maze	Swiss mice (20-24g)	0.06-4	ip, 30	o		Nic Dhonnchadha et al., 2003	Behav. Brain Res. 140:203-214
Sertindole	5-HT_{2A} antagonist	Light/dark test	BKW mice (25-30g)	0.00023-2300 nM/kg	ip, 40	+	Asymmetric compartments	Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Sertindole	5-HT_{2A} antagonist	Light/dark test	Wistar rats (200-250g)	0.00023-0.23 µM/kg	sc, 2h	+		Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Sertindole	5-HT_{2A} antagonist	Social interaction	Lister hooded rats (225-275g)	0.000023-2300 nM/kg	ip, 40	+	HLU	Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Sertindole	5-HT_{2A} antagonist	Light/dark test	BKW mice (25-30g)	0.00023-2300 nM/kg	po, 40	+	Asymmetric compartments	Sánchez et al., 1995	Drug Dev. Res. 34:19-29

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Sertindole	5-HT_{2A} antagonist	Human threat	Marmoset (310-365g)	2.3-46 nM/kg	sc, 40	+		Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Sertindole	5-HT_{2A} antagonist	Vogel conflict test	Wistar rats (150-175g)	MED>5.7	sc, 2h	o	0.6 mA	Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Sertindole	5-HT_{2A} antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	MED>5.7	sc, 2h	o	Inescapable footshock of 1 mA	Sánchez et al., 1995	Drug Dev. Res. 34:19-29
Sertraline	5-HT reuptake inhibitor	Light/dark test	Wistar rats (200-250g)	0.00029-2.9 µmol/kg	sc, 30	o		Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Sertraline	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=22	sc, 30	+	Four 1.0 mV inescapable footshocks, each 10 s.	Sánchez and Meier, 1997	Psychopharmacology 129:197-205
Sertraline	5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	8-32	ip, 30	+	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344
Sertraline	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-330g)	15	ip, 30	-	LLF conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
Sertraline	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats			+	(1) Weak effects; (2) Four footshocks were delivered	Sanchez, 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S66
Sertraline	5-HT reuptake inhibitor	Stress-induced hyperthermia	ICR mice (7-week-old)	8-24	ip, 30	+		Liu et al., 2003	J. Psychiat. Res. 37:249-259
Sertraline	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (150-200g)	10	ip, for 7 days, o.d.	o	Animals were exposed to a predator scent 14 days prior to elevated plus-maze exposure and the drug was given 7 days after predator	Matar et al., 2006	Neuropsychopharmacology 31:2610-2618

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							scent exposure		
Sertraline	5-HT reuptake inhibitor	Acoustic startle reflex	Sprague-Dawley rats (150-200g)	10	ip, for 7 days, o.d.	o	Animals were exposed to a predator scent 14 days prior to elevated plus-maze exposure and the drug was given 7 days after predator scent exposure	Matar et al., 2006	Neuropsychopharmacology 31:2610-2618
Sertraline	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (150-200g)	10	ip, for 7 days, o.d.	+	Animals were exposed to a predator scent 14 days prior to elevated plus-maze exposure and the drug was given 1 h after predator scent exposure	Matar et al., 2006	Neuropsychopharmacology 31:2610-2618
Sertraline	5-HT reuptake inhibitor	Acoustic startle reflex	Sprague-Dawley rats (150-200g)	10	ip, for 7 days, o.d.	+	Animals were exposed to a predator scent 14 days prior to elevated plus-maze exposure and the drug was given 1 h after predator scent exposure	Matar et al., 2006	Neuropsychopharmacology 31:2610-2618
Sertraline	5-HT reuptake inhibitor	Fear-potentiated startle reflex	F344 rats (8-10-week-old)	30-100	po, 60	-		Steiner et al., 2012	Psychopharmacology 223:465-475

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Sertraline	5-HT reuptake inhibitor	Acoustic startle reflex	F344 rats (8-10-week-old)	100	po, 60	-	Rats were tested in dark condition	Steiner et al., 2012	Psychopharmacology 223:465-475
Sertraline	5-HT reuptake inhibitor	Acoustic startle reflex	F344 rats (8-10-week-old)	30-100	po, 60	-	Rats were tested in light condition	Steiner et al., 2012	Psychopharmacology 223:465-475
Sertraline	5-HT reuptake inhibitor	Elevated plus-maze	Female and male Wistar rats (70-day-old)	10	ip, for 7 days	o		Yildirim et al., 2012	Pharmacol. Biochem. Behav. 101:278-287
Sertraline	5-HT reuptake inhibitor	Elevated plus-maze	Female and male Wistar rats (70-day-old)	10	ip, for 7 days	+	Enriched rearing conditions	Yildirim et al., 2012	Pharmacol. Biochem. Behav. 101:278-287
Sertraline	5-HT reuptake inhibitor	Elevated plus-maze	Female and male Wistar rats (70-day-old)	10	ip, for 7 days	-	Social isalation rearing conditions	Yildirim et al., 2012	Pharmacol. Biochem. Behav. 101:278-287
Sertraline+SB 242084 (0.05-0.2 mg/kg)	5-HT reuptake inhibitor	Social interaction	Sprague-Dawley rats (240-330g)	15	ip, 30	(o)	(1) Antagonism of the anxiogenic-like effects of fluoxetine; (2) LLF conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
Sibutramine	NA/5-HT reuptake inhibitor	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	5-20	ip, 30	+	The drug impaired inhibitory avoidance	Jorge et al., 2004	Pharmacol. Res. 50:517-522
Sibutramine	NA/5-HT reuptake inhibitor	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	5-20	ip, 30	+	The drug increased latency to escape	Jorge et al., 2004	Pharmacol. Res. 50:517-522
Sibutramine	NA/5-HT reuptake inhibitor	Light/dark test	Wistar rats (250-300g)	5-20	ip, 30	+		Jorge et al., 2004	Pharmacol. Res. 50:517-522
Sibutramine	NA/5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (250-300g)	5-20	ip, 30	o		Jorge et al., 2004	Pharmacol. Res. 50:517-522
SL88.0338	5-HT_{1A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	1-3	sc, 15	+		Griebel et al., 1999	Psychopharmacology 144:121-130

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SL88.0338	5-HT_{1A} antagonist	Conflict test	Wistar rats (400-500g)	0.3-3	sc, 15	o		Griebel et al., 2000	Neuropharmacology 39:1848-57
SL88.0338	5-HT_{1A} antagonist	Vogel conflict test	Sprague-Dawley rats (180-200g)	3-10	sc, 15	+		Griebel et al., 2000	Neuropharmacology 39:1848-57
SL88.0338	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (180-200g)	0.3-10	sc, 15	+		Griebel et al., 2000	Neuropharmacology 39:1848-57
SL88.0338	5-HT_1 antagonist	Lithium-induced aversion	Rats	3	ip, 30	o		Jung et al., 2001	Soc. Neurosci. Abstr. 27:664.4
SL88.0338	5-HT_1 antagonist	Distress vocalizations	Guinea pig pups	10	ip, 30	o		Jung et al., 2001	Soc. Neurosci. Abstr. 27:664.4
SL88.0338	5-HT_{1A} antagonist	Passive-avoidance test	Wistar rats (175-220g)	3	ip, 30	o		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
SLV313	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Marble burying	NMRI mice (20-22g)	2.5	sc, 60	+		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
SM-13496	Non-selective 5-HT_{2A} antagonist	Conditioned fear	Sprague-Dawley rats	3-6	po, 60	+	Electric footshock-induced freezing	Ohno et al., 1996	Soc. Neurosci. Abstr. 22:480
Sotalol	Non selective antagonist	Elevated plus-maze	PVG rats (180-260g)	1-10	ip, 30	o	10-min exposure	Njung'e et al., 1993	J. Psychopharmacol. 7:173-180
Spiperone	Non selective antagonist	Conflict test	Squirrel monkeys (550-900g)	0.001-0.1	im	o	FR30	Brady and Barrett, 1985	J. Pharmacol. Exp. Ther. 234:106-112
Spiperone	Non selective antagonist	Conflict test	White Carneau Pigeons	0.01-0.1	im, 5	o		Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
Spiperone	Non selective antagonist	Light/dark test	BKW mice (30-35g)	0.04-0.32	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Spiperone	Non selective antagonist	Social interaction	Lister hooded rats (250-300g)	0.04-0.32	ip, 40	o		Costall and Naylor, 1995	Br. J. Pharmacol. 116:2989-2999
Spiperone	Non selective antagonist	Ultrasonic distress	AP mice (4-6 day-old)	0.1-0.2	30	+		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		vocalizations							
Spiperone	Non selective antagonist	DPAG stimulation	Wistar rats (200-250g)	10 nmol	dorsal PAG, 10	o		Nogueira and Graeff, 1995	Pharmacol. Biochem. Behav. 52:1-6
Spiperone	Non selective antagonist	DPAG stimulation	Wistar rats (370-450g)	0.14-0.2	ip, 35	+		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
Spiroxatrine	5-HT_{1A} agonist	Conflict test	White Carneau Pigeons	0.01-0.3	im,0	+	FR30	Barrett, 1992	Drug Dev. Res. 26:299-317
Spiroxatrine	5-HT_{1A} agonist	Elevated plus-maze	CD rats (160-200g)	0.3-3	po, 60	+		Luscombe et al., 1992	Br. J. Pharmacol. 100 (Suppl.):356P
SR 57746A	5-HT_{1A} full agonist	Geller-Seifter conflict test	Sprague-Dawley rats (200-250g)	3-30	po, 30	+		Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
SR 57746A	5-HT_{1A} full agonist	Taste aversion conflict test	Sprague-Dawley rats (200-250g)	3-10	po, 30	+		Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
SR 57746A	5-HT_{1A} full agonist	Light/dark test	C57BL/6J mice (18-20g)	2-8	po, 30	+		Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
SR 57746A	5-HT_{1A} full agonist	Staircase test	CD1 mice (22-25g)	1-32	po, 30	+		Simiand et al., 1993	Fundam. Clin. Pharmacol. 7:413-427
SSR181507	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Lithium-induced aversion	Rats	3	ip, 30	+		Jung et al., 2001	Soc. Neurosci. Abstr. 27:664.4
SSR181507	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Distress vocalizations	Guinea pig pups	1	ip, 30	+		Jung et al., 2001	Soc. Neurosci. Abstr. 27:664.4
SSR181507	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Marble burying	NMRI mice (20-22g)	0.04-2.5	sc, 60	o		Bruins et al., 2008	Behav. Pharmacol. 19:145-152
SSR181507	$D_{2/3}$ antagonist-5-	Passive-avoidance	Wistar rats (175-220g)	0.3-1	ip, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	HT_{1A} receptor agonist	test							
SSR181507	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (180-200g)	0.3-1	ip, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
SSR181507	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (180-200g)	1	ip, o.d. for 7, 14 and 21 days	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
SSR181507	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Social interaction	Sprague-Dawley rats (180-200g)	3	ip, 30	+		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
SSR181507+SL88.0338 (10 mg/kg)	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Distress vocalizations	Guinea pig pups	1	ip, 30	(o)	Antagonism of the effects of SSR181507	Jung et al., 2001	Soc. Neurosci. Abstr. 27:664.4
SSR181507+SL88.0338 (3 mg/kg)	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Lithium-induced aversion	Rats	3	ip, 30	(o)	Antagonism of the effects of SSR181507	Jung et al., 2001	Soc. Neurosci. Abstr. 27:664.4
SSR181507+SL88.0338 (3 mg/kg)	$D_{2/3}$ antagonist-5-HT_{1A} receptor agonist	Passive-avoidance test	Wistar rats (175-220g)	1	ip, 30	(o)		Boulay et al., 2011	Pharmacol. Biochem. Behav. 97:428-435
SUN 8399	5-HT_{1A} full agonist	Geller-Seifter conflict test	ddY mice (7-8-week-old)	3-30	po	o	VI1.5/FR5	Kuribara, 1994	Jpn. J. Pharmacol. 64:273-280
SUN 8399	5-HT_{1A} full agonist	Vogel conflict test	Rats	10-30	po	+		Hirotsu et al., 1991	Soc. Neurosci. Abstr. 17:1602
SUN 8399	5-HT_{1A} full agonist	Social interaction	Rats	10	po	+		Hirotsu et al., 1991	Soc. Neurosci. Abstr. 17:1602
Tandospirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Ovariectomized Long-Evans CD rats (300g)	1-100	po, 60	o		Pollard et al., 1992	Eur. J. Pharmacol. 221:297-305

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tandospirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	ddY mice (7-8-week-old)	10	po	o	VI1.5/FR5	Kuribara, 1994	Jpn. J. Pharmacol. 64:273-280
Tandospirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (320-370g)	1.25-20	ip, 0	+	Modified Geller-Seifter test	Shimizu et al., 1992	Jpn. J. Pharmacol. 58:283-289
Tandospirone	5-HT_{1A} partial agonist	Geller-Seifter conflict test	Sprague-Dawley rats (320-370g)	1.25-20	po, 0	+	Modified Geller-Seifter test	Shimizu et al., 1992	Jpn. J. Pharmacol. 58:283-289
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	5-10	ip, 60	+	Modified Vogel test	Shimizu et al., 1987	Jpn. J. Pharmacol. 45:493-500
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	10	ip, 5-10 days	+	Modified Vogel test	Shimizu et al., 1987	Jpn. J. Pharmacol. 45:493-500
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	20-40	po, 60	+	Modified Vogel test	Shimizu et al., 1987	Jpn. J. Pharmacol. 45:493-500
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (250g)	30-60 g/2l	dorsal hippocampus	+		Kataoka et al., 1991	Neuropharmacology 30:475-480
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (180-200g)	1	sc, 60	+	Modified Vogel test	Shimizu et al., 1992	Jpn. J. Pharmacol. 59:105-112
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Sprague-Dawley rats (180-200g)	1	sc, 60	+	with 5,7-DHT and Modified Vogel test	Shimizu et al., 1992	Jpn. J. Pharmacol. 59:105-112
Tandospirone	5-HT_{1A} partial agonist	Conflict test	Squirrel monkeys (800-1050g)	0.01-0.1	im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337
Tandospirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	1	im, 15	+	FR30	Pollard et al., 1992	Eur. J. Pharmacol. 221:297-305
Tandospirone	5-HT_{1A} partial agonist	Conflict test	White Carneau Pigeons	0.3-10	im, 0	+		Barrett and Vanover, 1993	Psychopharmacology 112:1-12

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tandospirone	5-HT_{1A} partial agonist	Conflict test	Pigeons	0.3-10		+		Barrett et al., 1994	Psychopharmacology 116:73-78
Tandospirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (500-600g)	0.63	im, 5	+	Unpunished responses decreased	Schreiber et al., 1995	Pharmacol. Biochem. Behav. 51:211-215
Tandospirone	5-HT_{1A} partial agonist	Conditioned avoidance	Sprague-Dawley rats (200-300g)	ED50>300	po, 60	o		Shimizu et al., 1987	Jpn. J. Pharmacol. 45:493-500
Tandospirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	1	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Tandospirone	5-HT_{1A} partial agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=17	po, 30	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Tandospirone	5-HT_{1A} partial agonist	Shock-induced fighting	Mice	ED50=80	po	+		Abe et al., 1995	Soc. Neurosci. Abstr. 21:2106
Tandospirone	5-HT_{1A} partial agonist	Straw suspension	Sprague-Dawley rats (140-170g)	5-20	ip, 30	+		Nishimura et al., 1993	Pharmacol. Biochem. Behav. 46:647-651
Tandospirone	5-HT_{1A} partial agonist	Cork gnawing	Ovariectomized Long Evans CD rats (300g)	10-60	po, 30	+		Pollard et al., 1992	Eur. J. Pharmacol. 221:297-305
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-250g)	10-40	po, 30	+	40 h water deprivation	Abe et al., 1996	J. Pharmacol. Exp. Ther. 278:898-905
Tandospirone	5-HT_{1A} partial agonist	Social interaction	Wistar rats (150-250g)	10-20	po, 30	+	HLU	Abe et al., 1996	J. Pharmacol. Exp. Ther. 278:898-905
Tandospirone	5-HT_{1A} partial agonist	Stress-induced fighting behavior	ddY mice (17-28g)	60-100	po, 60	+	Animals received a footshock (240 V AC) for 1 min	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Tandospirone	5-HT_{1A} partial agonist	Stress-induced fighting behavior	ddY mice (17-28g)	ED50=320	po, 120	+	Animals received a footshock (240 V AC) for 1 min	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-250g)	20	po, 60	+	Animals received footshocks (240 V AC) for 2 s	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Tandospirone	5-HT_{1A} partial agonist	Vogel conflict test	Wistar rats (150-250g)	20	po, 120	o	Animals received footshocks (240 V AC) for 2 s	Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Tandospirone	5-HT_{1A} partial agonist	Marble burying	ICR mice (25-35g)	80-320	po, 60	+		Abe et al., 1998	Jpn. J. Pharmacol. 76:297-304
Tandospirone	5-HT_{1A} partial agonist	Conflict test	White Carneau pigeons (500-650g)	0.02-2	im, 5	o		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283
Tandospirone	5-HT_{1A} partial agonist	Conditioned fear	Rats	1-30	ip, 30	+		Maki et al., 1998	Soc. Neurosci. Abstr. 24:1193
Tandospirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (230-250g)	1-10	sc, 30	+	Shock of 2.5 mA for 5 min the day before	Maki et al., 2000	Eur. J. Pharmacol. 406:411-418
Tandospirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (7-week-old, 260-300g)	10-80	ip, 30 min or 4 h	+	Shocks of 0.6 mA were applied the day before	Inoue et al., 2006	Eur. J. Pharmacol. 540:91-95
Tandospirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	60-100	po, 60	+	Electric shock of 2.5 mA/30 s were applied the day before	Nishikawa et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:926-931
Tandospirone	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	1	sc, 30	+	(1) The drug reduced freezing when tested one or 14 days after footshock; (2) Shocks of 2.5 mA/30 s were applied	Nishikawa et al., 2007	Eur. Neuropsychopharmacol. 17:643-450
Tandospirone	5-HT_{1A} partial agonist	Elevated plus-maze	ddY mice	20	po, 60	+		Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
Tandospirone	5-HT_{1A} partial agonist	Elevated plus-maze	ddY mice	20	po, 60	+	The drug attenuated anxionegic-like	Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							effects of ethanol withdrawal		
Tandospirone+cimetidine (200 mg/kg)	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	60	po, 60	(+)	(1) Potentiation of the anxiolytic-like effects of tandospirone; (2) Electric shock of 2.5 mA/30 s were applied the day before	Nishikawa et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:926-931
Tandospirone+ketoconazole (10 mg/kg)	5-HT_{1A} partial agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	60	po, 60	(+)	(1) Potentiation of the anxiolytic-like effects of tandospirone; (2) Electric shock of 2.5 mA/30 s were applied the day before	Nishikawa et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:926-931
Tertatolol	5-HT_{1A} antagonist	Elevated plus-maze	Lister hooded rats (200-300g)	3 µg	dorsal raphe nucleus, 3	o		File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
Tertatolol	5-HT_{1A} antagonist	Elevated plus-maze	Lister hooded rats (200-300g)	3 µg	dorsal raphe nucleus, 3	o	Rats already exposed to the maze	File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
Tertatolol	5-HT_{1A} antagonist	Elevated plus-maze	Lister hooded rats (200-300g)	3 µg	Ventral hippocampus	+		File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
Tertatolol	5-HT_{1A} antagonist	Elevated plus-maze	Lister hooded rats (200-300g)	3 µg	Ventral hippocampus	+	Rats already exposed to the maze	File and Gonzalez, 1996	Pharmacol. Biochem. Behav. 54:123-128
Tertatolol	5-HT_{1A} antagonist	Elevated plus-maze	Lister rats (200-300g)	3 µg	dorsal hippocampus, 3	o		File et al., 1996	J. Neurosci. 16:4810-4815
Tertatolol	5-HT_{1A} antagonist	Elevated plus-maze	Lister rats (200-300g)	3 µg	dorsal hippocampus, 3	o	Rats already exposed to the maze	File et al., 1996	J. Neurosci. 16:4810-4815

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tertatolol	5-HT_{1A} antagonist	Social interaction	Lister rats (200-300g)	1.5 µg	amygdala, 3	o	LLF	Gonzalez et al., 1996	Brain Res. 732:145-153
Tertatolol	5-HT_{1A} antagonist	Elevated plus-maze	Lister rats (200-300g)	1.5 µg	amygdala, 3	o		Gonzalez et al., 1996	Brain Res. 732:145-153
TFMPP	Non selective agonist	Elevated plus-maze	Swiss NIH mice (20-30g)	1.56-6.25	ip, 30	-		Benjamin et al., 1990	Life Sci. 47:195-203
TFMPP	Non selective agonist	Elevated plus-maze	DBA/2 mice (6-8-week-old)	2.5-5	ip, 30	-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
TFMPP	Non selective agonist	Elevated plus-maze	Mice	0.625-5		-		Rodgers et al., 1992	Behav. Pharmacol. 3:621-634
TFMPP	Non selective agonist	Elevated plus-maze	Wistar rats (150-220g)	1-10	ip, 30	-		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
TFMPP	Non selective agonist	Elevated plus-maze	Lister hooded rats (180-280g)	0.3-1	ip, 30	-	10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210
TFMPP	Non selective agonist	Open-field	Wistar rats (200-250g)	1-5	ip, 30	-	Sedation?	Klodzinska et al., 1989	J. Neural Transm. Park. Dis. Dement. Sect. 1:207-218
TFMPP	Non selective agonist	Open-field	Sprague-Dawley rats (200-250g)	2.5-5	ip, 20	-	Locomotion decreased	Lucki et al., 1989	J. Pharmacol. Exp. Ther. 249:155-164
TFMPP	Non selective agonist	Social interaction	Sprague-Dawley rats (200-250g)	0.2-1	ip, 20	-		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
TFMPP	Non selective agonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-11 day-old)	0.3-3	sc, 30	-		Winslow and Insel, 1991	Psychopharmacology 105:513-520
TFMPP	Non selective agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	0.3-3	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
TFMPP	Non selective agonist	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	3	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
TFMPP	Non selective agonist	Ultrasonic distress vocalizati	AP mice (4-6 day-old)	0.5-1	30	+		Nastiti et al., 1991	Neurosci. Biobehav. Rev. 15:483-487

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		ons							
TFMPP	Non selective agonist	Ultrasonic distress vocalizations	Wistar rats	ED50=1.8	ip, 15	+		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
TFMPP	Non selective agonist	Shock-probe burying test	Rats			+		Meert, 1989	In: Serotonin, from Cell Biology to Pharmacology and Therapeutics
TFMPP	Non selective agonist	Marble burying	Female MF1 mice (23-35g)	1-20	ip, 30	+		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
TFMPP	Non selective agonist	Stress-induced hyperthermia	Swiss mice 25-30g)	5-20	ip, 45	o		Lecci et al., 1990	J. Neural Transm. Gen. Sect. 82:219-230
TFMPP	Non selective agonist	DPAG stimulation	Rats			+		Jenck et al., 1989	Psychopharmacology 97:489-495
TFMPP	Non-selective agonist	Light/dark test	Wistar rats (200-250g)	0.001-1	sc, 30	o	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
TFMPP	Non selective agonist 5-HT_2	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-260g)	0.1-0.8	ip, 25	-		Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
TFMPP	Non selective agonist 5-HT_2	Escape behavior in the elevated T-maze	Wistar rats (220-260g)	0.1-0.8	ip, 25	(+)	Non specific effects ?	Mora et al., 1997	Pharmacol. Biochem. Behav. 58:1051-1057
TFMPP	Non selective agonist 5-HT_2	Elevated plus-maze	Long Evans hooded rats (300-350g)	0.16-1.25	ip, 15	o		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
TFMPP	Non selective agonist 5-HT_2	mCPP discrimination	Long Evans hooded rats (300-350g)	0.16-1.25	ip, 15	o		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
TFMPP	Non selective agonist 5-HT_2	PTZ drug discrimination	Long Evans hooded rats (300-350g)	ED50=0.608	ip, 15	-		Wallis and Lal, 1998	Prog. Neuropsychopharmacol. Biol. Psychiatry 22:547-565
TFMPP	Non selective 5-HT_2 agonist	Elevated plus-maze	Wistar rats (190-240g)	0,1-0,4	ip, 30	-		Setem et al., 1999	Pharmacol. Biochem. Behav. 62:515-521
TFMPP	Non selective 5-HT_2 agonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	0,3; 1-10	sc, 30	-/+	Biphasic effects	Fish et al., 2000	Psychopharmacology 149:277-85
TFMPP	Non selective 5-HT_2 agonist	Elevated plus-maze	Wistar rats (190-260g)	0.75-3 µg/0.2 µl	ventral hippocampus, 15	+	Activity was reduced at 3 µg	Alves et al., 2004	Behav. Pharmacol. 15:37-43
TFMPP	Non selective 5-HT_2 agonist	Elevated plus-maze	Wistar rats (190-260g)	0.75-3 µg/0.2 µl	dorsal hippocampus, 15	o		Alves et al., 2004	Behav. Pharmacol. 15:37-43
TFMPP+GR 127935 (0,1 mg/kg)	Non selective 5-HT_2 agonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	0,3; 1-10	sc, 30	(o)	Antagonism of the effects of TFMPP	Fish et al., 2000	Psychopharmacology 149:277-85
Tianeptine	5-HT reuptake stimulant	Elevated plus-maze	Lister rats (200-250g)	2.5-10	for 5 days (o.d.)	o	Weak effect	File and Mabbutt, 1991	Psychopharmacology 104:62-66
Tianeptine	5-HT reuptake stimulant	Elevated plus-maze	Rats	2.5-10		o	Cat odour	File et al., 1993	Eur. Psychiatry 8 Suppl. 2:75s-80s
Tianeptine	5-HT reuptake stimulant	Elevated plus-maze	Lister rats (200-250g)	10	ip, 20	+	Weak effect	File and Mabbutt, 1991	Psychopharmacology 104:62-66
Tianeptine	5-HT reuptake stimulant	Social interaction	Lister rats (200-250g)	2.5-10	ip, 20	o		File and Mabbutt, 1991	Psychopharmacology 104:62-66
Tianeptine	5-HT reuptake stimulant	Social interaction	Lister rats (200-250g)	5-10	for 5 days (o.d.)	+		File and Mabbutt, 1991	Psychopharmacology 104:62-66
Tianeptine	5-HT reuptake stimulant	Social interaction	Rats	2.5-10	ip, 30	o		Andrews and File, 1993	Psychopharmacology 112:21-25

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tianeptine	5-HT reuptake stimulant	Social interaction	Rats	2.5-10		o		File et al., 1993	Eur. Psychiatry 8 Suppl. 2:75s-80s
Tianeptine	5-HT reuptake stimulant	Social interaction	Rats	2.5-10		o	Cat odour	File et al., 1993	Psychopharmacology 112:21-25
Tianeptine	5-HT reuptake stimulant	Social interaction	Rats	5-10		+	Diazepam withdrawal	File et al., 1993	Eur. Psychiatry 8 Suppl. 2:75s-80s
Tianeptine	5-HT reuptake stimulant	Stress-induced hyperthermia	NMRI mice		po	o		van der Heyden et al., 1994	Soc. Neurosci. Abstr. 20:385
Tianeptine	5-HT reuptake stimulant	Stress-induced hyperthermia	NMRI mice (12-14g)	3-30	po, 60	o		Zethof et al., 1995	Eur. J. Pharmacol. 294:125-135
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-350g)	10	ip, 60	o	Following 30 min restraint stress	Fontanges et al., 1993	Eur. Psychiatry 8 Suppl. 2:67s-73s
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-350g)	10	ip, 60	o	Following 2 h restraint stress	Fontanges et al., 1993	Eur. Psychiatry 8 Suppl. 2:67s-73s
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-350g)	10	ip, for 15 days (o.d.)	o	Following 30 min restraint stress	Fontanges et al., 1993	Eur. Psychiatry 8 Suppl. 2:67s-73s
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-350g)	10	ip, for 15 days (o.d.)	o	Following 2 h restraint stress	Fontanges et al., 1993	Eur. Psychiatry 8 Suppl. 2:67s-73s
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-350g)	10	ip, 60	+	Single injection stress	Fontanges et al., 1993	Eur. Psychiatry 8 Suppl. 2:67s-73s
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-350g)	10	ip, 60	+	Following 2 h restraint	Fontanges et al., 1993	Eur. Psychiatry 8 Suppl. 2:67s-73s
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-350g)	10	ip, for 15 days (o.d.)	+	Following 2 h restraint	Fontanges et al., 1993	Eur. Psychiatry 8 Suppl. 2:67s-73s
Tianeptine	5-HT reuptake stimulant	Social interaction	CD1 mice (23-45g)	10	ip, for 21 days (o.d.)	-		Cutler et al., 1997	Pharmacol. Biochem. Behav. 56:287-293
Tianeptine	5-HT reuptake stimulant	Elevated plus-maze	CD1 mice (23-45g)	10	ip, for 21 days (o.d.)	-		Rodgers et al., 1997	Pharmacol. Biochem. Behav. 57:127-136

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tianeptine	5-HT reuptake stimulant	Light/dark test	Wistar rats (180-220g)	5	po, 30	+		Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Tianeptine	5-HT reuptake stimulant	Light/dark test	Wistar rats (180-220g)	5	po, for 7 days (o.d.)	+		Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Tianeptine	5-HT reuptake stimulant	Light/dark test	Wistar rats (180-220g)	5	po, for 14 days (o.d.)	+		Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Tianeptine	5-HT reuptake stimulant	Vogel conflict test	Outbred rats			-		Molodavkin et al., 2005	Eksp. Klin. Farmakol. 68:10-12
Tianeptine	5-HT reuptake stimulant	Conditioned fear	Sprague-Dawley rats (350-400g)	10	ip, 60	o	Footshocks of 0.7 mA/0.5 s were delivered during conditioning	Burghardt et al., 2007	Biol. Psychiatry 62:1111-1118
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-300g)	10	ip, 60	o	Animals were subjected to a single restrainbt stress for 20 min prior to testing	Kasar et al., 2009	Meth. Find. Exp.Clin. Pharm. 31:157-163
Tianeptine	5-HT reuptake stimulant	Open-field	Wistar rats (250-300g)	10	ip, 60	o	Animals were subjected to a repeated severe stress (6-h daioly restraint for 21 days)	Kasar et al., 2009	Meth. Find. Exp.Clin. Pharm. 31:157-163
Tianeptine	5-HT reuptake stimulant	Holeboard	Wistar rats (250-300g)	10	ip, 60	o	Animals were subjected to a single restrainbt stress for 20 min prior to testing	Kasar et al., 2009	Meth. Find. Exp.Clin. Pharm. 31:157-163
Tianeptine	5-HT reuptake stimulant	Holeboard	Wistar rats (250-300g)	10	ip, 60	o	Animals were subjected to a repeated severe stress (6-h daioly restraint for 21 days)	Kasar et al., 2009	Meth. Find. Exp.Clin. Pharm. 31:157-163

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tianeptine	5-HT reuptake stimulant	Open-field	BALB/c ByJ mice (7-8-week-old)	5	ip, for 5 weeks	o		Mutlu et al., 2012	Life Sci. 91:1252-1262
Tianeptine	5-HT reuptake stimulant	Open-field	BALB/c ByJ mice (7-8-week-old)	5	ip, for 5 weeks	o	Mice were subjected to unpredictable chonic mild stress for 7 weeks	Mutlu et al., 2012	Life Sci. 91:1252-1262
Tianeptine	5-HT reuptake stimulant	Novelty-suppressed feeding	BALB/c ByJ mice (7-8-week-old)	5	ip, for 5 weeks	o		Mutlu et al., 2012	Life Sci. 91:1252-1262
Tianeptine	5-HT reuptake stimulant	Novelty-suppressed feeding	BALB/c ByJ mice (7-8-week-old)	5	ip, for 5 weeks	+	Mice were subjected to unpredictable chonic mild stress for 7 weeks	Mutlu et al., 2012	Life Sci. 91:1252-1262
Tianeptine+bicuculline	5-HT reuptake stimulant	Vogel conflict test	Outbred rats			-	Potentiation of the effects of tianeptine	Molodavkin et al., 2005	Eksp. Klin. Farmakol. 68:10-12
Tianeptine+fluoxetine (5 mg/kg for 14 days)	5-HT reuptake stimulant	Light/dark test	Wistar rats (180-220g)	5	po, for 14 days (o.d.)	(o)	The combination abolished the anxiolytic-like action of both drugs	Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Tianeptine+fluoxetine (5 mg/kg for 7 days)	5-HT reuptake stimulant	Light/dark test	Wistar rats (180-220g)	5	po, for 7 days (o.d.)	(o)	The combination abolished the anxiolytic-like action of both drugs	Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Tianeptine+fluoxetine (5 mg/kg)	5-HT reuptake stimulant	Light/dark test	Wistar rats (180-220g)	5	po, 30	(o)	The combination abolished the anxiolytic-like action of both drugs	Nowakowska et al., 2000	Arzneimittelforschung 50:5-10
Timolol	Non selective antagonist	Elevated plus-maze	PVG rats (180-260g)	3-40	ip, 30	o	10-min exposure	Njung'e et al., 1993	J. Psychopharmacol. 7:173-180
Tropisetron	5-HT_3 antagonist	Geller-Seifter	Rats	0.01	sc	o	Modified Geller-Seifter test	Thiébot et al., 1990	Psychopharmacology 101:S57

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		conflict test							
Tropisetron	5-HT_3 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	0.001-0.1	sc, 60	o		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats (300-350g)	1-10	ip, 30	o		Dunn et al., 1991	J. Neurochem. 57:1615-1622
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats (210-280g)	0.00001-0.001	amygdala, 5	o	Modified Vogel test	Higgins et al., 1991	Psychopharmacology 104:545-551
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Rats		accumbens	+		Plaznik et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 190
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats (180-220g)	0.0001-0.01	ip, 60	+	Modified Vogel test	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Rats	0.001-0.01		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats	0.000005-0.00001	hippocampus	+		Stefanski et al., 1993	Neuropharmacology 32:987-993
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats	0.00001	nucleus accumbens	+		Stefanski et al., 1993	Neuropharmacology 32:987-993
Tropisetron	5-HT_3 antagonist	Vogel conflict test	Wistar rats (180-220g)	0.25-0.5	ip, 45	+	0.1 mA, 2 s	Artaiz et al., 1995	Psychopharmacology 117:137-148
Tropisetron	5-HT_3 antagonist	Conflict test	White Carneau Pigeons	0.001-0.3	im, 5	+	Weak effect	Gleeson et al., 1989	J. Pharmacol. Exp. Ther. 250:809-817
Tropisetron	5-HT_3 antagonist	Elevated plus-maze	Rats	0.1	po, 60	+		Johnston and File, 1988	Psychiatry Res. 25:81-90
Tropisetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (200-250g)	10.25-0.5	ip, 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tropisetron	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (180-220g)	0.01-2	ip, 30	+		Artaiz et al., 1995	Psychopharmacology 117:137-148
Tropisetron	5-HT_3 antagonist	Light/dark test	BKW mice 25-30g)	0.00000001-0.00001	median raphe	o	Asymmetric compartments	Costall et al., 1989	Br. J. Pharmacol. 96:325-332
Tropisetron	5-HT_3 antagonist	Light/dark test	Gerbils	0.1 2	po, for 12-16 days (o.d.)	o	Asymmetric compartments	Cutler, 1990	Neuropharmacology 29:515-520
Tropisetron	5-HT_3 antagonist	Light/dark test	ddY mice (4-week-old)	1-5	ip, 30	o	Modified test	Shimada et al., 1995	Gen. Pharmacol. 26:205-210
Tropisetron	5-HT_3 antagonist	Light/dark test	Mice	0.0001-0.01	ip	+	Asymmetric compartments and rears	Costall et al., 1987	Br. J. Pharmacol. 92:881-894
Tropisetron	5-HT_3 antagonist	Light/dark test	Mice	0.00001-0.01	ip	+	Asymmetric compartments	Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68
Tropisetron	5-HT_3 antagonist	Light/dark test	Mice	0.00001-0.01	ip	+	Asymmetric compartments	Costall et al., 1988	Rev. Neurosci. 2:41-65
Tropisetron	5-HT_3 antagonist	Light/dark test	BKW mice (25-30g)	0.00000001-0.00001	dorsal raphe or amygdala	+	Asymmetric compartments	Costall et al., 1989	Br. J. Pharmacol. 96:325-332
Tropisetron	5-HT_3 antagonist	Light/dark test	BKW mice (25-30g)	0.0001-0.1	ip, 45	+	Asymmetric compartments	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Tropisetron	5-HT_3 antagonist	Light/dark test	C57Bl/6J mice (18-20g)	0.001 ng/kg-1	ip, 30	+		Kilfoil et al., 1989	Neuropharmacology 28:901-905
Tropisetron	5-HT_3 antagonist	Light/dark test	BKW mice (20-30g)	0.00001-0.001	ip, 45	+	Asymmetric compartments and rears	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Tropisetron	5-HT_3 antagonist	Light/dark test	ICR mice (20-35g)	0.001-1	ip, 30	+	Transitions and Asymmetric compartments	Onaivi and Martin, 1989	Prog. Neuropsychopharmacol. Biol. Psychiatry 13:963-976
Tropisetron	5-HT_3 antagonist	Light/dark test	Female T/O mice (22-30g)	0.01	sc, 30	+	Asymmetric compartments	Bill et al., 1992	Eur. J. Pharmacol. 218:327-334
Tropisetron	5-HT_3 antagonist	Light/dark test	Mice	0.0001-0.1	ip, 40	+		Costall and Naylor, 1993	Int. Clin. Psychopharmacol. 8 Suppl 2:11-18

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tropisetron	5-HT_3 antagonist	Light/dark test	BKW mice (30-36g)	0.01-0.1	ip, 40	+	Asymmetric compartments	Cheng et al., 1994	Eur. J. Pharmacol. 255:39-49
Tropisetron	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	0.01	ip, 45	+	Asymmetric compartments	Artaiz et al., 1995	Psychopharmacology 117:137-148
Tropisetron	5-HT_3 antagonist	Open-field	Wistar rats (250-270g)	0.187-20	ip, 60	o		Papp and Przegalinski, 1989	J. Psychopharmacol. 3:14-20
Tropisetron	5-HT_3 antagonist	Open-field	Wistar rats	0.000001-0.0001	hippocampus	o		Stefanski et al., 1993	Neuropharmacology 32:987-993
Tropisetron	5-HT_3 antagonist	Open-field	Rats		accumbens	+		Plaznik et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 190
Tropisetron	5-HT_3 antagonist	Open-field	Wistar rats (180-220g)	0.0001-0.01	ip, 60	+	65 dB noise	Stefanski et al., 1992	Neuropharmacology 31:1251-1258
Tropisetron	5-HT_3 antagonist	Open-field	Rats	0.001-0.1		+		Stefanski et al., 1992	Pharmacol. Res. 25 (Suppl.):79-80
Tropisetron	5-HT_3 antagonist	Open-field	Wistar rats	0.000001-0.00001	nucleus accumbens	+		Stefanski et al., 1993	Neuropharmacology 32:987-993
Tropisetron	5-HT_3 antagonist	Open-field	Wistar rats	0.000005	nucleus accumbens	+	+5,7-DHT	Stefanski et al., 1993	Neuropharmacology 32:987-993
Tropisetron	5-HT_3 antagonist	Social interaction	Rats	0.01-1	po, 60	o	HLU	Johnston and File, 1988	Psychiatry Res. 25:81-90
Tropisetron	5-HT_3 antagonist	Social interaction	Sprague-Dawley rats (200-250g)	0.05-1	sc, 40	o		Kennett et al., 1989	Eur. J. Pharmacol. 164:445-454
Tropisetron	5-HT_3 antagonist	Social interaction	Wistar rats (210-280g)	0.0001-0.001	amygdala, 5	o	LLF	Higgins et al., 1991	Psychopharmacology 104:545-551
Tropisetron	5-HT_3 antagonist	Social interaction	Wistar rats (210-280g)	0.00005-0.005	dorsal raphe, 5	o	HLU	Higgins et al., 1991	Psychopharmacology 104:545-551
Tropisetron	5-HT_3 antagonist	Social interaction	Rats	0.0001-0.01	ip	+		Costall et al., 1987	Br. J. Pharmacol. 92:881-894
Tropisetron	5-HT_3 antagonist	Social interaction	Rats	0.00001-0.001	po, 45	+	HLU	Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tropisetron	5-HT_3 antagonist	Social interaction	Lister rats (200-250g)	0.00001-0.1	po, 45	+	HLU	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Tropisetron	5-HT_3 antagonist	Social interaction	Mice	0.00001-0.1	ip, 45	+	Observations during 7min	Cutler and Dixon, 1989	Br. J. Pharmacol. 96 (Suppl.):12P
Tropisetron	5-HT_3 antagonist	Social interaction	Gerbils	0.12	po, for 3 weeks (o.d.)	+	HLU	Cutler, 1990	Neuropharmacology 29:515-520
Tropisetron	5-HT_3 antagonist	Social interaction	Gerbils	0.12	po, for 3 weeks (o.d.)	+	LLF	Cutler, 1990	Neuropharmacology 29:515-520
Tropisetron	5-HT_3 antagonist	Social interaction	Wistar rats (250-300g)	1	ip, 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622
Tropisetron	5-HT_3 antagonist	Social interaction	Wistar rats (210-280g)	0.0001-0.001	amygdala, 5	+	HLU	Higgins et al., 1991	Psychopharmacology 104:545-551
Tropisetron	5-HT_3 antagonist	Social interaction	Rats	0.001-0.1	ip, 40	+		Costall and Naylor, 1993	Int. Clin. Psychopharmacol. 8 Suppl 2:11-18
Tropisetron	5-HT_3 antagonist	Social competition	Rats	0.01-1		o		Sanger and Joly, 1992	J. Psychopharmacol. 6:141
Tropisetron	5-HT_3 antagonist	Novelty-suppressed feeding	Sprague-Dawley rats (270-320g)	0.01-1	sc, 30	o		Fletcher and Davies, 1990	Psychopharmacology 102:301-308
Tropisetron	5-HT_3 antagonist	Novelty-suppressed feeding	Rats	0.001		+		Rex et al., 1991	In: Serotonin 1991, 5-Hydroxytryptamine-CNS Receptors and Brain Function, p. 147
Tropisetron	5-HT_3 antagonist	Marble burying	Female MF1 mice (23-35g)	0.1-10	ip, 30	o		Njung'e and Handley, 1991	Br. J. Pharmacol. 104:105-112
Tropisetron	5-HT_3 antagonist	Human threat	Marmoset Callithrix jacchus (350-400g)	0.0001-0.01	ip	+		Tyers et al., 1987	Neurosci. Lett. 29 (Suppl.):S68
Tropisetron	5-HT_3 antagonist	Human threat	Marmoset	0.0001-0.001		+		Costall et al., 1988	Rev. Neurosci. 2:41-65
Tropisetron	5-HT_3 antagonist	Human threat	Marmoset Callithrix jacchus (295-335g)	0.1-1	sc, 45	+		Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Tropisetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=35	sc, 30	o	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Tropisetron	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats	0.00001-1	ip, 15	o		De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
Tropisetron	5-HT_3 antagonist	Conditioned fear	Sprague-Dawley rats (290-350g)	0.01-0.1	ip, 30	+	1 mA scrambled shock; VI	Yoshioka et al., 1995	Pharmacol. Biochem. Behav. 51:515-519
Tropisetron	5-HT_3 antagonist	Conditioned place aversion	Wistar rats (250-270g)	0.125-1	ip, 60	+		Papp, 1988	Eur. J. Pharmacol. 151:321-324
Tropisetron	5-HT_3 antagonist	Passive-avoidance test	Wistar rats (250-270g)	0.0937-0.1875	ip, 60	+		Papp and Przegalinski, 1989	J. Psychopharmacol. 3:14-20
Tropisetron	5-HT_3 antagonist	DPAG stimulation	Wistar rats (370-450g)	0.01-10	ip, 35	o		Jenck et al., 1989	Eur. J. Pharmacol. 161:219-221
Tropisetron	5-HT_3 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220g)	0.01-0.1	sc, 30	o		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Tropisetron	5-HT_3 antagonist	Open-field	Wistar rats (175-225g)	0.001-0.01	ip, 0	+	Latency to eat in the open-field was reduced	Rex et al., 1998	Pharmacol. Biochem. Behav. 59:677-683
Tropisetron	5-HT_3 antagonist	Conditioned fear	Sprague-Dawley rats (350-400g)	0.1	ip, 60	o	Footshocks of 0.7 mA/0.5 s were delivered during conditioning	Burghardt et al., 2007	Biol. Psychiatry 62:1111-1118
TV3326	MAO A and B inhibitor	Elevated plus-maze	Sprague-Dawley rats (230-280g)	26	po, 2h	-		Weinstock et al., 2002	Psychopharmacology 160:318-324
TV3326	MAO A and B inhibitor	Elevated plus-maze	Sprague-Dawley rats (230-280g)	26	po, o.d. for 2 weeks	o		Weinstock et al., 2002	Psychopharmacology 160:318-324
U-67413B	Agonist	Face-to-face test	CF-1 mice (18-29g)	10	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
U-67413B	Agonist	Center test (thigmotaxis)	Sprague-Dawley rats (170-190g)	1-10	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
U-67413B	Agonist	Four-plate test	CF-1 mice (18-29g)	10	sc, 20	+		Piercey et al., 1994	J. Pharmacol. Exp. Ther. 268:1304-1310
U-93385	5-HT_{1A} full agonist	Isolation-induced aggression	Mice	3-10	ip	+		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
U-93385	5-HT_{1A} full agonist	Isolation-induced aggression	Mice	3-10	po	+		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
U-93385	5-HT_{1A} full agonist	Shock-induced aggression	Mice	10	ip	+		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
U-93385	5-HT_{1A} full agonist	Center test (thigmotaxis)	Rats	1-10	sc	o		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
U-93385	5-HT_{1A} full agonist	Center test (thigmotaxis)	Rats	22	sc, for 16 days (o.d.)	+		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
U-93385	5-HT_{1A} full agonist	Social interaction	Mice	10	po	+		Schreur et al., 1993	Soc. Neurosci. Abstr. 19:763.5
Umespirone	5-HT_{1A} agonist	Light/dark test	BKW mice (30-35g)	0.0001-100	po, 45	+	Asymmetric compartments	Barnes et al., 1991	Pharmacol. Biochem. Behav. 40:89-96
Umespirone	5-HT_{1A} agonist	Social interaction	Sprague-Dawley rats (225-275g)	0.001-10	po, 45	+	HLU	Barnes et al., 1991	Pharmacol. Biochem. Behav. 40:89-96
Umespirone	5-HT_{1A} agonist	Human threat	Marmoset Callithrix jacchus (350-440g)	0.001-0.1	sc, 45	+		Barnes et al., 1991	Pharmacol. Biochem. Behav. 40:89-96
VA21B7	5-HT_3 antagonist	Vogel conflict test	Wistar rats (180-220g)	1-2	ip, 45	+	0.1 mA, 2 s	Artaiz et al., 1995	Psychopharmacology 117:137-48
VA21B7	5-HT_3 antagonist	Vogel conflict test	Wistar rats (180-220g)	4-8	po, 60	+	0.1 mA, 2 s	Artaiz et al., 1995	Psychopharmacology 117:137-48

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
VA21B7	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (180-220g)	0.25-0.5	ip, 30	+		Artaiz et al., 1995	Psychopharmacology 117:137-48
VA21B7	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (180-220g)	2-8	po, 60	+		Artaiz et al., 1995	Psychopharmacology 117:137-48
VA21B7	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	0.002-0.5	ip, 45	+	Asymmetric compartments	Artaiz et al., 1995	Psychopharmacology 117:137-48
VA21B7	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	0.004-0.008	po, 45	+	Asymmetric compartments	Artaiz et al., 1995	Psychopharmacology 117:137-48
VA21B7	5-HT_3 antagonist	Light/dark test	Swiss mice (20-25g)	0.02	ip, 30	+	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
Venlafaxine	5-HT/NA reuptake inhibitor	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}=8.2	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
Venlafaxine	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-32	ip, 30	+	Shock of 0.6 mA/0.5 s	Hascoët et al., 2000	Pharmacol. Biochem. Behav. 65:339-344
Venlafaxine	NA/5-HT reuptake inhibitor	Stress-induced hyperthermia	ICR mice (7-week-old)	24-32	ip, 30	+		Liu et al., 2003	J. Psychiat. Res. 37:249-259
Venlafaxine	NA/5-HT reuptake inhibitor	Light/dark test	Wistar rats	20	po	+	Rats were chonically stressed (16 days)	Nowakowska et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):Suppl. 183
Venlafaxine	NA/5-HT reuptake inhibitor	Light/dark test	Wistar rats	20	po, for 7, 14 and 21 days	+	Rats were chonically stressed (16 days)	Nowakowska et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):Suppl. 183
Venlafaxine	NA/5-HT reuptake inhibitor	Vogel conflict test	Rats	10	ip	o		Millan et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S268
Venlafaxine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Rats	10	ip	+		Millan et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S268

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Venlafaxine	NA/5-HT reuptake inhibitor	Social interaction	Rats	10	ip	o		Millan et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S268
Venlafaxine	NA/5-HT reuptake inhibitor	Marble burying	Mice	10	ip	+		Millan et al., 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S268
Venlafaxine	NA/5-HT reuptake inhibitor	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	ED50=7	sc, 45	+	To elicit ultrasonic vocalizations, pups were placed on a 19°C surface for 4 min	Fish et al., 2004	J. Pharmacol. Exp. Ther. 308:474-480
Venlafaxine	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	2-16	ip, 30	+	Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Venlafaxine	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-16	ip, 30	+	Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2005	Psychopharmacology 180:73-83
Venlafaxine	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (20-24g)	4-16	ip, 30	o	(1) Animals were exposed to the FPT 24 h before; (2) Electric shock of 0.6 mA/0.5 s were delivered	Ripoll et al., 2005	Psychopharmacology 180:73-83
Venlafaxine	NA/5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	3-60	ip, 30	o		Troelsen et al., 2005	Psychopharmacology 181:741-750
Venlafaxine	NA/5-HT reuptake inhibitor	Nestlet shredding	NIH Swiss mice (28-32g)	30-60	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Venlafaxine	NA/5-HT reuptake inhibitor	Marble burying	NIH Swiss mice (28-32g)	30-60	ip, 30	+		Li et al., 2006	Life Sci. 78:1933-1939
Venlafaxine	NA/5-HT reuptake inhibitor	Social interaction	Wistar rats (200-275g)	10	ip, 30	+	HLU conditions were used	Artaiz et al., 2005	Psychopharmacology 182:400-413

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Venlafaxine	NA/5-HT reuptake inhibitor	Social interaction	Wistar rats (200-275g)	30	po, for 14 days, o.d.	o	HLU conditions were used	Artaiz et al., 2005	Psychopharmacology 182:400-413
Venlafaxine	NA/5-HT reuptake inhibitor	Elevated zero-maze	Female NMRI mice (20-25g)	10	po, b.i.d. for 28 days	o		Mirza et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:858-866
Venlafaxine+BW 723C86 (0.5 and 2 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.25-1	ip, 30	o	(1) The effects of venlafaxine were not potentiated by BW 723C86; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Venlafaxine+DOI (0.06 and 0.25 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.25-1	ip, 30	(+)	The effects of venlafaxine were potentiated by DOI	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Venlafaxine+Epliva nserin (0.1 and 1 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	8	ip, 30	(o)	(1) Blockade of the effects of venlafaxine; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Venlafaxine+Ro 60-0175 (0.25 and 1 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	0.25-1	ip, 30	o	(1) The effects of venlafaxine were not potentiated by Ro 60-0175; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Venlafaxine+RS 102221 (0.1 and 1 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	8	ip, 30	+	(1) The effects of venlafaxine were not antagonized; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429
Venlafaxine+SB 206553 (0.1 and 1 mg/kg)	NA/5-HT reuptake inhibitor	Four-plate test	Swiss mice (4-week-old, 18-22g)	8	ip, 30	(o)	(1) Blockade of the effects of venlafaxine; (2) Electric shocks of 0.6 mA/0.5 s	Nic Dhonnchadha et al., 2005	Psychopharmacology 179:418-429

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rats	ED50>10	sc, 30	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rats	ED50>10	po, 30	o		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rats	ED50=3.8	sc, 120	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rats	ED50=12.8	po, 120	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rats	ED50=4	sc, 210	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Rats	ED50=12.5	po, 210	+		Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Shock-probe burying test	Sprague-Dawley rats (300-400g)	20-40	ip, 60	+		Treit et al., 2001	Eur. J. Pharmacol. 414:245-248
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Elevated plus-maze	Sprague-Dawley rats (300-400g)	10-40	ip, 60	o		Treit et al., 2001	Eur. J. Pharmacol. 414:245-248
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Ultrasonic distress vocalizations	Wistar rats (173-287g)	55	po, 120-210	+	Scrambled shock of 1.8 mA/0.3 s	Bartoszyk et al., 1997	Eur. J. Pharmacol. 322:147-153
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Elevated plus-maze	Long-Evans rats (171.7±0.6g)	2.5-40	ip, one week	o	The drug was given 10 min following exposure to a	Adamec et al., 2004	Eur. J. Pharmacol. 504:65-77

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							cat, which produced anxiogenic-like behavior		
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Elevated plus-maze	Long-Evans rats (171.7±0.6g)	2.5-40	ip, 90	o	The drug was given one week following exposure to a cat, which produced anxiogenic-like behavior	Adamec et al., 2004	Eur. J. Pharmacol. 504:65-77
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Holeboard	Long-Evans rats (171.7±0.6g)	2.5-40	ip, one week	o	The drug was given 10 min following exposure to a cat, which produced anxiogenic-like behavior	Adamec et al., 2004	Eur. J. Pharmacol. 504:65-77
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Holeboard	Long-Evans rats (171.7±0.6g)	2.5-40	ip, 90	o	The drug was given one week following exposure to a cat, which produced anxiogenic-like behavior	Adamec et al., 2004	Eur. J. Pharmacol. 504:65-77
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Acoustic startle reflex	Long-Evans rats (171.7±0.6g)	10/20-40	ip, one week	-/+	(1) Biphasic effects; (2) The drug was given 10 min following exposure to a cat, which produced anxiogenic-like behavior	Adamec et al., 2004	Eur. J. Pharmacol. 504:65-77

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Vilazodone (EM 68843)	Mixed 5-HT reuptake inhibitor/5-HT_{1A} agonist	Acoustic startle reflex	Long-Evans rats (171.7±0.6g)	2.5-40	ip, 90	-	The drug was given one week following exposure to a cat, which produced anxiogenic-like behavior	Adamec et al., 2004	Eur. J. Pharmacol. 504:65-77
Volinanserin	5-HT_{2A} antagonist	Vogel conflict test	Sprague-Dawley rats (180-230g)	0.1-1	ip, 30	o	48 h water deprivation and electric shocks of 0.3 mA	Griebel et al., 1997	Neuropharmacology 36:793-802
Volinanserin	5-HT_{2A} antagonist	Elevated plus-maze	Sprague-Dawley rats (180-230g)	0.1-1	ip, 30	o		Griebel et al., 1997	Neuropharmacology 36:793-802
Volinanserin	5-HT_{2A} antagonist	Light/dark test	BALB/c mice (7-week-old)	0.3-3	ip, 30	o		Griebel et al., 1997	Neuropharmacology 36:793-802
Volinanserin	5-HT_{2A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3-3	ip, 30	o		Griebel et al., 1997	Neuropharmacology 36:793-802
Volinanserin	5-HT_{2A} antagonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	0.1	ip, 30	o	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
Volinanserin	5-HT_{2A} antagonist	Social interaction	Rats	MED>0.63		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
Volinanserin	5-HT_{2A} antagonist	Ultrasonic distress vocalizations	Rats	MED>0.63		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
Volinanserin	5-HT_{2A} antagonist	Vogel conflict test	Rats	MED=0.16		+		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
Volinanserin	5-HT_{2A} antagonist	Elevated plus-maze	Rats	MED>0.16		o		Brocco et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S18
Volinanserin	5-HT_{2A} antagonist	Social interaction	Sprague-Dawley rats	0,04	sc, 30	o		Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Volinanserin	5-HT_{2A} antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.04	sc, 45	o	HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
Volinanserin	5-HT_{2A} antagonist	Novelty-elicited head-bob behavior	New Zealand rabbits (1.6-1.8 kg)	0.1	sc, 30	+		Aloyo et al., 2007	Behav. Pharmacol. 18:651-659
Volinanserin	5-HT_2 antagonist	Elevated plus-maze	CD1 mice (50-60-day-old)	0.25	ip, 5	-		Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
WAY 100135	5-HT_{1A} antagonist	Geller-Seifter conflict test	Wistar AF rats (300-400g)	0.25-8	sc, 30	o	FR8/FR1	Charrier et al., 1994	Pharmacol. Biochem. Behav. 48:281-289.
WAY 100135	5-HT_{1A} antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	1-10	sc, 60	o		Cervo and Samanin, 1995	Pharmacol. Biochem. Behav. 52:671-676
WAY 100135	5-HT_{1A} antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	3-10	sc, 60	o		Cervo and Samanin, 1995	Eur. J. Pharmacol. 284:249-255
WAY 100135	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (230-270g)	0.03-0.3 µg	dorsal hippocampus, 20	o	0.5 mA	Przegalinski et al., 1995	Neuropharmacology 34:1211-1217
WAY 100135	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (230-270g)	5-10	sc, 45	o	0.5 mA	Przegalinski et al., 1995	Neuropharmacology 34:1211-1217
WAY 100135	5-HT_{1A} antagonist	Elevated plus-maze	Lister rats (250-280g)	1	sc,45	o		Bickerdike et al., 1993	Behav. Pharmacol. 4:231-236
WAY 100135	5-HT_{1A} antagonist	Elevated plus-maze	Rats			o		Millan et al., 1994	Soc. Neurosci. Abstr. 20:1544
WAY 100135	5-HT_{1A} antagonist	Elevated plus-maze	Lister-hooded rats (250-280g)	1	ip, 30	o		Bickerdike et al., 1995	Neuropharmacology 34:805-811
WAY 100135	5-HT_{1A} antagonist	Elevated plus-maze	DBA/2 mice (at least 4-week-old)	2.5-10	ip, 30	+	Additional measures of anxiety	Rodgers and Cole, 1994	Eur. J. Pharmacol. 261:321-325
WAY 100135	5-HT_{1A} antagonist	Light/dark test	Mice	3-10	sc	+		Fletcher et al., 1991	Psychopharmacology 104:302-306

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100135	5-HT_{1A} antagonist	Light/dark test	Mice	1-30	sc	+		Fletcher et al., 1992	In: 2nd International Symposium on Serotonin, from Cell Biology to Pharmacology and Therapeutics, p. 30
WAY 100135	5-HT_{1A} antagonist	Light/dark test	Female Tuck (T/O) mice (24-35g)	MED=1	sc, 30	+		Bill and Fletcher, 1994	Br. J. Pharmacol. 111:151P
WAY 100135	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Rats	2	sc	+		Fletcher et al., 1992	In: 2nd International Symposium on Serotonin, from Cell Biology to Pharmacology and Therapeutics, p. 30
WAY 100135	5-HT_{1A} antagonist	Resident-intruder paradigm	Mice	1-10	sc, 30	o	Effects on defensive postures	Bell et al., 1996	Pharmacol. Biochem. Behav. 54:159-167
WAY 100135	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (200-250g)	40 nM/0.5 µl	dorsal hippocampus, 24h	o	24h after a 2h restraint period	Netto and Guimarães, 1996	Behav. Brain Res. 77:215-218
WAY 100135	5-HT_{1A} antagonist	Social interaction	Lister rats (200-300g)	10	sc, 30	o		File et al., 1996	J. Neurosci. 16:4810-4815
WAY 100135	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (150-250g)	10	sc, 80	o	40 h water deprivation	Abe et al., 1996	J. Pharmacol. Exp. Ther. 278:898-905
WAY 100135	5-HT_{1A} antagonist	Conditioned fear	Sprague-Dawley rats (230-270g)	0.1	ip, 75	o	Rats received inescapable electric footshocks (2.5 mA, 10 ms every 100 ms)	Cao and Rodgers, 1998	Psychopharmacology 139:185-194
WAY 100135	5-HT_{1A} antagonist	Stress-induced hyperthermia	BALB/c mice (35-45g)	2.5-5	ip, 15	-	Hyperthermia was induced by territorial aggression	Lopez-Mendoza et al., 1998	Pharmacol. Biochem. Behav. 61:1-8
WAY 100135	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (220-250g)	20	sc, 45	o	Shock of 0.5 mA	Dereń-Wesołek et al., 1998	J. Psychopharmacol. 12:380-384

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100289	5-HT_3 antagonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	0.01-10	ip, 45	o	Additional measures of anxiety	Rodgers et al., 1995	Psychopharmacology 117:306-312
WAY 100289	5-HT_3 antagonist	Light/dark test	Female T/O mice (22-30g)	0.1-10	po, 45	+	Asymmetric compartments	Bill et al., 1992	Eur. J. Pharmacol. 218:327-334
WAY 100289	5-HT_3 antagonist	Light/dark test	Female T/O mice (22-30g)	0.1-10	sc, 30	+	Asymmetric compartments	Bill et al., 1992	Eur. J. Pharmacol. 218:327-334
WAY 100289	5-HT_3 antagonist	Fear-potentiated startle reflex	Lister rats (250-285g)	0.03-0.3	sc, 30	+		Bill et al., 1992	Eur. J. Pharmacol. 218:327-334
WAY 100635	5-HT_{1A} antagonist	Conflict test	Pigeons			o		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131
WAY 100635	5-HT_{1A} antagonist	Conflict test	Rats			o		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131
WAY 100635	5-HT_{1A} antagonist	Conditioned Emotional response	Pigeons			o		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131
WAY 100635	5-HT_{1A} antagonist	Conditioned Emotional response	Rats			o		Overshiner et al., 1995	Soc. Neurosci. Abstr. 21:1131
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Lister-hooded rats (250-280g)	0.03-0.3	ip, 30	o		Bickerdike et al., 1995	Neuropharmacology 34:805-811
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (220-250g)	1	ip, 15	o	Scrambled shocks of 2 mA (2 s)	Remy et al., 1996	Psychopharmacology 125:89-91
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Lister rats (200-300g)	100 ng	median raphe nucleus, 3	o		File et al., 1996	J. Neurosci. 16:4810-4815
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Lister rats (200-300g)	100 ng	median raphe nucleus, 3	o	Rats already exposed to the maze	File et al., 1996	J. Neurosci. 16:4810-4815
WAY 100635	5-HT_{1A} antagonist	Social interaction	Lister rats (200-300g)	100 ng	median raphe nucleus, 3	o		File et al., 1996	J. Neurosci. 16:4810-4815

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Rats	0.16	sc	o		Brocco et al., 1996	Soc. Neurosci. Abstr. 22:236
WAY 100635	5-HT_{1A} antagonist	Conflict test	Pigeons	MED>20	sc	o		Brocco et al., 1996	Soc. Neurosci. Abstr. 22:236
WAY 100635	5-HT_{1A} antagonist	Geller-Seifter conflict test	Sprague-Dawley CD-COBS rats (370-375g)	0.3	sc, 30	o	VI20	Samanin et al., 1996	Soc. Neurosci. Abstr. 22:607
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	0.03-0.3	sc	-	After 0.8 mA shock	Groenink et al., 1996	Pharmacol. Biochem. Behav. 54:249-254
WAY 100635	5-HT_{1A} antagonist	Conditioned emotional response	Lister hooded rats (208g)	0.03-3	sc, 30	o		Stanhope and Dourish, 1996	Psychopharmacology 128:293-303.
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (220-430g)	0.1	sc, 30	o	Five shocks of 1.8 mA for 0.3 s, separated by 20 s	Bartoszyk et al., 1996	Soc. Neurosci. Abstr. 22:613
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (200-300g)	0.3	ip, 30	o	Animals received 20 inescapable footshocks of 2 mA/2 s	Xu et al., 1997	Eur. J. Pharmacol. 323:59-68
WAY 100635	5-HT_{1A} antagonist	Geller-Seifter conflict test	Wistar rats (200-250g)	0.03-3	sc, 30	o	VI30: food; FR10: food+shock	King et al., 1997	Eur. J. Pharmacol. 325:121-128
WAY 100635	5-HT_{1A} antagonist	Light/dark test	Wistar rats (200-250g)	0.001-0.01	sc, 30	+	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
WAY 100635	5-HT_{1A} antagonist	Light/dark test	Wistar rats (200-250g)	0.1-1	sc, 30	-	Asymmetric compartments	Sánchez, 1996	Behav. Pharmacol. 7:788-797
WAY 100635	5-HT_{1A} antagonist	Defensive behavior	Lister hooded rats (200-250g)	0.1	sc, 30	o	Defense was elicited by intra-PAG dorsolateral hypothalamus	Beckett and Marsden, 1997	J. Psychopharmacol. 11:35-40

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Defensive behavior	Lister hooded rats (200-250g)	10 nmol/250 nl	PAG, 10	-	Defense was elicited by intra-PAG dorsolateral hypothalamus	Beckett and Marsden, 1997	J. Psychopharmacol. 11:35-40
WAY 100635	5-HT_{1A} antagonist	Agonistic behavior	Mice	0.01-1	sc	o		Bell et al., 1999	Pharmacol. Biochem. Behav. 64:549-554
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (300 g)	0.3-1	sc, 30	o		Collinson and Dawson, 1997	Psychopharmacology 132:35-43
WAY 100635	5-HT_{1A} antagonist	Conflict test	White Carneau pigeons (500-600g)	0.01-0.16	im, 5	o		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (220-240g)	0.0006-0.63	sc, 30	o		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
WAY 100635	5-HT_{1A} antagonist	Isolation-induced aggression	CD1 mice (20-25g)	0.16	sc, 30	o		Millan et al., 1997	J. Pharmacol. Exp. Ther. 282:148-161
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster (8-9 week-old)	0.05-9	ip, 30	+		Cao and Rodgers, 1997	Pharmacol. Biochem. Behav. 58:593-603
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Mice			o	Distress vocalizations were produced by isolation	Brunner et al., 1997	Soc. Neurosci. Abstr. 23:518
WAY 100635	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Rats	0.1-1	sc, 30	+		Joordens et al., 1997	Soc. Neurosci. Abstr. 23:2150
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (180-200g)	1	ip, 30	o	Animals received an electric shock of 0.6 mA, 2 s	Schreiber et al., 1998	Psychopharmacology 135:383-391
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperthermia	NMRI mice (12-14g)	0.3-3	sc, 60	o		Olivier et al., 1998	Eur. J. Pharmacol. 342:177-182

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Light/dark test	Swiss mice (20-25g)	0.3-1	ip, 30	o	Animals were exposed twice to the test and injected before the second trial	Artaiz et al., 1998	Behav. Pharmacol. 9:103-112
WAY 100635	5-HT_{1A} antagonist	Fear-potentiated startle reflex	Wistar rats (175-200g)	1	sc, 30	+		Joordens et al., 1998	Psychopharmacology 139:383-390
WAY 100635	5-HT_{1A} antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (350-375g)	0.3	sc, 40	o		Cervo et al., 1998	Soc. Neurosci. Abstr. 24:1364
WAY 100635	5-HT_{1A} antagonist	Open-field	Female and male C57BL6/Jx129/sv mice	0.03-0.3		+		Ramboz et al., 1998	Proc. Natl. Acad. Sci. U.S.A. 95:14476-14481
WAY 100635	5-HT_{1A} antagonist	Vogel conflict test	Sprague-Dawley rats (220-250g)	0.1-0.3	sc, 30	o	Electric shocks of 0.25 mA/0.2 s	Kennett et al., 1998	Neuropharmacology 37:1603-1610
WAY 100635	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (220-240g)	0.16	sc, 60	o		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar rats (220-240g)	0.16	sc, 60	o		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
WAY 100635	5-HT_{1A} antagonist	Social interaction	Wistar rats (220-240g)	0.16	sc, 60	o		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
WAY 100635	5-HT_{1A} antagonist	Isolation-induced aggression	CD1 mice (22-25g)	0.16-0.63	sc, 60	o		Millan et al., 1999	J. Pharmacol. Exp. Ther. 288:1002-1014
WAY 100635	5-HT_{1A} antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.1-3	sc, 30	+		Griebel et al., 1999	Psychopharmacology 144:121-130
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	BALB/c mice (35-45g)	5	ip, 45	+	Weak effects	Lopez-Mendoza et al., 1999	Pharmacol. Biochem. Behav. 62:499-509
WAY 100635	5-HT_{1A} antagonist	Geller-Seifter	Fisher 344 rats	0.3-3	sc, 20	o	Rats were tested during the light	Gleason and Leander,	Behav. Pharmacol. 10:758-91

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		conflict test					phase	1999	
WAY 100635	5-HT_{1A} antagonist	Geller-Seifter conflict test	Fisher 344 rats	0.3-3	sc, 20	o	Rats were tested during the dark phase	Gleason and Leander, 1999	Behav. Pharmacol. 10:758-91
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats	0,16	sc, 30	o		Dekeyne et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S23
WAY 100635	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	CFW mouse pups (7-day-old)	0,1	sc, 30	o		Fish et al., 2000	Psychopharmacology 149:277-85
WAY 100635	5-HT_{1A} antagonist	Social interaction	Hooded Lister rats	200 ng	hippocampus, 0	o	High Light Familiar condition	Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Hooded Lister rats	200 ng	hippocampus, 0	o		Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981
WAY 100635	5-HT_{1A} antagonist	Acoustic startle reflex	Rats	0,1	sc	o		Meloni and David, 1999	Soc. Neurosci. Abstr. 25:2132
WAY 100635	5-HT_{1A} antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (300-325g)	0.3	sc, 30	o	VI-20 s	Cervo et al., 2000	Neuropharmacology 39:1037-43
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.16	sc, 45	o	HLU condition	Dekeyne et al., 2000	Neuropharmacology 39:1114-7
WAY 100635	5-HT_{1A} antagonist	Conflict test	Wistar rats (400-500g)	0.3-10	sc, 30	o	Unpunished responding was decreased from 3 mg/kg	Griebel et al., 2000	Neuropharmacology 39:1848-57
WAY 100635	5-HT_{1A} antagonist	Vogel conflict test	Sprague-Dawley rats (180-200g)	0.3-1	sc, 30	+		Griebel et al., 2000	Neuropharmacology 39:1848-57
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (180-200g)	0.03-1	sc, 30	+		Griebel et al., 2000	Neuropharmacology 39:1848-57
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (250-380g)	0.3	sc, 90	o	LLF conditions	Bristow et al., 2000	Neuropharmacology 39:1222-36

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (200-240g)	0.63	sc, 45	o	0.3 mA/0.5 s shock	Dekeyne et al., 2000	Psychopharmacology 152:55-66
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.16	sc, 45	o	HLU conditions	Dekeyne et al., 2000	Psychopharmacology 152:55-66
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	ddY mice (23-28g)	1	ip, 30	o	Specific alternation of rhythm in temperature was used as stressor	Hata et al., 2001	Jpn. J. Pharmacol. 85:189-196
WAY 100635	5-HT_{1A} antagonist	Free-exploratio n test	BALB/c mice (8-week-old)	0.03-1	ip, 30	o		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (250-350g)	1	sc, o.d. for 7 days	o	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (250-350g)	0.03	sc, 60	o	HLU conditions	Duxon et al., 2000	Br. J. Pharmacol. 130:1713-1719
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (240-330g)	0.05-0.2	sc, 30	o	LLF conditions	Bagdy et al., 2001	Int. J. Neuropsychopharmacol. 4:399-408
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperther mia	5-HT_{1A} 129/Sv-Swiss KO mice (25-30g)	1	sc, 60	o		Pattij et al., 2001	Biol. Psychiatry 49:569-574
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperther mia	129/Sv mice (25-30g)	1	sc, 60	o		Pattij et al., 2001	Biol. Psychiatry 49:569-574
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Mice	0.05-0.2 ng	dorsal raphe	+		Coubard and Barone, 2001	Behav. Pharmacol. 12 (Suppl. 1):S24
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperther mia	Wild-type 129/Sv mice (13-week-old)	1	sc, 60	o	Radiotelemetry system was used	Bouwknecht et al., 2002	Brain Res. Bull. 57:93-102
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperther	5-HT1B KO 129/Sv mice (13-week-old)	1	sc, 60	o	Radiotelemetry system was used	Bouwknecht et al., 2002	Brain Res. Bull. 57:93-102

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		mia							
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	3 µg/0.2 µl	ventral hippocampus, 0	+		Nunes-de-Souza et al., 2002	Brain Res. 927:87-96
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	0.1-3 µg/0.2 µl	ventral hippocampus, 0	o	Maze-experienced mice were used	Nunes-de-Souza et al., 2002	Brain Res. 927:87-96
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	0.1-3 µg/0.2 µl	dorsal hippocampus, 0	o		Nunes-de-Souza et al., 2002	Brain Res. 927:87-96
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	0.1-3 µg/0.2 µl	dorsal hippocampus, 0	o	Maze-experienced mice were used	Nunes-de-Souza et al., 2002	Brain Res. 927:87-96
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	3 µg/0.1 µl	median raphe, 0	+		Canto-de-Souza et al., 2002	Brain Res. 928:50-59
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	3 µg/0.1 µl	median raphe, 0	+	(1) Weak effects; (2) Maze-experienced mice were used	Canto-de-Souza et al., 2002	Brain Res. 928:50-59
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	1-3 µg/0.1 µl	dorsal raphe, 0	o		Canto-de-Souza et al., 2002	Brain Res. 928:50-59
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	1-3 µg/0.1 µl	dorsal raphe, 0	o	Maze-experienced mice were used	Canto-de-Souza et al., 2002	Brain Res. 928:50-59
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	0.37 nmol/0.2 µl	dorsal raphe, 10	-		Zangrossi et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S149
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated	Wistar rats (220-240g)	0.185 nmol/0.2 µl	dorsal raphe, 10	+		Zangrossi et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S149

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		T-maze							
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-240g)	0.185-0.740 nmol/0.2 µl	dorsal PAG, 10	o		Zangrossi et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S149
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-240g)	0.185-0.740 nmol/0.2 µl	dorsal PAG, 10	o		Zangrossi et al., 2002	Int. J. Neuropsychopharmacol. 5 (Suppl. 1):S149
WAY 100635	5-HT_{1A} antagonist	Light/dark test	Swiss-Webster mice (25-30g)	0.5	ip, 20	+		Briones-Aranda et al., 2002	Psychopharmacology 162:147-155
WAY 100635	5-HT_{1A} antagonist	Light/dark test	Swiss-Webster mice (25-30g)	0.5	ip, 20	-	Animals had forced swim stress 1 or 24 h prior to testing	Briones-Aranda et al., 2002	Psychopharmacology 162:147-155
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	ddY mice (4-week-old)	0.1	po, 90	o		Sakaue et al., 2003	Eur. J. Pharmacol. 458:141-144
WAY 100635	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (250-350g)	0.5-1	sc, 30	+	Electric shocks of 0.5 mA	Wesolowska et al., 2003	J. Pharm. Pharmacol. 55:533-543
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (250-350g)	0.05-0.1	sc, 30	+		Wesolowska et al., 2003	J. Pharm. Pharmacol. 55:533-543
WAY 100635	5-HT_{1A} antagonist	Four-plate test	Swiss mice (25-30g)	0.01	sc, 30	+		Wesolowska et al., 2003	J. Pharm. Pharmacol. 55:533-543
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (160-180g)	3	ip, 5 and 10 days	o	The drug was given after the first and second cycles	Overstreet et al., 2003	Psychopharmacology 167:344-352
WAY 100635	5-HT_{1A} antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 4.5 h	o	The drug was given after removal of ethanol on the	Overstreet et al., 2003	Psychopharmacology 167:344-352

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							third cycle		
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	-	The drug facilitated inhibitory avoidance	Zangrossi and Pobbe, 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S358
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	+	The drug impaired one-way escape	Zangrossi and Pobbe, 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S358
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats	0.37 nmol/0.2 µl	dorsal raphe nucleus and dorsal PAG, 10	-	The dorsal PAG infusion did not alter the anxiogenic-like action of intra-dorsal raphe nucleus application	Zangrossi and Pobbe, 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S358
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats	0.37 nmol/0.2 µl	dorsal raphe nucleus and dorsal PAG, 10	(o)	The dorsal PAG infusion altered the anxiogenic-like action of intra-dorsal raphe nucleus application	Zangrossi and Pobbe, 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S358
WAY 100635	5-HT_{1A} antagonist	Schedule-induced polydipsia	Wistar WU rats (150-175g)	0.52	sc, o.d. for 3 days	o		Hogg and Dalvi, 2004	Pharmacol. Biochem. Behav. 77:69-75
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Female C57BL/6J background mice (3-7-month old)	0.05-0.3	sc, 30	o		Holmes et al., 2003	Neuropsychopharmacology 28:2077-2088
WAY 100635	5-HT_{1A} antagonist	Taxidermized predator-induced fear	Female and male marmosets (*Callithrix penicillata*, 300-400g)	0.4	ip, 30	+	The drug reversed fear-induced avoidance behavior	Barros et al., 2003	Eur. J. Pharmacol. 482:197-203
WAY 100635	5-HT_{1A}	Holeboard	Wistar rats (90-day-old)	1	ip, 40	o		Marco et al.,	Behav. Pharmacol. 15:21-27

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist							2004	
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (90-day-old)	1	ip, 40	o		Marco et al., 2004	Behav. Pharmacol. 15:21-27
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (18-25g)	0.3	sc, 30	o		Peng et al., 2004	Life Sci. 75:2451-2462
WAY 100635	5-HT_{1A} antagonist	Fear-potentiated startle reflex	DBA/1J mice (6-8-week-old)	0.3	ip, 10	o		Risbrough and Geyer, 2005	Biol. Psychiatry 57:33-43
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (4-week-old, 18-20g)	0.008-0.03	ip, 45	+		Clénet et al., 2005	Behav. Brain Res. 158:339-348
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-220g)	0.37-0.74 nmol/0.2 µl	median raphe nucleus, 10	-	The drug impaired inhibitory avoidance by facilitating it	Dos Santos et al., 2005	Psychopharmacology 179:733-741
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (200-220g)	0.18-0.74 nmol/0.2 µl	median raphe nucleus, 10	o		Dos Santos et al., 2005	Psychopharmacology 179:733-741
WAY 100635	5-HT_{1A} antagonist	Conditioned emotional response	Lister hooded rats (250-300g)	0.3	sc, 10	o		Mirza et al., 2005	Psychopharmacology 180:159-168
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Ovariectomized female Wistar rats (200g)	100 ng	median raphe	o		Andrade et al., 2005	Behav. Brain Res. 163:18-25
WAY 100635	5-HT_{1A} antagonist	Open-field	Ovariectomized female Wistar rats (200g)	100 ng	median raphe	o		Andrade et al., 2005	Behav. Brain Res. 163:18-25
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0.185-0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	+	The drug impaired inhibitory avoidance	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	0.185-0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	+	The drug increased latency to escape	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (18-20g)	0.03-2	ip, 30	o		Clénet et al., 2006	Behav. Brain Res. 166:140-149
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (18-20g)	2	ip, 30	+	Mice were housed in a constantly illuminated room for 1 week prior to testing	Clénet et al., 2006	Behav. Brain Res. 166:140-149
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (18-20g)	0.03	ip, 30	+	Mice were housed in a constantly dark room for 1 week prior to testing	Clénet et al., 2006	Behav. Brain Res. 166:140-149
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (18-20g)	0.03	ip, 30	+	12/12H light at 19h	Clénet et al., 2006	Behav. Brain Res. 166:140-149
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (25-30g)	0.3	ip, 60	o		Jung et al., 2006	Biol. Pharm. Bull. 29:261-265
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperthermia	ICR mice (25-34g)	0.3-3	sc, 60	o		Iijima et al., 2007	Psychopharmacology 190:233-239
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (5-week-old)	0,1-0,3	ip, 30	o		Komiya et al., 2006	Behav. Brain Res. 172:240-249

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Social interaction	Lister rats (300-375g)	0,2	ip, 30	o	HLU conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (90-day-old)	1	ip, 40	o		Marco et al., 2004	Behav. Pharmacol. 15:21-27
WAY 100635	5-HT_{1A} antagonist	Holeboard	Wistar rats (90-day-old)	1	ip, 40	o		Marco et al., 2004	Behav. Pharmacol. 15:21-27
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (260-270g)	0.3	ip, 30	o		Jung et al., 2006	J. Ethnopharmacol. 108:193-197
WAY 100635	5-HT_{1A} antagonist	Conditioned fear	Mixed (C57BL6/J x CBA/J) x C57BL/6J background mice (>5-week-old)	0.3	sc	-	The drug increased freezing	Tsetsenis et al., 2007	Nat. Neurosci. 10:896-902
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.3	sc, 60	o		Braida et al., 2007	Eur. J. Pharmacol. 555:156-163
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	C57BL/6 (6-12-week-old, 22-34g)	0.5	ip, 45	o		Grundmann et al., 2006	J. Ethnopharmacol. 110:406-411
WAY 100635	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (230-270g)	0.1	ip, 60	o	Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-220g)	0,18-0,74 nmol/0.2 µl	dorsal hippocampus, 10	o		Dos Santos et al., 2008	Eur. Neuropsychopharmacol. 18:286-294
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (200-220g)	0,18-0,74 nmol/0.2 µl	dorsal hippocampus, 10	o		Dos Santos et al., 2008	Eur. Neuropsychopharmacol. 18:286-294
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (280-350g)	0.1	ip, 30	o		Ghisleni et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1508-1515
WAY 100635	5-HT_{1A} antagonist	Conditioned fear	Sprague-Dawley rats (230-270g)	0.15	sc, 5h	o	Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (220-240g)	0.37 nmol/0.2 µl	dldorsal PAG, 10	o		Campos et al., 2008	Psychopharmacology 199:223-230
WAY 100635	5-HT_{1A} antagonist	DPAG stimulation	Wistar rats (250-280g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Broiz et al., 2008	Pharmacol. Bicohem. Behav. 89:76-84
WAY 100635	5-HT_{1A} antagonist	Conditioned fear	Wistar rats (250-280g)	10 nmol/0.2 µl	dorsal PAG, 10	o	Shocks of 0.6 mA/1 s were applied 24 h prior to testing	Broiz et al., 2008	Pharmacol. Bicohem. Behav. 89:76-84
WAY 100635	5-HT_{1A} antagonist	Mouse defense test battery	CD1 mice (10-12-week-old)	0.1-0.4µg/0.1 µl	dorsal raphe nucleus, 10	o		Pobbe et al., 2011	Eur. Neuropsychopharmacol. 21:306-315
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperthermia	NMRI mice	0.1-1	ip, 60	o		Vinkers et al., 2012	Psychopharmacology 211:123-132
WAY 100635	5-HT_{1A} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	0,37 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe et al., 2010	Neuroscience Letters 479:87-91
WAY 100635	5-HT_{1A} receptor antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0,37 nmol/0.2 µl	dorsal PAG, 10	o		Pobbe et al., 2010	Neuroscience Letters 479:87-91
WAY 100635	5-HT_{1A} receptor antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	0.18-0.37 nmol/0.2 µl	ventrolateral PAG, 10	+		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
WAY 100635	5-HT_{1A} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	0.04-0.7 nmol/0.2 µl	ventrolateral PAG, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} receptor antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	0.37 nmol/0.05 µl	dorsal tegmental bundle, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
WAY 100635	5-HT_{1A} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	0.37 nmol/0.05 µl	dorsal tegmental bundle, 10	o		de Paula Soares and Zangrossi, 2009	Behav. Brain Res. 197:178-185
WAY 100635	5-HT_{1A} receptor antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-250g)	0.18 nmol/0.2 µl	median raphe nucleus, 10	o		Vicente et al., 2008	Neurosci. Lett. 445:204-208
WAY 100635	5-HT_{1A} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	0.18 nmol/0.2 µl	median raphe nucleus, 10	o		Vicente et al., 2008	Neurosci. Lett. 445:204-208
WAY 100635	5-HT_{1A} receptor antagonist	Light/dark test	Wistar rats (200-250g)	0.74 nmol/0.2 µl	median raphe nucleus, 10	-		Vicente et al., 2008	Neurosci. Lett. 445:204-208
WAY 100635	5-HT_{1A} receptor antagonist	Elevated plus-maze	Wistar rats (280-330g, 12-16-week-old)	2-5 nmol/0.3 µl	dorsal PAG, 5	o		Moraes et al., 2008	Behav. Brain Res. 194:181-186
WAY 100635	5-HT_{1A} receptor antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	0.37 nmol/0.2 µl	lateral septum, 10	o		Viana et al., 2008	Pharmacol. Biochem. Behav. 89:360-366
WAY 100635	5-HT_{1A} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	0.37 nmol/0.2 µl	lateral septum, 10	o		Viana et al., 2008	Pharmacol. Biochem. Behav. 89:360-366
WAY 100635	5-HT_{1A} receptor antagonist	Elevated plus-maze	Wistar rats (230-250g)	0.1	ip, 24 h	o	Animals were subjected to restraint stress	Resstel et al., 2009	Br. J. Pharmacol. 156:181-188

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							the day prior to testing		
WAY 100635	5-HT_{1A} receptor antagonist	Conditioned fear	Sprague-Dawley rats (270-300g)	1	ip, 30	o	Shocks of 1 mA/30 s were applied	Kakui et al., 2009	Pharmacol. Biochem. Behav. 92:393-398
WAY 100635	5-HT_{1A} antagonist	Conditioned fear	C57BL/6J (9-11-week-old)	0.3	sc, 20	o	Shocks of 0.7 mA/2 s were applied	Youn et al., 2009	Neuropharmacology 5:567-576
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Female Swiss mice (25-35g)	0.1	sc, 30	o		Brüning et al., 2009	Behav. Brain Res. 205:511-517
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	0.1	sc, 45	o		Wierońska et al., 2010	Neuropharmacology 59:627-634
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (25-30g)	5.6 nmol/0.1 µl	median raphe nucleus, 15	+		Nunes-de-Souza et al., 2011	Behav. Brain Res. 225:547-553
WAY 100635	5-HT_{1A} antagonist	Light/dark test	Swiss mice (30-day-old)	0.1	ip, 45	o		Rodrigues de Almeida et al., 2011	J. Ethnopharmacol.137:828-836.
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (230-250g)	0.4 µg/0.2 µl	dorsal PAG, 40	o		Sela et al., 2011	Neurosci. Lett. 495:63-66
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (230-250g)	0.4 µg/0.2 µl	dorsal PAG, 40	o		Sela et al., 2011	Neurosci. Lett. 495:63-66
WAY 100635	5-HT_{1A} antagonist	Marble burying	ddY mice (4-8-week-old)	3	sc, 60	o		Honda et al., 2011	Behav. Brain. Res. 216:308-312
WAY 100635	5-HT_{1A} antagonist	Vogel conflict test	Wistar rats (250-300g)	0.1	sc, 45	o	Shocks of 0.1 to 0.5 mA were applied	Stachowicz et al., 2011	Pharmacol. Rep. 63:880-887
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperther	Swiss mice (28-32g)	0.1	sc, 45	o		Wierońska et al., 2012	Neuropharmacology 62:322-331

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		mia							
WAY 100635	5-HT_{1A} antagonist	Acoustic startle reflex	Brown Norway rats (10-week-old)	1	ip, 40	o		Conti, 2012	Neuropharmacology 62:256-263
WAY 100635	5-HT_{1A} antagonist	Acoustic startle reflex	Wistar-Kyoto rats (10-week-old)	1	ip, 40	o		Conti, 2012	Neuropharmacology 62:256-263
WAY 100635	5-HT_{1A} antagonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	400 nmol/1 µl	basolateral amygdala, 10	+	Empty cage of a resident aggressor	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600
WAY 100635	5-HT_{1A} antagonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	400-1600 nmol/1 µl	basolateral amygdala, 10	o	(1) Following 15 min social defeat training; (2) expression of conditioned defeat	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600
WAY 100635	5-HT_{1A} antagonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	400 nmol/1 µl	basolateral amygdala, 10	-	Empty cage of a resident aggressor	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600
WAY 100635	5-HT_{1A} antagonist	Resident-intruder paradigm	Syrian hamsters (M. auratus, 120-140g, 3-4-month-old)	400-1600 nmol/1 µl	basolateral amygdala, 10	o	(1) Following 15 min social defeat training; (2) acquisition of conditioned defeat	Morrison and Cooper, 2012	Pharmacol. Biochem. Behav. 100:592-600
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	ddY mice	0.03-1	ip, 30	o		Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	ddY mice	0.03-1	ip, 30	o	The drug attenuated anxionegic-like effects of ethanol withdrawal	Shibasaki et al., 2012	J. Pharmacol. Sci. 118:215-224
WAY 100635	5-HT_{1A} antagonist	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	0.1	sc, 45	o		Sławińska et al., 2013	Neuropharmacology 66:225-235

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	0.37 nmol/0.2 µl	dorsal PAG, 10	o		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-è
WAY 100635	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	0.37 nmol/0.2 µl	dorsal PAG, 10	o		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-è
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (220-250g)	1	ip, 60	o		Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (220-250g)	1	ip, 60	o	Animals were exposed a cat for 10 min, 7 days prior to testing	Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
WAY 100635	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (6-8-wek-old, 120-150g)	0.5	ip, 15	o		Khatri et al., 2009	Bioorg. Med. Chem. 17:1890-1897
WAY 100635+(PhSe)2 (50 nµmol/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (280-350g)	0.1	ip, 30	(o)	Antagonism of the anxiolytic-like effects of $(PhSe)_2$	Ghisleni et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:1508-1515
WAY 100635+4-hydroxybenzaldehyde (100 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (25-30g)	0.3	ip, 60	+	No interaction	Jung et al., 2006	Biol. Pharm. Bull. 29:261-265
WAY 100635+4-hydroxybenzyl alcohol (100 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (25-30g)	0.3	ip, 60	(o)	Antagonism of the anxiolytic-like effects of the extract	Jung et al., 2006	Biol. Pharm. Bull. 29:261-265
WAY 100635+8-OH-DPAT (200 ng)	5-HT_{1A} antagonist	Social interaction	Hooded Lister rats	200 ng	hippocampus, 0	(o)	(1) WAY blocked the anxiolytic-like effects of 8-OH-DPAT; (2) High Light Familiar condition	Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981
WAY 100635+Albizzia julibrissin (200	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (260-270g)	0.3	ip, 30	(o)	WAY blocked the anxiolytic-like activity of	Jung et al., 2005	Pharmacol. Biochem. Behav. 81:205-210

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
mg/kg)							AEAJ		
WAY 100635+Apocynum venetum extracts (100-125 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	C57BL/6J (9-11-week-old)	0.5	ip, 60	+	No blockade of the anxiolytic-like effects of AV	Youn et al., 2009	Neuropharmacology 5:567-576
WAY 100635+Apocynum venetum extracts (22.5-30 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	C57BL/6J (9-11-week-old)	0.5	ip, 60	(o)		Youn et al., 2009	Neuropharmacology 5:567-576
WAY 100635+*Apocynum venetum* L.(125 mg/kg)	5-HT_{1A} partial agonist	Elevated plus-maze	C57BL/6 (6-12-week-old, 22-34g)	10	po, 60	(o)	Partial antagonism of the effects of the plant extract	Grundmann et al., 2006	J. Ethnopharmacol. 110:406-411
WAY 100635+*Cinnamomum cassia* (750 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (22-26g)	0.3-1	ip, 90	(o)	WAY 100635 blocked the anxiolytic-like effects of the extract	Yu et al., 2007	Pharmacol. Biochem. Behav. 87:164-170
WAY 100635+CP55,940 (50 µg)	5-HT_{1A} antagonist	Holeboard	Wistar rats (90-day-old)	1	ip, 40	(o)	Blockade of the anxiogenic- but not the anxiolytic-like effects of the CB1 agonist	Marco et al., 2004	Behav. Pharmacol. 15:21-27
WAY 100635+CP55,940 (50 µg)	5-HT_{1A} antagonist	Elevated plus-maze	Wistar rats (90-day-old)	1	ip, 40	(o)	Blockade of the anxiogenic- but not the anxiolytic-like effects of the CB1 agonist	Marco et al., 2004	Behav. Pharmacol. 15:21-27
WAY 100635+Cymbopogon citratus extracts (10 mg/kg)	5-HT_{1A} antagonist	Light/dark test	Swiss mice (30-day-old)	0.1	ip, 45	+	No interaction	Rodrigues de Almeida et al., 2011	J. Ethnopharmacol.137:828-836.
WAY 100635+diazepam (1 mg/kg)	5-HT_{1A} antagonist	Light/dark test	Swiss mice (30-day-old)	0.1	ip, 45	+	No interaction	Rodrigues de Almeida et al., 2011	J. Ethnopharmacol.137:828-836.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635+Diazepam (1-4 mg/kg)	5-HT_{1A} antagonist	Stress-induced hyperthermia	NMRI mice	0.1-1	ip, 60	(o)		Vinkers et al., 2010	Psychopharmacology 211:123-130
WAY 100635+diazepam (5 mg/kg)	5-HT_{1A} antagonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	0.1	sc, 45	(o)		Wierońska et al., 2010	Neuropharmacology 59:627-634
WAY 100635+EEDQ (0,31 mg/kg)	5-HT_{1A} antagonist	Ultrasonic distress vocalizations	Wistar WU rats (150-175g)		sc, 15	(+)	(1) No antagonism of the effects of EEDQ, (2) Rats received four 1 mA inescapable footshocks each of 10 s	Sánchez and Mørk, 1999	Eur. Neuropsychopharmacol. 9:287-294
WAY 100635+estradiol benzoate (600-1200 ng)	5-HT_{1A} antagonist	Elevated plus-maze	Ovariectomized female Wistar rats (200g)	100 ng	median raphe	(o)	WAY blocked the anxiolytic-like activity of EB	Andrade et al., 2005	Behav. Brain Res. 163:18-25
WAY 100635+estradiol benzoate (600-1200 ng)	5-HT_{1A} antagonist	Open-field	Ovariectomized female Wistar rats (200g)	100 ng	median raphe	(o)	WAY blocked the anxiolytic-like activity of EB	Andrade et al., 2005	Behav. Brain Res. 163:18-25
WAY 100635+*Gastrodia elata* (400 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (25-30g)	0.3	ip, 60	(o)	Antagonism of the anxiolytic-like effects of the extract	Jung et al., 2006	Biol. Pharm. Bull. 29:261-265
WAY 100635+GR 127935 (4 mg/kg)	5-HT_{1A} antagonist	Conditioned fear	Sprague-Dawley rats (230-270g)	0.15	sc, 5h	o	(1) No interaction; (2) Shocks of 2.5 mA/30 s were applied the day before	Muraki et al., 2008	Eur. J. Pharmacol. 586:171-178
WAY 100635+kaempferol (0.02-0.08 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	C57BL/6J (9-11-week-old)	0.5	ip, 60	+	No blockade of the anxiolytic-like effects of kaempferol	Youn et al., 2009	Neuropharmacology 5:567-576

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635+kainic acid (60 pmol)	5-HT_{1A} receptor antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	0,37 nmol/0.2 µl	dorsal PAG, 10	(o)	WAY100635 antagonized the effects of kanic acid	Pobbe et al., 2010	Neuroscience Letters 479:87-91
WAY 100635+kainic acid (60 pmol)	5-HT1A receptor antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0,37 nmol/0.2 µl	dorsal PAG, 10	(-)	WAY100635 did not antagonize the effects of kanic acid	Pobbe et al., 2010	Neuroscience Letters 479:87-91
WAY 100635+kainic acid (60 pmol, intra-DRN)	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats	0.37 nmol/0.2 µl	dorsal raphe nucleus and dorsal PAG, 10	(o)	The dorsal PAG infusion altered the anxiogenic-like action of intra-dorsal raphe nucleus application of kainic acid	Zangrossi and Pobbe, 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S358
WAY 100635+kainic acid (60 pmol, intra-DRN)	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats	0.37 nmol/0.2 µl	dorsal raphe nucleus and dorsal PAG, 10	-	The dorsal PAG infusion did not alter the anxiogenic-like action of intra-dorsal raphe nucleus application of kanic acid	Zangrossi and Pobbe, 2003	Eur. Neuropsychopharmacol. 13 (Suppl. 4):S358
WAY 100635+kainic acid (60 pmol/0.2 µl, intra-DPAG)	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	+	(1) No interaction; (2) The drug impaired inhibitory avoidance	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
WAY 100635+kainic acid (60 pmol/0.2 µl, intra-DPAG)	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	(o)	The combination blocked the effects of intra-dorsal raphe nucleus WAY	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635+ketanserin (10 nmol/0.1 µl in PAG)	5-HT_{1A} antagonist	Elevated plus-maze	Swiss mice (25-30g)	5.6 nmol/0.1 µl	median raphe nucleus, 15	(o)		Nunes-de-Souza et al., 2011	Behav. Brain Res. 225:547-553
WAY 100635+ketanserin (10 nmol/0.2 µl, intra-DPAG)	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	(o)	The combination blocked the effects of intra-dorsal raphe nucleus WAY	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
WAY 100635+ketanserin (10 nmol/0.2 µl, intra-DPAG)	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	(o)	The combination blocked the effects of intra-dorsal raphe nucleus WAY	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
WAY 100635+lamotrigine (30 mg/kg)	5-HT_{1A} antagonist	Conditioned emotional response	Lister hooded rats (250-300g)	0.3	sc, 10	+	WAY did not block the anxiolytic-like activity of lamotrigine	Mirza et al., 2005	Psychopharmacology 180:159-168
WAY 100635+lemon oil vapor	5-HT_{1A} antagonist	Elevated plus-maze	ICR mice (5-week-old)	0,3	ip, 30	o	No interaction	Komiya et al., 2006	Behav. Brain Res. 172:240-249
WAY 100635+m-CF3-C6H4Se)2 (100 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Female Swiss mice (25-35g)	0.1	sc, 30	(o)	Blockade of the anxiolytic-like effects of m-CF_3-$C_6H_4Se)_2$	Brüning et al., 2009	Behav. Brain Res. 205:511-517
WAY 100635+Nicotine (1-8 µg/side)	5-HT_{1A} antagonist	Social interaction	Hooded Lister rats	200 ng	hippocampus, 0	(o)	(1) WAY blocked the anxiogenic-like effects of nicotine; (2) High Light Familiar condition	Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981
WAY 100635+Nicotine (1-8 µg/side)	5-HT_{1A} antagonist	Elevated plus-maze	Hooded Lister rats	200 ng	hippocampus, 0	(o)	(1) WAY blocked the anxiogenic-like effects of nicotine; (2) High Light	Kenny et al., 1999	Soc. Neurosci. Abstr. 25:1981

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							Familiar condition		
WAY 100635+NMDA (25 pmol/0.3 µl)	5-HT_{1A} receptor antagonist	Elevated plus-maze	Wistar rats (280-330g, 12-16-week-old)	5 nmol/0.3 µl	dorsal PAG, 5	(o)		Moraes et al., 2008	Behav. Brain Res. 194:181-186
WAY 100635+Passiflorace ae extract (375 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	C57J/BL6 mice (6-12-week-old, 22-34g)	0.5	ip, 75	+	WAY did not antagonize the anxiolytic-like effects of the extract	Grundmann et al., 2008	Planta Med. 74:1769-1773
WAY 100635+SKF82958 (1 mg/kg)	5-HT_{1A} antagonist	Acoustic startle reflex	Rats	0,1	sc	-	No interaction	Meloni and David, 1999	Soc. Neurosci. Abstr. 25:2132
WAY 100635+tipepidine (10 mg/kg)	5-HT_{1A} antagonist	Marble burying	ddY mice (4-8-week-old)	3	sc, 60	(o)	Antagonism of the effects of tipepidine	Honda et al., 2011	Behav. Brain. Res. 216:308-312
WAY 100635+TP003 (1 mg/kg)	5-HT_{1A} antagonist	Stress-induced hyperthermia	NMRI mice	0.1-1	ip, 60	(o)		Vinkers et al., 2011	Psychopharmacology 211:123-131
WAY 100635+*Uncaria rhynchophylla* (200 mg/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Sprague-Dawley rats (260-270g)	0.3	ip, 30	(o)	The drug antagonized the anxiolytic-like effects of the extract	Jung et al., 2006	J. Ethnopharmacol. 108:193-197
WAY 100635+WAY 100635 (intra-DPAG)	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	+	(1) No interaction; (2) The drug impaired inhibitory avoidance	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
WAY 100635+WAY 100635 (intra-DPAG)	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	0.37 nmol/0.2 µl	dorsal raphe nucleus, 10	(o)	The combination blocked the effects of intra-dorsal raphe nucleus WAY	Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WAY 100635+WAY100365 (0,74 nmol in MRN)	5-HT_{1A} antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-220g)	0,18-0,74 nmol/0.2 µl	dorsal hippocampus, 10	o	No interaction	Dos Santos et al., 2008	Eur. Neuropsychopharmacol. 18:286-294
WAY 100635+WAY100365 (0,74 nmol in MRN)	5-HT_{1A} antagonist	Escape behavior in the elevated T-maze	Wistar rats (200-220g)	0,18-0,74 nmol/0.2 µl	dorsal hippocampus, 10	o	No interaction	Dos Santos et al., 2008	Eur. Neuropsychopharmacol. 18:286-294
WAY 100635+yohimbine (10 mg/kg)	5-HT_{1A} antagonist	Fear-potentiated startle reflex	DBA/1J mice (6-8-week-old)	0.3	ip, 10	(-)	The drug did not block the anxiogenic-like effects of yohimbine	Risbrough and Geyer, 2005	Biol. Psychiatry 57:33-43
WAY 100635+yokukansan (1 g/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Wistar/ST rats (10-13-week-old)	1	ip, for 14 days	(o)		Yamaguchi et al., 2012	J. Ethnopharmacol. 143:533-539
WAY 100635+yokukansan (1 g/kg)	5-HT_{1A} antagonist	Conditioned fear	Wistar/ST rats (10-13-week-old)	1	ip, for 14 days	(o)	Shocks of 0.5 mA were applied	Yamaguchi et al., 2012	J. Ethnopharmacol. 143:533-539
WAY 100635+yokukansan (1 g/kg)	5-HT_{1A} antagonist	Elevated plus-maze	Wistar/ST rats (10-13-week-old)	1	ip, 60	+	No blockade of the anxiolytic-like effects of yokukansan	Yamaguchi et al., 2012	J. Ethnopharmacol. 143:533-539
WAY 100635+yokukansan (1 g/kg)	5-HT_{1A} antagonist	Conditioned fear	Wistar/ST rats (10-13-week-old)	1	ip, 60	+	(1) Shocks of 0.5 mA were applied; (2) No blockade of the anxiolytic-like effects of yokukansan	Yamaguchi et al., 2012	J. Ethnopharmacol. 143:533-539
WAY 100635+Zolpidem (10 mg/kg)	5-HT_{1A} antagonist	Stress-induced hyperthermia	NMRI mice	0.1-1	ip, 60	o		Vinkers et al., 2012	Psychopharmacology 211:123-132
WAY 181187	5-HT_6 agonist	Schedule-induced polydipsia	Sprague-Dawley rats (300-400 g)	178	ip, 0	+		Schechter et al., 2008	Neuropsychopharmacology 33:1323-1335

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WY-27,587	5-HT reuptake inhibitor	Elevated zero-maze	Lister hooded rats (250-320g)	6	sc, 30	-		Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
WY-47,846	5-HT_{1A} agonist	Geller-Seifter conflict test	CD rats (200g)	1-20	ip, 30	o	VI2	Haskins et al., 1989	Drug Dev. Res. 18:29-45
WY-47,846	5-HT_{1A} agonist	Vogel conflict test	CD rats (200-250g)	1-20	ip, 30	o		Haskins et al., 1989	Drug Dev. Res. 18:29-45
WY-47,846	5-HT_{1A} agonist	Conflict test	Squirrel monkeys (800-1050g)	0.01-0.3	im	o	FI3	Gleeson and Barrett, 1990	Pharmacol. Biochem. Behav. 37:335-337
WY-47,846	5-HT_{1A} agonist	Conflict test	White Carneau Pigeons (450-600g)	0.1-10	im, 20	+	FR30	Barrett and Zhang, 1991	Drug Dev. Res. 24:179-188
WY-48,723	5-HT_{1A} agonist	Geller-Seifter conflict test	Rats			o		Andree et al., 1988	Soc. Neurosci. Abstr. 14:555
WY-48,723	5-HT_{1A} agonist	Conflict test	White Carneau Pigeons (450-600g)	0.03-10	im, 20	+	FR30	Barrett and Zhang, 1991	Drug Dev. Res. 24:179-188
WY-48,723	5-HT_{1A} agonist	Conditioned avoidance	Rats			+		Andree et al., 1988	Soc. Neurosci. Abstr. 14:555
WY-50,324	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Geller-Seifter conflict test	Rats	10	ip	+		Morris et al., 1989	Soc. Neurosci. Abstr. 15:852
WY-50,324	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau Pigeons (450-600g)	0.03-10	im, 20	+	FR30	Barrett and Zhang, 1991	Drug Dev. Res. 24:179-188
WY-50,324	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau Pigeons (500-650g)	0.01-0.16	im, 5	+	FR30:FR30	Kleven and Koek, 1996	J. Pharmacol. Exp. Ther. 276:388-397
WY-50,324	Mixed 5-HT_{1A} agonist/5-$HT_{2A/2C}$ antagonist	Conflict test	White Carneau pigeons (500-650g)	0.01-0.2	im, 5	+		Koek et al., 1998	J. Pharmacol. Exp. Ther. 287:266-283

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Y-25,130	5-HT_3 antagonist	Stress-induced analgesia	ddY mice (18-20g)	0.03-0.1	ip, 30	+		Tokuyama et al., 1993	Jpn. J. Pharmacol. 61:237-242
YM114	5-HT_3 antagonist	Stress-induced defecation	Wistar rats (200-300g)	0.01-1	po, 60	+		Miyata et al., 1993	Eur. J. Pharmacol. 250:303-310
YM992	5-HT reuptake inhibitor/5-HT_{2A} antagonist	Marble burying	ICR mice (28-40g)	15	ip, 20	+		Takeuchi et al., 2002	Jpn. J. Pharmacol. 90:197-200
Zacopride	5-HT_3 antagonist	Vogel conflict test	Wistar rats (300-350g)	35339	ip, 30	o	Modified Vogel test	Dunn et al., 1991	J. Neurochem. 57:1615-1622
Zacopride	5-HT_3 antagonist	Elevated plus-maze	Lister rats (250g)	0.01-1	ip, po, 60	o		File and Johnston, 1989	Psychopharmacology 99:248-251
Zacopride	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (150-200g)	2	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Zacopride	5-HT_3 antagonist	Elevated plus-maze	Lister rats	0.000001	amygdala	+	Observartions during 10 min	Tomkins et al., 1990	J. Psychopharmacol. 4: 262P
Zacopride	5-HT_3 antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.1-0.3	ip, 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622
Zacopride	5-HT_3 antagonist	Light/dark test	Wistar rats (150-200g)	2	30	o	Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.0001-10	ip, 45	+	Asymmetric compartments	Costall et al., 1988	J. Pharm. Pharmacol. 40:302-305
Zacopride	5-HT_3 antagonist	Light/dark test	Mice	0.0001-17.8	ip	+		Young and Johnson, 1988	Soc. Neurosci. Abstr. 14:207
Zacopride	5-HT_3 antagonist	Light/dark test	Mice	0.001-100	po	+		Young and Johnson, 1988	Soc. Neurosci. Abstr. 14:207
Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (20-30g)	0.001-0.05	ip, 45	+	Asymmetric compartments and rears	Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Zacopride	5-HT_3 antagonist	Light/dark test	Female ICR-DUB mice (17-35g)	0.0001-17.8	ip, 30	+	Asymmetric compartments	Young and Johnson, 1991	Eur. J. Pharmacol. 201:151-155

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Zacopride	5-HT_3 antagonist	Light/dark test	BKW mice (30-35g)	0.01-0.1	ip, 45	+	Asymmetric compartments	Barnes et al., 1992	Eur. J. Pharmacol. 218:91-100
Zacopride	5-HT_3 antagonist	Light/dark test	Female T/O mice (22-30g)	0.001-1	sc, 30	+	Asymmetric compartments	Bill et al., 1992	Eur. J. Pharmacol. 218:327-334
Zacopride	5-HT_3 antagonist	Light/dark test	Swiss mice (10-week-old)	0.001-0.01	po, 30	+		Griebel, 1993	In: Serotonergic System and Emotional Reactivity in Rats and in Mice: Pharmacological Approach, PhD Thesis
Zacopride	5-HT_3 antagonist	Light/dark test	Female Tuck T/O mice (22-30g)	0.001-1	sc, 30	+	Asymmetric compartments	Bill et al., 1995	Br. J. Pharmacol. 115:775-780
Zacopride	5-HT_3 antagonist	Light/dark test	Lundbeck mice strain (30-35g)	0.003-0.03 µmol/kg	sc, 30	+	Asymmetric compartments	Sánchez, 1995	Pharmacol. Toxicol. 77:71-78
Zacopride	5-HT_3 antagonist	Holeboard	Wistar rats (150-200g)	2	30	o		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Zacopride	5-HT_3 antagonist	Social interaction	Lister rats (250g)	0.01-1	ip, 60	o		File and Johnston, 1989	Psychopharmacology 99:248-251
Zacopride	5-HT_3 antagonist	Social interaction	Sprague-Dawley rats (225-275g)	0.001-10	ip, 45	+		Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Zacopride	5-HT_3 antagonist	Social interaction	Wistar rats (250-300g)	0.3-1	ip, 30	+		Dunn et al., 1991	J. Neurochem. 57:1615-1622
Zacopride	5-HT_3 antagonist	Free-exploration test	BALB/c mice (10-week-old)	0.0001-1	ip, 30	o		Griebel et al., 1993	Behav. Pharmacol. 4:637-644
Zacopride	5-HT_3 antagonist	Human threat	Marmoset Callithrix jacchus (350-400g)	0.0001-0.001	sc, 45	+		Costall et al., 1989	In: Behavioural Pharmacology of 5-HT, pp. 383-387
Zacopride	5-HT_3 antagonist	Ultrasonic distress vocalizations	Wistar rats (150-175g)	ED50=6.9	sc, 30	o	Four 1.0 mA inescapable footshocks	Sánchez, 1993	Behav. Pharmacol. 4:269-277
Zacopride	5-HT_3 antagonist	Elevated plus-maze	Wistar mice (25-30g)	5	ip, 30	o		Bhattacharya and Acharya, 1993	Indian J. Exp. Biol. 31:902-907

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Zacopride	5-HT_3 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	0.03	sc, 30	+		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Zalospirone	5-HT_{1A} agonist	Geller-Seifter conflict test	Wistar rats (250-300g)	1-2	ip, 30	+	Modified test and FR1/FR8	Hascoët et al., 1994	J. Psychopharmacol. 8:227-237
Zimelidine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (150-200g)	40	30	-		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Zimelidine	5-HT reuptake inhibitor	Elevated plus-maze	Lister hooded rats (180-280g)	3	ip, 30	-	10-min exposure	Handley et al., 1993	Behav. Brain Res. 58:203-210
Zimelidine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-250g)	20 nmol	hippocampus	o	2 h after forced restraint + dl-prpropanolol	Padovan and Guimarães, 1993	Braz. J. Med. Biol. Res. 26:1085-1089
Zimelidine	5-HT reuptake inhibitor	Elevated plus-maze	Rats	20-100 nmol	hippocampus	+	24 h after 2 h of forced restraint	Guimarães et al., 1993	Behav. Brain Res. 58:133-139
Zimelidine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (200-250g)	20 nmol	hippocampus	+	2 h after forced restraint	Padovan and Guimarães, 1993	Braz. J. Med. Biol. Res. 26:1085-1089
Zimelidine	5-HT reuptake inhibitor	Elevated plus-maze	Wistar rats (250-300g)	100 nmol	inferior colliculus, 20	+		Melo and Brandão, 1995	Pharmacol. Biochem. Behav. 51:317-321
Zimelidine	5-HT reuptake inhibitor	Elevated zero-maze	Lister hooded rats (250-320g)	6	sc, 30	-		Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
Zimelidine	5-HT reuptake inhibitor	Light/dark test	Wistar rats (150-200g)	40	30	-	Asymmetric compartments	Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Zimelidine	5-HT reuptake inhibitor	Holeboard	Wistar rats (150-200g)	40	30	-		Kshama et al., 1990	Behav. Neural. Biol. 54:234-253
Zimelidine	5-HT reuptake inhibitor	Marble burying	Female MF1 mice (23-35g)	1-30	ip, 30	+		Njung'e and Handley, 1991	Pharmacol. Biochem. Behav. 38:63-67
Zimelidine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	1-10	30	o	Warm condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Zimelidine	5-HT reuptake inhibitor	Ultrasonic distress vocalizations	Wistar rats (9-11-day-old)	3-10	30	+	Cold condition	Mos and Olivier, 1989	In: Behavioural Pharmacology of 5-HT, pp. 361-366
Zimelidine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (250-300g)	100 nmol	dorsal PAG, 10	+		Schütz et al., 1985	Psychopharmacology 85:340-345
Zimelidine	5-HT reuptake inhibitor	DPAG stimulation	Rats	100 nmol	dorsal PAG, 10	+		Graeff et al., 1986	Behav. Brain Res. 22:173-180
Zimelidine	5-HT reuptake inhibitor	DPAG stimulation	Wistar rats (200-250g)	100 nmol	dorsal PAG, 10 or 20	+		Audi et al., 1988	J. Psychopharmacol. 2:26-32
Zimelidine	5-HT reuptake inhibitor	IC-Stimulation	Rats	40 nmol	inferior colliculus	+		Brandão et al., 1993	Behav. Brain Res. 58:49-55
Zimelidine	5-HT reuptake inhibitor	IC-Stimulation	Wistar rats (250-300g)	40 nmol	inferior colliculus, 15	+		Melo and Brandão, 1995	Pharmacol. Biochem. Behav. 51:317-321
Zimelidine	5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (180-220 g)	3	sc, 30	-		Griebel et al., 1997	Pharmacol. Biochem. Behav. 57:817-827
Zimelidine	5-HT reuptake inhibitor	Distress vocalizations	Female and male Sprague-Dawley rat pups (9-11 day-old)	10-40	ip, 30	+		Kehne et al., 2000	Neuropharmacology 39:1357-67
Zingicomb	Non selective antagonist	Elevated plus-maze	Wistar rats (230-280g)	0.5	po, 60	+		Hasennöhrl et al., 1996	Pharmacol. Biochem. Behav. 53:271-275

CRF

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Antalarmin	CRF_1 antagonist	Intruder paradigm	Rhesus macaque monkeys (9-13 kg)	20	po, 115	+	The drug inhibited a repertoire of behaviors associated with anxiety	Habib et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:6079-84
Antalarmin	CRF_1 antagonist	Conditioned fear	Rats	20	ip	+	The drug blocked the induction, expression and enhancement of CFS	Deak et al., 1999	Soc. Neurosci. Abstr. 23:520
Antalarmin	CRF_1 antagonist	Staircase test	Wistar rats (190-230g)	1	ip, 30	+	Following cat exposure	Griebel et al., 2001	Psychopharmacology 158:241-251
Antalarmin	CRF_1 antagonist	Stress-induced gastric ulceration and intestinal responses	Sprague-Dawley rats (200-250g)	20	ip, twice, -2 and +2 hrs	+	Rats were subjected to 4 hrs of immobilization stress	Gabry et al., 2002	Mol. Psychiatry 7:474-483
Antalarmin	CRF_1 antagonist	Elevated plus-maze	Wistar rats (250-300g)	10-20	ip, 80	o		Zorrilla et al., 2002	Brain Res. 952:188-199
Antalarmin	CRF_1 antagonist	Defensive withdrawal	Wistar rats (250-300g)	20	ip, 80	+		Zorrilla et al., 2002	Brain Res. 952:188-199
Antalarmin	CRF_1 antagonist	Conflict test	Sprague-Dawley rats (180-330g)	10-30	ip, 30	+	The shock intensity was 0.6 mA/500 ms	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-330g)	10-30	po, 60	+		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Stress-induced hyperthermia	Sprague-Dawley rats (180-330g)	30	ip, 60	+		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Light/dark test	BALB/c mice (17-32g)	1-30	ip, 30	o		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Four-plate test	NMRI mice	30	ip, 30	+	The shock intensity was 1 mA/0.2 ms	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Elevated plus-maze	CD1 mice (17-32g)	30	ip, 15	+	Following social defeat	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Mouse defense test battery	OF1 mice (10-week-old)	1-30	po, 60	+	The drug reduced mainly defensive aggression	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Distress vocalizations	Guinea pig pups (9-day old)	3 and 30	ip, 30	+		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
Antalarmin	CRF_1 antagonist	Exploration behavior	Rhesus monkeys (4-6 kg)	20	po, for 28 days	+	The drug increased environmental	Ayala et al., 2004	J. Clin. Endocr. Metabol. 89:5729-5737

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							exploration rduced by stress		
Antalarmin	CRF_1 antagonist	Light/dark test	ICR mice	792 pmol/0,25 µl/side	central amygdala, 30	+	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Antalarmin	CRF_1 antagonist	Open-field	ICR mice	792 pmol/0,25 µl/side	central amygdala, 30	+	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Antalarmin	CRF_1 antagonist	Novel object test	ICR mice	264-792 pmol/0,25 µl/side	central amygdala, 30	o	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Antalarmin	CRF_1 antagonist	Social interaction	Long-Evans rats (300-380g)	20	ip, 30	+	The drug attenuated the increase in 'antisocial'/aggressive behavior induced by yohimbine	Ghitza et al., 2006	Neuropsychopharmacology 31:2188-2196
Antalarmin	CRF_1 antagonist	Free observation	Sprague-Dawley rats (250-300g)	20	ip, 30	o		Howard et al., 2008	Psychopharmacology 199:569-582
Antalarmin	CRF_1 antagonist	Elevated plus-maze	C57BL/6J (9-week-old)	10-20	ip, 60	o		Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Antalarmin	CRF_1 antagonist	Conditioned fear	C57BL/6J (9-week-old)	20	ip, 60	o	Freezing was measured post-shock (0,7 mA/2 s)	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Antalarmin	CRF_1 antagonist	Conditioned fear	C57BL/6J (9-week-old)	20	ip, 60	o	Shocks of 0,7 mA/2 s were delivered at Day 1	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Antalarmin	CRF1 antagonist	Elevated plus-maze	C57BL/6J mice (8-week-old)		ip, 15	o	Animals were exposed to immobilization stress prior to testing	Wang et al., 2011	Pharmacol. Biochem. Behav. 98:362-368
Antalarmin	CRF_1 antagonist	Light/dark transfer test	C57BL/6J mice	30	sc, 30	o		Paneda et al., 2009	J. Neurosci. 29:4155-4161
Antalarmin	CRF_1 antagonist	Distress vocalizations	Cockerel chicks (*Gallus gallus*, 1-day posthatch)	1-30	im, 15	-		Sufka et al., 2009	Behav. Pharmacol. 20:146-154.
Antalarmin	CRF_1 antagonist	Conditioned fear	Wistar rats (10-13-week-old)	250 ng/0.5 µl/side	median raphe nucleus, 10	o	Shocks of 0.5 mA/2 s were applied	Ohmura et al., 2010	Neuropsychopharmacology 35:1271-1278

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Antalarmin	CRF_1 antagonist	Elevated plus-maze	Wistar rats (10-13-week-old)	250 ng/0.5 µl/side	median raphe nucleus, 10	o	Shocks of 0.5 mA/2 s were applied	Ohmura et al., 2010	Neuropsychopharmacology 35:1271-1278
Antalarmin+CR2945	CRF1 antagonist +CCK2 antagonist	Elevated plus-maze	C57BL/6J mice (8-week-old)		ip, 15	(+)	(1) Synergistic effect, (2) Animals were exposed to immobilization stress prior to testing	Wang et al., 2011	Pharmacol. Biochem. Behav. 98:362-368
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	BALB/c mice (9-week-old)	100 pmol/0,25 µl/side	lateral septum, 40	o		Radulovic et al., 1999	J. Neurosci. 19:5016-5025
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	BALB/c mice (9-week-old)	100 pmol/0,25 µl/side	lateral septum, 0	+	Following restraint stress	Radulovic et al., 1999	J. Neurosci. 19:5016-5025
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	BALB/c mice (9-week-old)	100 pmol/0,25 µl/side	Dorsal hippocampus, 0	o	Following restraint stress	Radulovic et al., 1999	J. Neurosci. 19:5016-5025
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	C57BL/6J mice (9-week-old)	400 ng/mouse	icv, 30	-		Kishimoto et al., 2000	Nat. Genet. 24:415-19
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	Sprague-Dawley (300-350g)	1-10 µg/1 µl	icv, 20	+		Takahashi et al., 2001	Brain Res. 902:135-142
Antisauvagine-30	CRF_2 antagonist	Stress-induced freezing	Sprague-Dawley (300-350g)	2-10 µg/1 µl	icv, 20	+	Shock of 1 mA/1 s	Takahashi et al., 2001	Brain Res. 902:135-142
Antisauvagine-30	CRF_2 antagonist	Defensive withdrawal	Sprague-Dawley (300-350g)	5-10 µg/1 µl	icv, 20	+		Takahashi et al., 2001	Brain Res. 902:135-142
Antisauvagine-30	CRF_2 antagonist	Marble burying	BALB/c mice (18-20g)	3-10 nmol/5 µl	icv, 30	+		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Antisauvagine-30	CRF_2 antagonist	Open-field	BALB/c mice (18-20g)	3-10 nmol/5 µl	icv, 30	+		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	BALB/c mice (18-20g)	0.1, 1-10 nmol/5 µl	icv, 30	+		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Antisauvagine-30	CRF_2 antagonist	Stress-induced freezing	Sprague-Dawley rats (275-325g)	0.1-1 nmol/0.5 µl	dorsal raphe nucleus, 15	+	The drug was given 15 min before inescapable shock, and 24 h prior testing	Hammack et al., 2003	J. Neurosci. 23:1019-1025
Antisauvagine-30	CRF_2 antagonist	Conditioned fear	BALB/c mice (9-week-old)	400 ng/0.5 µl/mouse	hippocampus, 15	+	The drug was administered before training. It reduced freezing.	Sananbenesi et al., 2003	J. Neurosci. 23:11436-11443

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Antisauvagine-30	CRF_2 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	20 µg	icv, twice	o	(1) The drug was given during the initial 2 withdrawals; (2) Rats were exposed to 7% ethanol for a total of 15 days, in cycles of 5 days, with 2-day intervals	Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413
Antisauvagine-30	CRF_2 antagonist	Acoustic startle reflex	C57BL/6J mice (6-8-week-old)	1-10 nmol/5 µl	icv, 60	o		Risbrough et al., 2003	Psychopharmacology 170:178-187
Antisauvagine-30	CRF_2 antagonist	Acoustic startle reflex	C57BL/6 mice (6-8-week-old)	3 nmol/5 µl	icv, 60	o		Risbrough et al., 2004	J. Neurosci. 24:6545-6552
Antisauvagine-30	CRF_2 antagonist	Novelty-suppressed feeding	Sprague-Dawley rats (400-550g)	2-10 µg/3 µl	icv, 20	o		Merali et al., 2004	Eur. J. Neurosci. 20:229-239
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	Long-Evans rats (250-300g)	0.2-1 nmol/0.5 µl	bed nucleus of the stria terminalis, 5	o		Sahuque et al., 2006	Psychopharmacology 186:122-132
Antisauvagine-30	CRF_2 antagonist	Conditioned fear	Syrian hamsters (120-140g)	500 ng/200 nl	dorsal raphe nucleus, 10	+	The compound reduced the expression of conditioned defeat	Cooper and Huhman, 2007	Psychopharmacology 194:297-307
Antisauvagine-30	CRF_2 antagonist	Conditioned fear	Syrian hamsters (120-140g)	500 ng/200 nl	dorsal raphe nucleus, 10	o	The compound did not reduce the acquisition of conditioned defeat	Cooper and Huhman, 2007	Psychopharmacology 194:297-307
Antisauvagine-30	CRF_2 antagonist	Elevated plus-maze	Swiss mice (25-35g)	1 nmol/ 0.1 µl	dorsal PAG, 10	o		Miguel and Nunes-de-Souza, 2011	Horm. Behav. 60:292-300
Antisauvagine-30+CRF (0.04 nmol)	CRF_2 antagonist	Open-field	CD1 mice (19-22g)	1 nmol/2.5 µl	icv, 5	(o)	Antagonism of the effects of CRF	Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806
Antisauvagine-30+CRF (0.04 nmol)	CRF_2 antagonist	Free observation	CD1 mice (19-22g)	1 nmol/2.5 µl	icv, 5	(o)	Antagonism of the effects of CRF	Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806
Antisense ODN	Blockade of CRF_1 receptor translation	Defensive withdrawal	Wistar rats (300-350g)	48 µg/24 µl/day	icv, for 5 days	+	Experiments were performed in an open-field containing a darkened compartment	Heinrichs et al., 1997	Regul. Pept. 71:15-21

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Antisense ODN	Blockade of CRF_2 receptor translation	Defensive withdrawal	Wistar rats (300-350g)	48 µg/24 µl/day	icv, for 5 days	o	Experiments were performed in an open-field containing a darkened compartment	Heinrichs et al., 1997	Regul. Pept. 71:15-21
Antisense ODN	CRF_1 inhibition	Elevated plus-maze	Wistar rats (300-350g)	0.25 µg/0.5 µl/h	amygdala	+	Rats were subjected to social defeat before exposure to the plus-maze	Liebsch et al., 1995	Regul. Pept. 59:229-239
Antisense ODN	CRF gene inhibition	Open-field	Sprague-Dawley rats (200-250g)	1 nmol	hippocampus, 4 injections	+	The treatment increased exploration	Wu et al., 1997	Neuroscience 78:147-153
Antisense ODN	Blockade of CRF translation	Conditioned fear	Sprague-Dawley rats (350-500g)	5 µg/µl	icv, 3 times	+	Rats displayed accelerated acquisition of an operant avoidance task	Skutella et al., 1994	Neuroreport 5:2181-2185
Antisense ODN	Blockade of CRF_1 receptor translation	Elevated plus-maze	Wistar rats (300-350g)	48 µg/24 µl/day	icv, for 5 days	o	Following swim stress	Heinrichs et al., 1997	Regul. Pept. 71:15-21
Antisense ODN	Blockade of CRF_2 receptor translation	Elevated plus-maze	Wistar rats (300-350g)	48 µg/24 µl/day	icv, for 5 days	o	Following swim stress	Heinrichs et al., 1997	Regul. Pept. 71:15-21
Antisense ODN	Blockade of CRF_1 receptor translation	Elevated plus-maze	Wistar rats (270-300g)	5 µg/0.5 µl/h	minipumps, 6 days	+	Rats were subjected to social defeat before exposure to the plus-maze	Liebsch et al., 1999	J. Psychiatr. Res. 33:153-163
Antisense ODN	Blockade of CRF_2 receptor translation	Elevated plus-maze	Wistar rats (270-300g)	5 µg/0.5 µl/h	minipumps, 6 days	o	Rats were subjected to social defeat before exposure to the plus-maze	Liebsch et al., 1999	J. Psychiatr. Res. 33:153-163
Antisense ODN	Blockade of CRF_2 receptor translation	Stress-induced freezing	Sprague-Dawley (300-350g)	2.5 nmol/1 µl	icv, for 7 days (o.d.)	+	Shock of 0.8 mA/1 s	Ho et al., 2001	Mol. Brain Res. 89:29-40
Antisense ODN	Blockade of CRF_2 receptor translation	Elevated plus-maze	Wistar rats (5-week-old)	0.25 µg/0.5 µl/h	icv, for 3 days	-		Isogawa et al., 2003	J. Psychopharmacol. 17:409-413
Antisense ODN	Blockade of CRF_2 receptor translation	Light/dark test	Wistar rats (5-week-old)	0.25 µg/0.5 µl/h	icv, for 3 days	-		Isogawa et al., 2003	J. Psychopharmacol. 17:409-413
Antisense ODN	Blockade of	Conditioned	Wistar rats (5-	0.25 µg/0.5	icv, for 3 days	-	The treatment	Isogawa et al.,	J. Psychopharmacol.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	CRF_2 receptor translation	fear	week-old)	µl/h			increased freezing behavior	2003	17:409-413
Antisense ODN+CRF (0.5 µg)	Blockade of CRF_1 receptor translation	Open-field	Wistar rats (200-250g)	0.5 µl/h	minipumps, 3 days	(+)		Skutella et al., 1998	Neuroscience 85:795-805
Antisense ODN+CRF (100 pM)	Blockade of CRF_1 receptor translation	Elevated plus-maze	Wistar rats (200-250g)	0.5 µl/h	minipumps, 3 days	(+)		Skutella et al., 1998	Neuroscience 85:795-805
Antisense ODN+DPC 904 (10 mg/kg)	Blockade of CRF_2 receptor translation	Stress-induced freezing	Sprague-Dawley (300-350g)	2.5 nmol/1 µl	icv for 7 days (o.d.)	(+)	(1) Potention of the anxiolytic-like effects of ODN by the CRF_1 antagonist ; (2) Shock of 0.8 mA/1 s	Ho et al., 2001	Mol. Brain Res. 89:29-40
Astressin	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (250-280g)	3-10 µg/5 µl	icv, 10	+	Rats were put on a platform placed in the middle of a home cage filled with water	Martinez et al., 1997	J. Pharmacol. Exp. Ther. 280:754-760
Astressin	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (250-280g)	3-10 µg/5 µl	icv, 160	+	Gastric emptying was induced by laparotomy and cecal manipulation (1 min)	Martinez et al., 1997	J. Pharmacol. Exp. Ther. 280:754-760
Astressin	$CRF_{1/2}$ antagonist	Elevated plus-maze	BALB/c mice (9-week-old)	85 pmol/0,25 µl/side	lateral septum, 40	o		Radulovic et al., 1999	J. Neurosci. 19:5016-5025
Astressin	$CRF_{1/2}$ antagonist	Elevated plus-maze	BALB/c mice (9-week-old)	85 pmol/0,25 µl/side	lateral septum, 0	+	Following restraint stress	Radulovic et al., 1999	J. Neurosci. 19:5016-5025
Astressin	$CRF_{1/2}$ antagonist	Elevated plus-maze	BALB/c mice (9-week-old)	85 pmol/0,25 µl/side	Dorsal hippocampus, 0	o	Following restraint stress	Radulovic et al., 1999	J. Neurosci. 19:5016-5025
Astressin	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (230-270g)	1 µg/5 µl	icv, 5-7	+	Social stress was produced using a resident-intruder confrontation with a Long Evans rat	Spina et al., 2000	Neuropsychopharmacology 22:230-239
Astressin	$CRF_{1/2}$ antagonist	Social interaction	Wistar rats (300-325g)	5-120 pmol/100 nl	basolateral amygdala	o	Low light familiar condition	Sajdyk and Gehlert, 2000	Brain Res. 877:226-234
Astressin	$CRF_{1/2}$ antagonist	Social interaction	Wistar rats (300-325g)	60-120 pmol/100 nl	basolateral amygdala	o	(1) Antagonism of the effects of	Sajdyk and Gehlert, 2000	Brain Res. 877:226-234

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							urocortin priming; (2) Low light familiar condition		
Astressin	$CRF_{1/2}$ antagonist	Marble burying	BALB/c mice (18-20g)	3-10 nmol/5 µl	icv, 30	+		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Astressin	$CRF_{1/2}$ antagonist	Open-field	BALB/c mice (18-20g)	0.1-10 nmol/5 µl	icv, 30	o		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Astressin	$CRF_{1/2}$ antagonist	Elevated plus-maze	BALB/c mice (18-20g)	0.1-0.3 nmol/5 µl	icv, 30	+		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Astressin	$CRF_{1/2}$ antagonist	Light/dark test	ICR mice	24-192 pmol/0,25 µl/side	lateral septum, 30	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Astressin	$CRF_{1/2}$ antagonist	Open-field	ICR mice	24-192 pmol/0,25 µl/side	lateral septum, 40	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Astressin	$CRF_{1/2}$ antagonist	Novel object test	ICR mice	24-192 pmol/0,25 µl/side	lateral septum, 50	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Astressin	$CRF_{1/2}$ antagonist	Light/dark test	ICR mice	192 pmol/0,25 µl/side	lateral septum, 30	+	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Astressin	$CRF_{1/2}$ antagonist	Open-field	ICR mice	24-192 pmol/0,25 µl/side	lateral septum, 40	o	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Astressin	$CRF_{1/2}$ antagonist	Novel object test	ICR mice	24-192 pmol/0,25 µl/side	lateral septum, 50	o	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Astressin	$CRF_{1/2}$ antagonist	Social interaction	Wistar rats (275-300g)	120 fmol/100 nl	bed nucleus of the stria terminalis, 30	o		Lee et al., 2008	Neuropsychopharmacology 33:2586-2594
Astressin	$CRF_{1/2}$ antagonist	Conditioned fear	Wistar rats (10-13-week-old)	1000 ng/0.5 µl/side	dorsal raphe nucleus, 10	o	Shocks of 0.5 mA/2 s were applied	Ohmura et al., 2010	Neuropsychopharmacology 35:1271-1278
Astressin	$CRF_{1/2}$ antagonist	Conditioned fear	Wistar rats (10-13-week-old)	250-1000 ng/0.5 µl/side	medianl raphe nucleus, 10	+	Shocks of 0.5 mA/2 s were applied	Ohmura et al., 2010	Neuropsychopharmacology 35:1271-1278
Astressin	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (10-13-week-old)	250 ng/0.5 µl/side	median raphe nucleus, 10	o	Shocks of 0.5 mA/2 s were applied	Ohmura et al., 2010	Neuropsychopharmacology 35:1271-1278

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Astressin+sodium lactate (0.5-10 mg/kg)	$CRF_{1/2}$ antagonist	Social interaction	Wistar rats (300-325g)	60-120 pmol/100 nl	basolateral amygdala	-	(1) No blockade of the anxiogenic-like effects of priming; (2) Low light familiar condition	Sajdyk and Gehlert, 2000	Brain Res. 877:226-234
Astressin2B	CRF_2 antagonist	Free observation	Sprague-Dawley rats (290-320g)	500-1000 ng/0.5 µl/side	lateral septum, 0	o		Bakshi et al., 2007	J. Neurosci. 27:10568-10577
Compound 12-3	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-300g)	30	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3073-3083
Compound 12-3	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (180-300g)	3-30	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3073-3083
Compound 13-15	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (171-217g)	10-30	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3084-3092
Compound 13-15	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (171-217g)	10	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3084-3092
Compound 2	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-300g)	18	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3073-3083
Compound 2	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (180-300g)	10	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3073-3083
Compound 2	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-300g)	18	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3084-3092
Compound 2	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (180-300g)	10	po, 60	+		Gilligan et al., 2009	J. Med. Chem. 52:3084-3092
Compound 26h	CRF_1 antagonist	Light/dark test	Mice	2.5-10	po	+	The drug reversed anxiogenic-like effects of swim stress	Chen et al., 2004	J. Med. Chem. 47:4787-4798
Compound 26h	CRF_1 antagonist	Elevated plus-maze	Mice	2.5-10	po	+	The drug reversed anxiogenic-like effects of swim stress	Chen et al., 2004	J. Med. Chem. 47:4787-4798
Compound 4 fi	CRF_1 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-12-day-old)	3-10	ip, 30	+		Arban et al., 2007	ChemMedChem. 2:528-540
Compound 6t	CRF_1 antagonist	Light/dark test	BALB/c mice (18.9-25.6g)	30	po, 60	+		Takahashi et al., 2012	J. Med. Chem. 55:8450-8463
Compound 7a	CRF_1 antagonist	Canopy test	BALB/c mice	32-64	ip	+	The drug reduced stretched attend postures	Dubowchik et al., 2003	Bioorg. Med. Lett. 13:3997-4000
Compound **7b**	CRF_1 antagonist	Canopy test	BALB/c mice	32-64	ip	+		Han et al., 2005	Bioorg. Med. Lett. 15:3870-3873

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound **7k**	CRF_1 antagonist	Canopy test	BALB/c mice	32-64	ip	+		Han et al., 2005	Bioorg. Med. Lett. 15:3870-3873
Cortagine	CRF_1 agonist	Elevated plus-maze	C57BL/6J mice (9-week-old)	30-300 ng	icv, 30	-		Tezval et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:9468-9473
Cortagine	CRF_1 agonist	Elevated plus-maze	C57BL/6J mice (9-week-old)	100 ng	lateral septum, 30	o		Tezval et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:9468-9473
Cortagine	CRF_1 agonist	Rat exposure test	Swiss-Webster mice (12-15-week-old)	100 ng/0.2 µl	dorsal PAG, 8	+		Livin et al., 2007	Horm. Behav. 52:244-251
Cortagine	CRF_1 agonist	Mouse defense test battery	Swiss-Webster mice (12-15-week-old)	30-100 ng/0.2 µl	dorsal PAG, 8	o		Livin et al., 2007	Horm. Behav. 52:244-251
Cortagine	CRF_1 agonist	Elevated plus-maze	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	-		Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine	CRF_1 agonist	Open-field	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	-		Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	+	Freezing was measured post-shock (0,7 mA/2 s)	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	-	Shocks of 0,7 mA/2 s were delivered at Day 1	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine	CRF_1 agonist	Elevated plus-maze	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, 30	-		Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+antalarmin (10-20 mg/kg)	CRF_1 agonist	Elevated plus-maze	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, 30	(o)	Blockade of the anxiogenic-like effects of cortagine	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+antalarmin (10-20 mg/kg)	CRF_1 agonist	Elevated plus-maze	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	-	No blockade of the anxiogenic-like effects of cortagine	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+antalarmin (20 mg/kg)	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	+	(1) No interaction; (2) Freezing was measured post-shock (0,7 mA/2 s)	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+antalarmin (20 mg/kg)	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	-	(1) (1) No interaction; (2) Shocks of 0,7 mA/2 s were delivered at Day 1	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+CCK4 (10 ng/0,5	CRF_1 agonist	Elevated plus-	C57BL/6J (9-	10 ng/0,5 µl	icv, for 5 days,	-	Potentiation of the	Sherrin et al.,	Mol. Psychiatry 14:291-

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
µl)		maze	week-old)		o.d.		anxiogenic-like effects of cortagine	2009	307
Cortagine+CCK4 (10 ng/0,5 µl)	CRF_1 agonist	Open-field	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	-	No potentiation of the anxiogenic-like effects of cortagine	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+CCK4 (10 ng/0,5 µl)	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	+	(1) No interaction; (2) Freezing was measured post-shock (0,7 mA/2 s)	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+CCK4 (10 ng/0,5 µl)	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	-	(1) (1) No interaction; (2) Shocks of 0,7 mA/2 s were delivered at Day 1	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+LY225910 (250 ng/0,5 µl)	CRF_1 agonist	Elevated plus-maze	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	(o)	(1) Blockade of the anxiogenic-like effects of cortagine; (2) LY225910 is a CCK2 antagonist	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+LY225910 (250 ng/0,5 µl)	CRF_1 agonist	Open-field	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	(o)	(1) Blockade of the anxiogenic-like effects of cortagine; (2) LY225910 is a CCK2 antagonist	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+LY225910 (250 ng/0,5 µl)	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	(o)	(1) Blockade of the effects of cortagine; (2) LY225910 is a CCK2 antagonist; (3) Freezing was measured post-shock (0,7 mA/2 s)	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
Cortagine+LY225910 (250 ng/0,5 µl)	CRF_1 agonist	Conditioned fear	C57BL/6J (9-week-old)	10 ng/0,5 µl	icv, for 5 days, o.d.	(o)	(1) Blockade of the effects of cortagine; (2) LY225910 is a CCK2 antagonist; (3) Shocks of 0,7 mA/2 s were delivered at Day 1	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
CP-154,526	$CRF_{1/2}$ antagonist	Stress-induced freezing	Rats	20	ip	+	2 inescapable footshocks of 1.0	Spina et al., 1997	Soc. Neurosci. Abstr. 23:521

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							mA, 5 s each were delivered		
CP-154,526	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (200g)	1	ip, 30	+		Lundkvist et al., 1996	Eur. J. Pharmacol. 309:195-200
CP-154,526	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley (180-230g)	0.62-20	ip, 30	o		Griebel et al., 1998	Psychopharmacology 138:55-66
CP-154,526	CRF_1 antagonist	Free-exploration test	BALB/c mice (7 week-old)	5 and 20	ip, 30	+	Weak effects	Griebel et al., 1998	Psychopharmacology 138:55-66
CP-154,526	CRF_1 antagonist	Light/dark test	BALB/c mice (7 week-old)	10-40	ip, 30	+		Griebel et al., 1998	Psychopharmacology 138:55-66
CP-154,526	CRF_1 antagonist	Mouse defense test battery	Swiss mice (10 week-old)	5-20	ip, 30	+	Flight, risk assessment and defensive biting were significantly reduced	Griebel et al., 1998	Psychopharmacology 138:55-66
CP-154,526	CRF_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats	10-17.8	ip	+	Animals were exposed to 108 dB acoustic startle stimuli	Schulz et al., 1996	Proc. Natl. Acad. Sci. U. S. A. 93:10477-10482
CP-154,526	CRF_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats	17.8	po, 60	+	Animals were exposed to 108 dB acoustic startle stimuli	Chen et al., 1997	J. Med. Chem. 40:1749-1754
CP-154,526	CRF_1 antagonist	Conflict test	Wistar rats (400-500g)	2.5-10	ip, 30	o	Two VI schedules (VI30 s for food, VI10 s for shock) were used	Griebel et al., 1998	Psychopharmacology 138:55-66
CP-154,526	CRF_1 antagonist	Vogel conflict test	Sprague-Dawley (180-230g)	0.62-20	ip, 30	o		Griebel et al., 1998	Psychopharmacology 138:55-66
CP-154,526	CRF_1 antagonist	Light/dark test	Mice	10	po, 30	+	Swim stress was used	Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CP-154,526	CRF_1 antagonist	Light/dark test	Mice	10-30	po, 30	o		Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CP-154,526	CRF_1 antagonist	Distress vocalizations	Rat pups			+		Coverdale et al., 1998	Soc. Neurosci. Abstr. 24:202
CP-154,526	CRF_1 antagonist	Acoustic startle reflex	Sprague-Dawley rats			+		Cain et al., 1998	Soc. Neurosci. Abstr. 24:201
CP-154,526	CRF_1 antagonist	Ultrasonic distress vocalizations	Rats	ED_{50}>20	ip, 30	o		Brocco et al., 1998	Soc. Neurosci. Abstr. 24:1490
CP-154,526	CRF_1	Vogel conflict	Rats	ED_{50}=54	ip, 30	+	Shock of 0.3 mA/0.5	Brocco et al.,	Soc. Neurosci. Abstr.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	test					sec, every 20th lick	1998	24:1490
CP-154,526	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats	3.2	osmotic mini pumps for 8 days	+		Arborelius et al., 1998	Soc. Neurosci. Abstr. 24:1489
CP-154,526	CRF_1 antagonist	Stress-induced freezing	CRF-deficient mice (129SVJ/C57BL6 background)	3.2 µg/4 µl	icv, 18	+		Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
CP-154,526	CRF_1 antagonist	Stress-induced freezing	129SVJ/C57BL6 background mice	3.2 µg/4 µl	icv, 18	+		Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
CP-154,526	CRF_1 antagonist	Conditioned fear	Syrian adult hamster (120-130g)	15-30	ip, 60	o	CP-154,526 reduced plasma ACTH levels	Jasnow et al., 1999	Brain Res. 846:122-8
CP-154,526	CRF_1 antagonist	Light/dark test	Rats	30	po, 60	o		He et al., 2000	J. Biol. Chem. 43:449-56
CP-154,526	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (200-250g)	3.2-32	sc	o		Arborelius et al., 2000	J. Pharmacol. Exp. Ther. 294:588-97
CP-154,526	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (200-250g)	3.2	sc, for 9 to 10 days (o.d.)	+		Arborelius et al., 2000	J. Pharmacol. Exp. Ther. 294:588-97
CP-154,526	CRF_1 antagonist	Conditioned fear	Wistar rats (100-150g)	10-32	30	+	The drug was injected 24 hrs after shock session and 30 min before reexposure to the chamber	Hikichi et al., 2000	Pharmacopsychiatry 33:189-193
CP-154,526	CRF_1 antagonist	Conditioned fear	Wistar rats (100-150g)	10-32	24 hrs	+	The drug was injected 30 min before shock session, ie 24 hrs before reexposure to the chamber	Hikichi et al., 2000	Pharmacopsychiatry 33:189-193
CP-154,526	CRF_1 antagonist	Distress vocalizations	Female and male Sprague-Dawley rat pups (9-11 day-old)	10-40	ip, 30	+		Kehne et al., 2000	Neuropharmacology 39:1357-67
CP-154,526	CRF_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (9-10-week-old)	30	ip, 60	+	(1) Rats were tested after conditioning of 8 consecutive sessions; (2) Shock of 1.25 mA	Kikusui et al., 2000	Physiol. Behav. 71:323-328

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP-154,526	CRF_1 antagonist	Free-exploration test	BALB/c mice (8-week-old)	5-15	ip, 30	o		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
CP-154,526	CRF_1 antagonist	Vogel conflict test	Wistar rats (200-250g)	80	ip, 30	+	Shock of 0.3 mA/0.5 sec, every 20th lick	Millan et al., 2001	Neuropsychopharmacology 25:585-600
CP-154,526	CRF_1 antagonist	Social interaction	Wistar rats (200-250g)	2.5	ip, 30	+	Unfamiliar cage	Millan et al., 2001	Neuropsychopharmacology 25:585-600
CP-154,526	CRF_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	2.5-80	ip, 30	o		Millan et al., 2001	Neuropsychopharmacology 25:585-600
CP-154,526	CRF_1 antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.63-80	ip, 30	o		Millan et al., 2001	Neuropsychopharmacology 25:585-600
CP-154,526	CRF_1 antagonist	Stress-induced hyperthermia	ICR mice (7-week-old)	10-40	ip, 30	o		Liu et al., 2003	J. Psychiat. Res. 37:249-259
CP-154,526	CRF_1 antagonist	Canopy test	BALB/c mice	32	ip	+	The drug reduced stretched attend postures	Dubowchik et al., 2003	Bioorg. Med. Lett. 13:3997-4000
CP-154,526	CRF_1 antagonist	Elevated zero-maze	Wistar rats	2.5	ip, for 6 days	+		Mällo et al., 2004	Pharmacol. Biochem. Behav. 77:855-865
CP-154,526	CRF_1 antagonist	Exploration behavior	Wistar rats	2.5	ip, 30	o		Mällo et al., 2004	Pharmacol. Biochem. Behav. 77:855-865
CP-154,526	CRF_1 antagonist	Exploration behavior	Wistar rats	2.5	ip, for 5 or 12 days	+	Animals were tested repeatedly	Mällo et al., 2004	Pharmacol. Biochem. Behav. 77:855-865
CP-154,526	CRF_1 antagonist	Stress-induced colonic hypersensitivity	Wistar rats (240-260g)	32	sc, 24h	+	The drug was injected 45 min before water avoidance stress on day 1	Schwetz et al., 2004	Am. J. Physiol. Gastrointest. Liver Physiol. 286:G683-G691
CP-154,526	CRF_1 antagonist	Stress-induced colonic hypersensitivity	Wistar rats (240-260g)	32	sc, 60	+	The drug was injected 60 min before colorectal distension on day 2	Schwetz et al., 2004	Am. J. Physiol. Gastrointest. Liver Physiol. 286:G683-G691
CP-154,526	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	10	ip, twice	+	(1) The drug was given during the initial 2 withdrawals; (2) Rats were exposed to 7% ethanol for a total of 15 days, in cycles of 5 days, with 2-day intervals	Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP-154,526	CRF_1 antagonist	Novelty-suppressed feeding	Sprague-Dawley rats (400-550g)	10-40	ip, 20	o		Merali et al., 2004	Eur. J. Neurosci. 20:229-239
CP-154,526	CRF_1 antagonist	Social interaction	Alcohol-preferring inbred P rats (160-180g)	10	ip, 60	+	The drug reversed anxiety-like behavior induced by repeated ethanol withdrawals	Overstreet et al., 2005	Pharmacol. Biochem. Behav. 81:122-130
CP-154,526	CRF_1 antagonist	Social interaction	Alcohol-preferring inbred P rats (160-180g)	10	ip, 60	+	(1) The drug reversed anxiety-like behavior induced by repeated ethanol withdrawals; (2) Rats were subjected to restraint stress	Overstreet et al., 2005	Pharmacol. Biochem. Behav. 81:122-130
CP-154,526	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (180-200g)	10	ip, for the first 2 withdrawal periods	+	The drug attenuated the reduction in social interaction in rats subjected to ethanol withdrawal and restraint stress	Breese et al., 2005	Neuropsychopharmacology 30:1662-1669
CP-154,526	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (180-200g)	10	ip, 30 min prior the application of stress	+	The drug attenuated the reduction in social interaction in rats subjected to ethanol withdrawal and restraint stress	Breese et al., 2005	Neuropsychopharmacology 30:1662-1669
CP-154,526	CRF_1 antagonist	Ultrasonic distress vocalizations	Female and male Sprague-Dawley rat pups (9- to 11-day-old, 21-30g)	30	ip, 30	+		Iijima and Chaki, 2005	Pharmacol. Biochem. Behav. 82:652-657
CP-154,526	CRF_1 antagonist	Elevated plus-maze	Long-Evans rats (250-300g)	0.2-1 nmol/0.5 µl	bed nucleus of the stria terminalis, 5	o		Sahuque et al., 2006	Psychopharmacology 186:122-132
CP-154,526	CRF_1 antagonist	Distress vocalizations	Female and male Hartley Guinea pig pups (5-21-day-old)	10-30	ip, 30	+		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
CP-154,526	CRF_1 antagonist	Ultrasonic distress vocalizations	Female and male CD rat pups (7-10-day-old, 25-30g)	10-30	ip, 30	+		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP-154,526	CRF_1 antagonist	Elevated plus-maze	CD rats (180-280g)	3-30	ip, 30	o		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
CP-154,526	CRF_1 antagonist	Conflict test	CD rats (500-800g)	3-30	ip, 30	o	Shocks of 0,7 mA/0,5 s were delivered	Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
CP-154,526	CRF_1 antagonist	Marble burying	CD1 mice (25g)	3-30	ip, 30	o		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
CP-154,526	CRF_1 antagonist	Elevated plus-maze	Syrian hamsters (*M. auratus*, 3-6-month-old)	20	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
CP-154,526	CRF_1 antagonist	T-tube	Syrian hamsters (*M. auratus*, 3-6-month-old)	20	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
CP-154,526	CRF_1 antagonist	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	20	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
CP-154,526+CRF (1 µg)	CRF_1 antagonist	Elevated plus-maze	Rats	3-10	po, 30	(+)		Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CP-154,526+DSP-4 (50 mg/kg)	CRF_1 antagonist	Exploration behavior	Wistar rats	2.5	ip, for 5 days	(o)	(1) Effects disappeared in DSP-4 rats; (2) Animals were tested repeatedly	Mällo et al., 2004	Pharmacol. Biochem. Behav. 77:855-865
CP-154,526+fluoxetine (20 mg/kg)	CRF_1 antagonist	Free-exploration test	BALB/c mice (8-week-old)	5-10	ip, 30	-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
CRA0316	CRF_1 antagonist	Light/dark test	Mice	1	po	o		Oshida et al., 2002	Eur. Neuropsychopharmacology 12 (suppl. 3): S220
CRA0316	CRF_1 antagonist	Light/dark test	Mice	1	po	+	The drug reversed swim stress-induced increase in anxiety	Oshida et al., 2002	Eur. Neuropsychopharmacology 12 (suppl. 3): S220
CRA0316	CRF_1 antagonist	Elevated plus-maze	Rats	1	po	+	The drug reversed swim stress-induced increase in anxiety	Oshida et al., 2002	Eur. Neuropsychopharmacology 12 (suppl. 3): S220
CRA0316+CRF (1 µg/kg)	CRF_1 antagonist	Elevated plus-maze	Rats	0.1	po	(o)	The drug reversed the anxiogenic-like effects of CRF	Oshida et al., 2002	Eur. Neuropsychopharmacology 12 (suppl. 3): S220
CRA1000	CRF_1 antagonist	Light/dark test	Mice	3-10	po, 30	+	Swim stress was used	Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRA1000	CRF_1 antagonist	Light/dark test	Mice	3-10	po, 30	o		Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CRA1000	CRF_1 antagonist	Stress-suppressed feeding	Wistar rats (180g)	10	ip, 15	+	Rats were exposed to stressed (shocked) congeners	Hotta et al., 1999	Brain Res. 823: 221-225
CRA1000	CRF_1 antagonist	Elevated plus-maze	Wistar rats	1.25-10	ip, 30	o		Harro et al., 2001	Neuropeptides 35:100-109
CRA1000	CRF_1 antagonist	Social interaction	Wistar rats	1.25-10	ip, 30	o	Unfamiliar highly illuminated cage	Harro et al., 2001	Neuropeptides 35:100-109
CRA1000	CRF_1 antagonist	Exploration behavior	Wistar rats	1.25	ip, 30	+		Harro et al., 2001	Neuropeptides 35:100-109
CRA1000	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	3	ip, 30	+	The drug attenuated the reduction in social interaction in rats subjected to ethanol withdrawal and restraint stress	Breese et al., 2004	Neuropsychopharmacology 29:470-482
CRA1000	CRF_1 antagonist	Stress-suppressed feeding	Female Wistar rats in proestrus (8-week-old)		ip, 15	+	Rats were subjected to restraint stress	Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CRA1000	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	1	ip, 30	o		Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413
CRA1000	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	3	ip, 30	+	(1) The drug was given into the third withdrawal; (2) Rats were exposed to 7% ethanol for a total of 15 days, in cycles of 5 days, with 2-day intervals	Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413
CRA1000	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	3	ip, twice	+	(1) The drug was given during the initial 2 withdrawals; (2) Rats were exposed to 7% ethanol for a total of 15 days, in cycles of 5 days, with 2-day intervals	Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRA1000	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	3	ip, twice	o	(1) The drug was given at 4h into the first and second withdrawal; (2) Rats were exposed to 7% ethanol for a total of 15 days, in cycles of 5 days, with 2-day intervals	Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413
CRA1000	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	3	ip, 10 and 5 days	o		Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413
CRA1000	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (160-180g)	0.5-1	ip, 30	+	The drug reversed anxiogenic-like effects of ethanol withdrawal	Knapp et al., 2004	Alcohol 32:101-111
CRA1000+CRF (1 µg)	CRF_1 antagonist	Elevated plus-maze	Rats	1	po, 30	(+)		Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CRA1000+DSP-4 (50 mg/kg)	CRF_1 antagonist	Exploration behavior	Wistar rats	1.25	ip, 30	+	No antagonism of the effects of CRA1000	Harro et al., 2001	Neuropeptides 35:100-109
CRA1001	CRF_1 antagonist	Light/dark test	Mice	10	po, 30	+	Swim stress was used	Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CRA1001	CRF_1 antagonist	Light/dark test	Mice	3-10	po, 30	o		Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CRA1001+CRF (1 µg)	CRF_1 antagonist	Elevated plus-maze	Rats	3	po, 30	(+)		Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CRF	Endogenous peptide	Acoustic startle reflex	Rats	10-40 ng	caudal pontine reticular nucleus, 0	-	Rats received 120 startle stimuli of 105 dB	Birnbaum et al., 1995	Soc. Neurosci. Abstr. 21:1697
CRF	Endogenous peptide	Acoustic startle reflex	Rats	1 µg	icv	-		Swerdlow et al., 1985	Soc. Neurosci. Abstr. 11:620
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6434-6446
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	bed nucleus of the stria terminalis, 0	-	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6434-6446
CRF	Endogenous	Acoustic startle	Sprague-Dawley	0.25 µg/5	icv, 30	-	Rats were pretreated	Pelton et al.,	Brain Res. 778:381-387

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	peptide	reflex	rats (280-340g)	µl			with arginine vasopressin 48 hrs before (30 pg)	1997	
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (280-340g)	0.25 µg/5 µl	icv, 30	-	CRF was given after the delivery of a footshock (0.4 mA) 72 and 48 hrs earlier	Pelton et al., 1997	Brain Res. 778:381-387
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	7.5-120 ng/0.5 µl	icv, 0	o	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	ventral hippocampus, 0	o	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6434-6446
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (280-340g)	0.25 µg/5 µl	icv, 30	o		Pelton et al., 1997	Brain Res. 778:381-387
CRF	Endogenous peptide	Free observation	Rhesus monkeys	20-180 µg/200 µl	icv	-	Chair-restrained monkeys. The treatment increased behavioral arousal	Kalin, 1985	Fed. Proc. 44:249-253
CRF	Endogenous peptide	Colonic function	Female Sprague-Dawley rats (150-200g)	0.3-10 µg	icv	-	CRF inhibited intestinal transit and increased colonic transit	Williams et al., 1987	Am. J. Physiol. 253:G582-6
CRF	Endogenous peptide	Colonic function	Female Sprague-Dawley rats (150-200g)	0.3-10 µg	iv	-	CRF inhibited intestinal transit and increased colonic transit	Williams et al., 1987	Am. J. Physiol. 253:G582-6
CRF	Endogenous peptide	Colonic function	Mongrel dogs (15-18kg)	20-100 ng	icv, 0	-	CRF suppressed gastric cyclic migrating motor complex	Bueno and Fioramonti, 1986	Peptides 7:73-77
CRF	Endogenous peptide	Colonic function	Sprague-Dawley rats (290-370g)	0.2-0.6 nmol/100 nl	paraventricular nucleus, 60	-		Mönnikes et al., 1992	Am. J. Physiol. 262:G137-43
CRF	Endogenous peptide	Colonic function	Mongrel dogs (15-18kg)	100-500 ng	iv, 0	o		Bueno and Fioramonti, 1986	Peptides 7:73-77
CRF	Endogenous peptide	Colonic function	Sprague-Dawley rats (290-370g)	0.2-0.6 nmol/100 nl	lateral hypothalamus, 60	o		Mönnikes et al., 1992	Am. J. Physiol. 262:G137-43
CRF	Endogenous	Colonic	Sprague-Dawley	0.2-0.6	central	o		Mönnikes et	Am. J. Physiol. 262:G137-

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	peptide	function	rats (290-370g)	nmol/100 nl	amygdala, 60			al., 1992	43
CRF	Endogenous peptide	Colonic function	Sprague-Dawley rats (350-350g)	50 nl	locus coeruleus	-		Mönnikes et al., 1992	Gastroenterology 102:A488
CRF	Endogenous peptide	Colonic function	Sprague-Dawley rats (350-350g)	50 nl	locus coeruleus	-	Experiments were performed in fasted rats	Mönnikes et al., 1992	Gastroenterology 102:A488
CRF	Endogenous peptide	Conditioned fear	Roman high-avoidance rats (280-370g)	30 ng/1 µl	amygdala, 10	?	(1) Immobility was decreased; (2) Animals received an inescapable footshok (0.6 mA, 3s)	Wiersma et al., 1997	Behav. Genet. 27:547-555
CRF	Endogenous peptide	Conditioned fear	Roman low-avoidance rats (280-370g)	30 ng/1 µl	amygdala, 10	?	(1) Exploration was increased; (2) Animals received an inescapable footshok (0.6 mA, 3s)	Wiersma et al., 1997	Behav. Genet. 27:547-555
CRF	Endogenous peptide	Conditioned suppression of responding	Rats (160-180g)	0.5 µg/1 µl	icv, 30	-		Cole and Koob, 1988	J. Pharmacol. Exp. Ther. 247:902-910
CRF	Endogenous peptide	Conditioned suppression of responding	Wistar rats (200-250g)	0.5-1 µg/2 µl	icv, 60	-		Britton et al., 1988	Psychopharmacology 94:306-311
CRF	Endogenous peptide	Conflict test	Sprague-Dawley rats (276-300g)	0.1-1 µg/3 µl	icv, 5	-	Rats were trained under a FR20 schedule	de Boer et al., 1992	J. Pharmacol. Exp. Ther. 262:335-342
CRF	Endogenous peptide	Conflict test	White Carneau pigeons (1-year old)	30 µg/5 µl	icv, 60	-	A multiple FR schedule was used	Zhang and Barrett, 1990	Biol. Psychiatry 27:953-967
CRF	Endogenous peptide	Conflict test	White Carneau pigeons (1-year old)	10-30 µg/5 µl	icv, 60	-	A multiple FR schedule was used	Barrett et al., 1989	J. Pharmacol. Exp. Ther. 250:788-794
CRF	Endogenous peptide	Shock-probe burying test	Wistar rats	30 ng/1 µl	amygdala, 10	-		Wiersma et al., 1996	Stress 1:113-122
CRF	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (230-335g)	300 ng/5 µl	icv, 20	-	The drug increased pattern of defensive-withdrawal	Takahashi et al., 1989	Behav. Neurosci. 103:648-654
CRF	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50-100 ng	icv, 25	-	The drug increased pattern of defensive-withdrawal	Yang et al., 1990	J. Pharmacol. Exp. Ther. 255:1064-1070

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	-	The drug increased pattern of defensive-withdrawal	Yang and Dunn, 1990	Pharmacol. Biochem. Behav. 36:847-851
CRF	Endogenous peptide	Defensive withdrawal	Long-Evans rats (250-300 g)	0.1-1 µg/1.6 µl	locus coeruleus, 45	-	Experiments were performed in an open-field containing a darkened compartment	Butler et al., 1990	J. Neurosci. 10:176-183
CRF	Endogenous peptide	Defensive withdrawal	Long-Evans rats (250-300g)	1 µg/1.6 µl	cerebral aqueduct, 45	-	Experiments were performed in an open-field containing a darkened compartment	Butler et al., 1990	J. Neurosci. 10:176-183
CRF	Endogenous peptide	Defensive withdrawal	Rats	300 ng	icv, 20	-		Takahashi and Kalin, 1989	In: Ethoexperimental Approaches to the Study of Behavior, pp. 580-592
CRF	Endogenous peptide	Defensive withdrawal	Preweaning guinea pigs	14 µg	sc, 60	o	The latency to enter a dark chamber was measured	Becker and Hennessy, 1993	Pharmacol. Biochem. Behav. 44:925-930
CRF	Endogenous peptide	Defensive withdrawal	Rats	300 ng	ip, 20	o		Takahashi and Kalin, 1989	In: Ethoexperimental Approaches to the Study of Behavior, pp. 580-592
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (200-220g)	0.5 µg/2 µl	icv, 30	-		Baldwin et al., 1991	Psychopharmacology 103:227-232
CRF	Endogenous peptide	Elevated plus-maze	Rats	2 µg	icv	-		McKay and Adamec, 1993	Soc. Neurosci. Abstr. 19:373
CRF	Endogenous peptide	Elevated plus-maze	Rats	100 ng	icv	-		File et al., 1988	Stress Med. 4:221-230
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g)	1-2 µg	icv, 60	-		Adamec et al., 1991	J. Psychopharmacol. 5:175-186
CRF	Endogenous peptide	Elevated plus-maze	Wistar (200-220g)	0.5 µg/2 µl	icv, 30	-		Baldwin et al., 1991	Psychopharmacology 103:227-232
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	2 µg/3 µl	icv, 60	-		Adamec and McKay, 1993	J. Psychopharmacol. 7:346-354
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (220-250g)	0.1 nmol/5 µl	icv, 30	-		Moreau et al., 1997	Neuroreport 8:1697-1701
CRF	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (250-275g)	0.1-1 µg	icv, 30	-		Jones et al., 1997	Br. J. Pharmacol. 120 (Suppl.):363P
CRF	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats	0.5 µg/5 µl	icv, 20	-		Moy et al., 1997	Psychopharmacology 131:354-360

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (320-390g)	4.9 µg	icv, for 7 days	-		Buwalda et al., 1997	Psychoneuroendocrinology 22:297-309
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g)	2 µg/1 µl	dorsal PAG, 10	-		Martins et al., 1997	Neuroreport 8:3601-3604
CRF	Endogenous peptide	Elevated plus-maze	Rats	1-25 µg	icv, 15	-		Behan et al., 1995	Nature 378:284-287
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g)	0.5-2 µg	icv, 60	o	Rats were stressed with repeated handling	Adamec et al., 1991	J. Psychopharmacol. 5:175-186
CRF	Endogenous peptide	Exploration behavior	CD1 mice (25-35g)	75 ng/4 µl	icv, 10	-	Multicompartment chamber	Berridge and Dunn, 1986	Regul. Pept. 16:83-93
CRF	Endogenous peptide	Exploration behavior	Sprague-Dawley rats (250-300g)	25 ng	icv, 10	-	Multicompartment chamber	Spadaro et al., 1990	Pharmacol. Biochem. Behav. 36:305-309
CRF	Endogenous peptide	Exploration behavior	Sprague-Dawley rats (250-300g)	25 ng	lateral ventricle, 10	-	Multicompartment chamber. Cerebral aqueduct was blocked with cold cream	Spadaro et al., 1990	Pharmacol. Biochem. Behav. 36:305-309
CRF	Endogenous peptide	Exploration behavior	Sprague-Dawley rats (250-300g)	25 ng	fourth ventricle, 10	o	Multicompartment chamber. Cerebral aqueduct was blocked with cold cream	Spadaro et al., 1990	Pharmacol. Biochem. Behav. 36:305-309
CRF	Endogenous peptide	Exploration behavior	Sprague-Dawley rats (250-300g)	25 ng	lateral ventricle, 10	o	Multicompartment chamber. There was a block within the third ventricle	Spadaro et al., 1990	Pharmacol. Biochem. Behav. 36:305-309
CRF	Endogenous peptide	Stress-induced freezing	Rats	100-300 ng	icv, 24	-	Rats received footshocks of 0.79 mA, 1 s each, 20 s apart	Sherman et al., 1987	Soc. Neurosci. Abstr. 13:427
CRF	Endogenous peptide	Stress-induced freezing	Sprague-Dawley rats	1 µg	icv, 30	-		Abreu et al., 1990	Clin. Neuropharmacology 13 (Suppl. 2):245-246
CRF	Endogenous peptide	Stress-induced freezing	Sprague-Dawley rats	1 µg	icv, for 9 days (o.d.)	-		Abreu et al., 1990	Clin. Neuropharmacology 13 (Suppl. 2):245-246
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (150-200g)	10-20 µg/5 µl	icv, 0	-	CRF increased grooming behavior in the home cage	Morley and Levine, 1982	Life Sci. 31:1459-1464
CRF	Endogenous peptide	Free observation	CD1 mice (25-35g)	1 µg/2 µl	icv, 30	-	Motor movements appeared as bursts of	Dunn and Berridge,	Pharmacol. Biochem. Behav. 27:685-691

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							activity followed by periods of immobility	1987	
CRF	Endogenous peptide	Colonic function	Rats	21-210 pmol/rat	intracisternally, 5	-	Gastric emptying was inhibited	Hagiwara et al., 1986	Gastroenterology 90:1447
CRF	Endogenous peptide	Colonic function	Rats	61-600 pmol/rat	iv, 5	-	Gastric emptying was inhibited	Hagiwara et al., 1986	Gastroenterology 90:1447
CRF	Endogenous peptide	Colonic function	Rats	210 pmol/rat	lateral hypothalamus, 5	o		Hagiwara et al., 1986	Gastroenterology 90:1447
CRF	Endogenous peptide	Colonic function	Rats	210 pmol/rat	paraventricular nucleus, 5	o		Hagiwara et al., 1986	Gastroenterology 90:1447
CRF	Endogenous peptide	Colonic function	NMRI mice (20-30g)	5 µg	icv, 30	-	CRF produced gastrointestinal disturbances which were mimicked by acoustic and cold stress	Bueno and Gué, 1988	Brain Res. 441:1-4
CRF	Endogenous peptide	Colonic function	NMRI mice (20-30g)	5 µg	ip, 30	o		Bueno and Gué, 1988	Brain Res. 441:1-4
CRF	Endogenous peptide	Colonic function	Sprague-Dawley rats (250-300g)	0.1-1 nmol/10 µl	icv, 20	-	CRF decreased gastric emptying and small bowel transit, and increased large bowel transit	Lenz et al., 1988	Gastroenterology 94:598-602
CRF	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (250-300g)	1 µg/µl	icv, 60	-		Britton et al., 1985	Psychopharmacology 86:170-174
CRF	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-250g)	1 µg	icv, 60	-		Britton et al., 1986	Brain Res. 369:303-306
CRF	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-250g)	0.5 µg	icv, 15	-	A continuous reinforcement schedule was used	Britton et al., 1992	Pharmacol. Biochem. Behav. 41:399-403
CRF	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (250g)	0.5 µg/2 µl	icv, 30	-		Thatcher Britton and Koob, 1986	Regul. Pept. 16:315-320
CRF	Endogenous peptide	Geller-Seifter conflict test	Rats	0.01-1 µg	icv	-		Thatcher Britton et al., 1987	Soc. Neurosci. Abstr. 13:1122
CRF	Endogenous peptide	Free observation	Rats	0.5-1 µg	icv, 10-180	-	Grooming was increased	Britton et al., 1984	Soc. Neurosci. Abstr. 10:178

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Free observation	Lister hooded rats	50, 200-250 pmol/2 µl	icv, 15	-	Grooming was increased	Elkabir et al., 1990	Regul. Pept. 28:199-214
CRF	Endogenous peptide	Free observation	Lister hooded rats	50 pmol/0.5 µl	amygdala, 5	-	Grooming was increased	Elkabir et al., 1990	Regul. Pept. 28:199-214
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (275-300g)	250-500 ng/0.5 µl	nucleus accumbens shell, 0	-	Grooming was increased	Holahan et al., 1997	Psychopharmacology 130:189-196
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (225-300g)	0.3 µg/5 µl	icv, 20	-	Grooming was increased	Sherman and Kalin, 1986	Life Sci. 39:433-441
CRF	Endogenous peptide	Free observation	Wistar rats (140-180g)	0.3 µg/1 µl	icv, 15	-	Grooming was increased	Veldhuis and De Wied, 1984	Pharmacol. Biochem. Behav. 21:707-713
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (180-200g)	0.3-3 µg	icv, 0	-	Grooming was increased under novel conditions	Sherman and Kalin, 1987	Pharmacol. Biochem. Behav. 26:699-703
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats	1 µg	icv, 30	-	Grooming was increased	Abreu et al., 1990	Clin. Neuropharmacology 13 (Suppl. 2):245-246
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.8 µg/2 µl	icv, 15	-	Grooming was increased in the home cage	Lazosky and Britton, 1991	Psychopharmacology 104:132-136
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.5 µg/0.5 µl	paraventricular nucleus, 0	-	Grooming was increased	Krahn et al., 1988	Brain Res. 443:63-69
CRF	Endogenous peptide	Free observation	Rats	0.5-1 µg	iv	o		Britton et al., 1984	Soc. Neurosci. Abstr. 10:178
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (225-300g)	0.3-3 µg/0.3 ml	sc, 0	o		Sherman and Kalin, 1986	Life Sci. 39:433-441
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats	1 µg	icv, for 9 days (o.d.)	o		Abreu et al., 1990	Clin. Neuropharmacology 13 (Suppl. 2):245-246
CRF	Endogenous peptide	Holeboard	Wistar rats (200-250g)	0.5-2 µg	icv, 60	o	Rats were stressed with repeated handling and surgery	Adamec et al., 1991	J. Psychopharmacol. 5:175-186
CRF	Endogenous peptide	Holeboard	Wistar rats (200-250g)	0.5-2 µg	icv, 60	o		Adamec et al., 1991	J. Psychopharmacol. 5:175-186
CRF	Endogenous peptide	Isolation-induced behavioral changes	Preweaning guinea pigs	5 µg/5 µl	icv (freehand), 90	-	Vocalizing was decreased	Hennessy et al., 1992	Pharmacol. Biochem. Behav. 43:37-43
CRF	Endogenous peptide	Isolation-induced behavioral	Albino guinea pig pups	7-14 µg	sc, 60	-	Vocalization and locomotion was decreased, and	Hennessy et al., 1995	Behav. Neurosci. 109:1137-1145

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		changes					crouch, eye-close and pilo-erection was increased		
CRF	Endogenous peptide	Isolation-induced behavioral changes	Albino guinea pig pups	7-14 µg	sc, 60	-	Vocalization and locomotion was decreased	Hennessy et al., 1991	Physiol. Behav. 50:17-22
CRF	Endogenous peptide	Isolation-induced behavioral changes	Preweaning guinea pigs	14 µg	sc, 60	?	Vocalizing and locomotor activity was decreased	Becker and Hennessy, 1993	Pharmacol. Biochem. Behav. 44:925-930
CRF	Endogenous peptide	Isolation-induced behavioral changes	Preweaning guinea pigs	5 µg/5 µl	icv (cannula), 90	o		Hennessy et al., 1992	Pharmacol. Biochem. Behav. 43:37-43
CRF	Endogenous peptide	Light/dark test	C57BL mice		icv	-		Guanowsky and Seymour, 1993	Soc. Neurosci. Abstr. 19:2
CRF	Endogenous peptide	Light/dark test	C57BL mice	0.32-3.2 µg	icv	-		Guanowsky et al., 1997	Soc. Neurosci. Abstr. 23:522
CRF	Endogenous peptide	Locomotor activity in home cage	Wistar rats (300-420g)	1-10/2 µl	icv, 0	-	Locomotor activity was increased	Morimoto et al., 1993	J. Physiol. 460:221-229
CRF	Endogenous peptide	Locomotor activity in home cage	Rats	0.5 µg	icv, 0	-	Locomotor activity was increased	Britton et al., 1986	Life Sci. 38:211-216
CRF	Endogenous peptide	Locomotor activity in home cage	Rats	0.8 µg	iv, 0	o		Britton et al., 1986	Life Sci. 38:211-216
CRF	Endogenous peptide	Stress-induced colonic motor alterations	Sprague-Dawley rats (350-500g)	0.1-1 µg/5 µl	icv, 30	-	Rats received 6 series of electric footshocks (1.5 mA, 180 ms)	Gué et al., 1991	Gastroenterology 100:964-970
CRF	Endogenous peptide	Free observation	Rhesus monkeys (4-6 kg)	20-180 µg	icv, 0	-	The drug increased arousal and produced huddling	Kalin et al., 1983	Peptides 4:217-220
CRF	Endogenous peptide	Free observation	Rhesus monkeys	10-125 µg/200 µl	iv	-	The treatment produced a behavioral inhibition	Kalin, 1985	Fed. Proc. 44:249-253
CRF	Endogenous peptide	Exploration behavior	Mice	10-50 ng	icv	-	CRF produced a decrease in	Berridge and Dunn, 1987	Soc. Neurosci. Abstr. 13:427

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							investigatory behavior similar to that observed after restraint stress		
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (250-275g)	0.1-1 µg	icv, 10	-	Grooming was increased	Jones et al., 1997	Br. J. Pharmacol. 120 (Suppl.):363P
CRF	Endogenous peptide	Open-field	Wistar rats (200-230g)	0.15 nmol/2 µl	icv, 60	-		Sutton et al., 1982	Nature 297:331-333
CRF	Endogenous peptide	Open-field	Sprague-Dawley rats (300g)	150 pmol/2 µl	icv, 60	-		Britton et al., 1982	Life Sci. 31:363-367
CRF	Endogenous peptide	Open-field	Sprague-Dawley rats (180-230g)	0.01-1 µg/1 µl	amygdala, 0	-	Decrease in locomotor activity, rearing and hole poking	Liang and Lee, 1988	Psychopharmacology 96:232-236
CRF	Endogenous peptide	Open-field	BALB/c mice (20-25g)	0.01 µg/0.4 µl	dendate gyrus of hippocampus, 3 hrs	-	There was an increase in locomotor activity in the center of the open-field	Lee and Tsai, 1989	Behav. Neural Biol. 51:412-423
CRF	Endogenous peptide	Open-field	BALB/c mice (20-25g)	0.02 µg/0.5 µl	amygdala, 3 hrs	-	There was an increase in locomotor activity in the center of the open-field	Lee and Tsai, 1989	Behav. Neural Biol. 51:412-423
CRF	Endogenous peptide	Open-field	Sprague-Dawley rats (250g)	60 pmol/2 µl	icv, 30	-		Britton and Indyk, 1990	Psychopharmacology 101:366-370
CRF	Endogenous peptide	Open-field	Wistar rats (310-330g)	0.1-0.4 µg/5 µl	icv, 20	-		Kumar and Karanth, 1996	J. Neural Transm. 103:1117-1126
CRF	Endogenous peptide	Open-field	BALB/c mice (20-25g)	0.2 µg/2 µl	icv, 3 hrs	-	The drug increased center region activity	Lee et al., 1987	Psychopharmacology 93:320-323
CRF	Endogenous peptide	Open-field	Wistar rats (200-230g)	0.015-7.5 nmol/2 µl	sc, 60	o		Sutton et al., 1982	Nature 297:331-333
CRF	Endogenous peptide	Open-field	BALB/c mice (20-25g)	0.05 µg/0.7 µl	caudate nucleus, 3 hrs	o		Lee and Tsai, 1989	Behav. Neural Biol. 51:412-423
CRF	Endogenous peptide	Novelty-suppressed drinking	Rats	25-500 ng/cannula	parabrachial nucleus, 0	-	Drinking in the lit area was reduced	Aaron et al., 1991	Soc. Neurosci. Abstr. 17:1417
CRF	Endogenous peptide	Novelty-suppressed drinking	Sprague-Dawley rats	25-250/cannula	locus coeruleus, 0	-	Drinking in the lit area was reduced	Weiss et al., 1994	Brain Res. Bull. 35:561-572
CRF	Endogenous peptide	Novelty-suppressed	Rats	250 ng/cannula	dorsal tegmentum, 0	o		Aaron et al., 1991	Soc. Neurosci. Abstr. 17:1417

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		drinking							
CRF	Endogenous peptide	Conflict test	Rats	0.75 µg	icv	-		Britton et al., 1997	Soc. Neurosci. Abstr. 23:521
CRF	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats	1 µg	icv, 60-70	-	Animals were exposed to 120 dB acoustic startle stimuli	Schulz et al., 1996	Proc. Natl. Acad. Sci. U. S. A. 93:10477-10482
CRF	Endogenous peptide	Fear-potentiated startle reflex	Wistar rats (200-220g)	1 µg/rat	icv	-		Swerdlow et al., 1986	Psychopharmacology 88:147-152
CRF	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)	0.5-1 µg/5 µl	icv, 20-6 hrs	-		Liang et al., 1992	J. Neurosci. 12:2303-2312
CRF	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)	0.1-1 µg/5 µl	intracisternal, 0	-		Liang et al., 1992	J. Neurosci. 12:2313-2320
CRF	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)	1 µg/5 µl	intrathecal, 0	-	Small potentiation	Liang et al., 1992	J. Neurosci. 12:2313-2320
CRF	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)	0.01-0.3 µg/5 µl	amygdala, 0	o		Liang et al., 1992	J. Neurosci. 12:2313-2320
CRF	Endogenous peptide	Conflict test	Rats	0.1-5.6 µg	icv	-	A multiple FR schedule was used	Aulisi et al., 1989	Soc. Neurosci. Abstr. 15:1068
CRF	Endogenous peptide	Exploration behavior	Sprague-Dawley rats 5-6 days old)	0.01-0.1 µg/1 µl	icv, 0	?	Vocalizing was decreased	Insel and Harbaugh, 1989	Pharmacol. Biochem. Behav. 32:197-201
CRF	Endogenous peptide	Distress vocalizations	Sprague-Dawley rats 5-6 days old)	1-10 µg/100 µl	sc, 30	o		Insel and Harbaugh, 1989	Pharmacol. Biochem. Behav. 32:197-201
CRF	Endogenous peptide	Distress vocalizations	Chicks (4 days old)	1 µg	icv	-	Animals were exposed to a plain box	Panksepp et al., 1988	In: The Physiological Control of Mammalian Vocalization, pp. 263-299
CRF	Endogenous peptide	Distress vocalizations	Chicks (4 days old)	1 µg	icv	-	Animals were exposed to a mirrored box	Panksepp et al., 1988	In: The Physiological Control of Mammalian Vocalization, pp. 263-299
CRF	Endogenous peptide	Distress vocalizations	Chicks (4 days old)	0.2-5 µg	icv	-	Animals were exposed to a plain box	Panksepp et al., 1988	In: The Physiological Control of Mammalian Vocalization, pp. 263-299

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Distress vocalizations	Chicks (4 days old)	0.2-5 µg	icv	-	Animals were exposed to a mirrored box	Panksepp et al., 1988	In: The Physiological Control of Mammalian Vocalization, pp. 263-299
CRF	Endogenous peptide	Stress-induced freezing	Sprague-Dawley rats (180-200g)	300 ng	icv, 22-25	-	Rats received three 1-s footshocks (0.79 mA) at 20-s intervals	Sherman and Kalin, 1988	Pharmacol. Biochem. Behav. 30:801-807
CRF	Endogenous peptide	Social interaction	Hooded Lister rats (250g)	0.1-0.3 µg/4 µl	icv, 20	-	Light intensity was 30 lux	Dunn and File, 1987	Horm. Behav. 21:193-202
CRF	Endogenous peptide	Social interaction	Rats	100 ng	icv	-		File et al., 1988	Stress Med. 4:221-230
CRF	Endogenous peptide	Social interaction			icv	-		Rohrbach et al., 1996	Soc. Neurosci. Abstr. 22:1544
CRF	Endogenous peptide	Stress-induced increase in arousal	Squirrel monkeys (800-1200g)	0.1-10 µg/10 µl	icv, 5	-		Winslow et al., 1989	Pharmacol. Biochem. Behav. 32:919-926
CRF	Endogenous peptide	Stress-induced fighting	Wistar rats (180-200g)	0.01-0.1 µg/2 µl	icv, 30	-	Pair of rats were exposed to inescapable footshocks (0.3-0.5 mA)	Tazi et al., 1987	Regul. Pept. 18:37-42
CRF	Endogenous peptide	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-250g)	0.1-1 µg/5 µl	icv, 30	-	Rats were subjected to partial body restraint	Lenz et al., 1988	Gastroenterology 95:1510-1517
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-450g)	10-80 ng/0.5 µl	nucleus reticularis pontis caudalis, 10-60	-	Animals received 60 startle stimuli (105 dB) before and 120 startle stimuli after drug infusion	Birnbaum and Davis, 1998	Brain Res. 782:318-323
CRF	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	1 µg/2 2 µl	icv, 25	-		Ward et al., 1998	Pharmacol. Biochem. Behav. 60:209-215
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g)	100 pM	icv, 30	-		Skutella et al., 1998	Neuroscience 85:795-805
CRF	Endogenous peptide	Open-field	Wistar rats (200-250g)	0.5 µg	icv, 30	-		Skutella et al., 1998	Neuroscience 85:795-805
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Grooming was increased	Jones et al., 1998	Psychopharmacology 138:124-132
CRF	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 30	-		Jones et al., 1998	Psychopharmacology 138:124-132
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 30	-	Ten 50-ms bursts of white noise (100 dB)	Jones et al., 1998	Psychopharmacology 138:124-132

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							spaced 60 s apart		
CRF	Endogenous peptide	Elevated plus-maze	Rats	1 µg/rat	icv, 60	-		Okuyama et al., 1998	Soc. Neurosci. Abstr. 24:589
CRF	Endogenous peptide	Defensive withdrawal	Rats	0.25-0.5	icv	-		Smagin et al., 1998	Soc. Neurosci. Abstr. 24:1198
CRF	Endogenous peptide	Social interaction	Wistar rats (300-350g)	200 fmol/100 nl	basolateral amygdala, 30	-		Sajdyk et al., 1999	Behav. Brain Res. 100:207-215
CRF	Endogenous peptide	Social interaction	Wistar rats (300-350g)	100 fmol/100 nl	basolateral amygdala, for 3 days	-	Sensitization	Sajdyk et al., 1999	Behav. Brain Res. 100:207-215
CRF	Endogenous peptide	Social interaction	Sprague-Dawley rats (290-340g)	100 ng/5 µl	icv, 20	-		To et al., 1999	Neuroreport 10:553-555
CRF	Endogenous peptide	Elevated plus-maze	BALB/c mice (9-week-old)	500 ng/0,25 µl/side	lateral septum, 30	-		Radulovic et al., 1999	J. Neurosci. 19:5016-5025
CRF	Endogenous peptide	Exploration behavior	CRF-deficient mice (129SVJ/C57BL6 background)	20 ng/2 µl	icv	-		Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
CRF	Endogenous peptide	Exploration behavior	129SVJ/C57BL6 background mice	20 ng/2 µl	icv	-		Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
CRF	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (9-week-old)	200 ng/mouse	icv, 30	-		Kishimoto et al., 2000	Nat. Genet. 24:415-19
CRF	Endogenous peptide	Free observation	White breed prebubertal boars (25kg)	100 µg/400 µl	icv, 0	-	Porcine CRF was used	Parrott et al., 2000	Pharmacol. Biochem. Behav. 65:123-9
CRF	Endogenous peptide	Conflict test	Wistar rats (300-400g)	0.75-1 µg/2-5 µl	icv, 15	-	Random-interval 30 s was used	Britton et al., 2000	Peptides 21:37-44
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (300-400g)	0.75 µg/2-5 µl	icv, 15	-		Britton et al., 2000	Peptides 21:37-44
CRF	Endogenous peptide	Open-field	CD1 mice (19-22g)	0.0063-0.63 nmol/5 µl	icv, 5	-		Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806
CRF	Endogenous peptide	Free observation	CD1 mice (19-22g)	0.04 nmol/5 µl	icv, 5	-	CRF produced freezing	Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806
CRF	Endogenous peptide	Defensive withdrawal	Wistar rats (300-350g)	25 µg/5 µl	icv, 15	-		Heinrichs et al., 2001	Behav. Brain Res. 122:43-50
CRF	Endogenous peptide	Lithium-induced aversion	Wistar rats (300-350g)	25 µg/5 µl	icv, 15	-		Heinrichs et al., 2001	Behav. Brain Res. 122:43-50
CRF	Endogenous peptide	Elevated plus-maze	BALB/c mice (9-week-old)	21 pmol	icv	-	Ovine CRF was used	Brauns et al., 2001	Neuropharmacology 41:507-516

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Social interaction	WistarF/Han rats (350-390g)	200 ng/0.25 µl/side	lateral septum, 20	-	Familiar lit area	Kask et al., 2001	Neuroscience 104:799-806
CRF	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-325g)	1 µg/1 µl	caudal to dorsal raphe nucleus, 15	-	The drug was given 24 h prior testing	Hammack et al., 2002	J. Neurosci. 22:1020-1026
CRF	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-325g)	1 µg/1 µl	lateral to dorsal raphe nucleus, 15	o	The drug was given 24 h prior testing	Hammack et al., 2002	J. Neurosci. 22:1020-1026
CRF	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-325g)	20 µg/1 µl	icv, 15	-	The drug was given 24 h prior testing	Hammack et al., 2002	J. Neurosci. 22:1020-1026
CRF	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-325g)	0.8 µg/0.25 µl	rostrocaudal to dorsal raphe nucleus, 15	-	The drug was given 24 h prior testing	Hammack et al., 2002	J. Neurosci. 22:1020-1026
CRF	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-325g)	50 ng/1 µl	caudal to dorsal raphe nucleus, once/h for 3h	-	The drug was given 24 h prior testing	Hammack et al., 2002	J. Neurosci. 22:1020-1026
CRF	Endogenous peptide	Free observation	Rats	0.1-10 µg	icv	-	Animals were tested in an unfamiliar open-field apparatus	Verleye et al., 2001	Behav. Pharmacol. 12 (Suppl. 1):S106
CRF	Endogenous peptide	Acoustic startle reflex	Wistar-Kyoto rats (250-275g)	3 µg/6 µl	icv, 30	-	CRF increased grooming prior testing	Conti et al., 2002	Psychopharmacology 161:296-303
CRF	Endogenous peptide	Acoustic startle reflex	Brown Norway rats (250-275g)	1-3 µg/6 µl	icv, 30	o	CRF increased grooming prior testing	Conti et al., 2002	Psychopharmacology 161:296-303
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (200g)	1 µg/2 µl	icv, 5, 30 and 120	-		Spina et al., 2002	Psychopharmacology 160:113-121
CRF	Endogenous peptide	Defensive withdrawal	Wistar rats (200g)	1 µg/2 µl	icv, 5 and 30	-		Spina et al., 2002	Psychopharmacology 160:113-121
CRF	Endogenous peptide	Geller-seifter conflict test	Wistar rats (200g)	0.75-1 µg/2 µl	icv, 30	-		Spina et al., 2002	Psychopharmacology 160:113-121
CRF	Endogenous peptide	Food intake	Wistar rats (200-250g)	0.2 µl/rat	icv, 20	-		Ciccocioppo et al., 2002	Psychopharmacology 161:113-119
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g)	10 µg/5 µl	icv, 10	-		Valdez et al., 2002	Brain Res. 943:142-150
CRF	Endogenous peptide	Ultrasonic distress vocalizations	CFW mouse pups (7-day old)	0,3-1 µg/1 µl	icv, 30	+	Under 19° and 30 °C conditions	Dirks et al., 2003	Pharmacol. Biochem. Behav. 72:993-999

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Elevated plus-maze	Rats	1 µg/kg	icv	-		Oshida et al., 2002	Eur. Neuropsychopharmacology 12 (suppl. 3): S220
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	1 µg/5 µl	icv, 10	-		Zorrilla et al., 2002	Brain Res. 952:188-199
CRF	Endogenous peptide	Free observation	Lister hooded rats (300g)	250 pmol/µl	icv, 0	-	The drug produced freezing	Temel et al., 2003	Neurosci. Lett. 338:139-142
CRF	Endogenous peptide	Open-field	Sprague-Dawley rats (245-255g)	1-10 µg/0.5 µl	icv, 20	-		Campbell et al., 2004	Pharmacol. Biochem. Behav. 77:447-455
CRF	Endogenous peptide	Social interaction	Sprague-Dawley rats (245-255g)	1 µg/0.5 µl	icv, 30	-		Campbell et al., 2004	Pharmacol. Biochem. Behav. 77:447-455
CRF	Endogenous peptide	Elevated plus-maze	ddY mice (23-28g)	10-20 pmol/5 µl/mouse	icv, 20	-		Nishikawa et al., 2004	Biol. Pharm. Bull. 27:352-356
CRF	Endogenous peptide	Elevated plus-maze	ddY mice (23-28g)	5-20 pmol/5 µl/mouse	icv, 20	o	Mice were subjected to repeated cold stress prior to testing	Nishikawa et al., 2004	Biol. Pharm. Bull. 27:352-356
CRF	Endogenous peptide	Social interaction	Sprague-Dawley rats (160-180g)	1 µg	icv, 30	-		Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413
CRF	Endogenous peptide	Social interaction	Sprague-Dawley rats (160-180g)	1 µg	icv, 10 and 5 days	-	Rats were exposed for 5 days to a diet containing 7% ethanol	Overstreet et al., 2004	Pharmacol. Biochem. Behav. 77:405-413
CRF	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.3-1 µg/5 µl	icv, 10	-		Kagamiishi et al., 2003	Brain Res. 991:212-221
CRF	Endogenous peptide	Acoustic startle reflex	C57BL/6J mice (6-8-week-old)	0.2-0.6 nmol/5 µl	icv, 1 to 2 h	-		Risbrough et al., 2003	Psychopharmacology 170:178-187
CRF	Endogenous peptide	Acoustic startle reflex	129/SvEvTac mice (6-8-week-old)	0.2-0.6 nmol/5 µl	icv, 1 to 4 h	-		Risbrough et al., 2003	Psychopharmacology 170:178-187
CRF	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (9-week-old)	100-300 ng	icv, 30	-		Tezval et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:9468-9473
CRF	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (9-week-old)	100 ng	lateral septum, 30	-		Tezval et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:9468-9473
CRF	Endogenous peptide	Elevated plus-maze	C57BL/6 mice (8-week-old)	100 ng/4 µl	icv, 10	-		Venihaki et al., 2004	J. Neuroendocrinol. 16:411-422
CRF	Endogenous peptide	Open-field	C57BL/6 mice (8-week-old)	100 ng/4 µl	icv, 10	o		Venihaki et al., 2004	J. Neuroendocrinol. 16:411-422
CRF	Endogenous peptide	Dark-light emergence test	C57BL/6 mice (8-week-old)	100 ng/4 µl	icv, 10	o		Venihaki et al., 2004	J. Neuroendocrinol. 16:411-422

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Acoustic startle reflex	C57BL/6 mice (6-8-week-old)	0.06-0.6 nmol/5 µl	icv, 60	-		Risbrough et al., 2004	J. Neurosci. 24:6545-6552
CRF	Endogenous peptide	Acoustic startle reflex	Mixed C57BL/6J x 129SvEv mice (4-5-month-old)	0.2 nmol/5 µl	icv, 60	-		Risbrough et al., 2004	J. Neurosci. 24:6545-6552
CRF	Endogenous peptide	Acoustic startle reflex	Mixed C57BL/6J x 129SvEv CRF_1 KO mice (4-5-month-old)	0.2 nmol/5 µl	icv, 60	(o)	The anxiogenic-like effects of CRF were ost in KO animals	Risbrough et al., 2004	J. Neurosci. 24:6545-6552
CRF	Endogenous peptide	Food intake	Sprague-Dawley rats (400-550g)	0.4 µg/0.5 µl	amygdala, 20	o		Merali et al., 2004	Eur. J. Neurosci. 20:229-239
CRF	Endogenous peptide	Food intake	Sprague-Dawley rats (400-550g)	2 µg/3 µl	icv, 20	o		Merali et al., 2004	Eur. J. Neurosci. 20:229-239
CRF	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Females were ovariectomized and received estrogen	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Females were ovariectomized	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Females were ovariectomized and received estrogen plus progesterone	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	o	Females were ovariectomized and received progesterone	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Females were ovariectomized and received progesterone for 7 days	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Females were virgin	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Females were lactating	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF	Endogenous peptide	Elevated plus-maze	C57BL/6 mice (3-month-old)	30-300 ng/1 µl	icv, 30	-		Matys et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:16345-16350

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Elevated plus-maze	tPA-/- (C57BL/6 backcrossed) mice (3-month-old)	300 ng/1 µl	icv, 30	-	Mice displayed reduced sensitivity to the effects of CRF	Matys et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:16345-16350
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (300-400g)	0,21 nmol/5 µl	icv, 60	-		Suzuki et al., 2005	Brain Res. 1044:116-121
CRF	Endogenous peptide	Fear-potentiated startle reflex	DBA/1J mice (6-8-week-old)	0.03-1 µg/5 µl	icv, 60	o	The drug increased startle independently from the presence of the cue	Risbrough and Geyer, 2005	Biol. Psychiatry 57:33-43
CRF	Endogenous peptide	Fear-potentiated startle reflex	Female 129SvEv mice (6-8-week-old)	1 µg/5 µl	icv, 60	?	The drug decreased FPS and increased startle independently from the presence of the cue	Risbrough and Geyer, 2005	Biol. Psychiatry 57:33-43
CRF	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (250g)	200 ng/500 nl/side	shell of the nucleus accumbens, 0	-	CRF potentiated startle after a short isolation, but not under grouped conditions	Nair et al., 2005	J. Neurosci. 25:11479-11488
CRF	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (about 400g)	1 µg/2 µl	icv, 0	-		Meloni et al., 2006	J. Neurosci. 26:3855-3863
CRF	Endogenous peptide	Elevated plus-maze	Long-Evans rats (250-300g)	1 nmol/0.5 µl	bed nucleus of the stria terminalis, 5	-		Sahuque et al., 2006	Psychopharmacology 186:122-132
CRF	Endogenous peptide	Conditioned place aversion	Long-Evans rats (250-300g)	1 nmol/0.5 µl	bed nucleus of the stria terminalis, 5	-	The drug produced place aversion	Sahuque et al., 2006	Psychopharmacology 186:122-132
CRF	Endogenous peptide	Mouse defense test battery	CD1 mice (12-week-old, 35-45g)	0.1-0.2 nmol/1 µl	icv, 30	-	The peptide increased all defensive behaviors, such as flight, risk assessment, avoidance and freezing)	Yang et al., 2006	Behav. Brain Res. 171:1-8
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (275-300g)	5 µg/4 µl	icv, 0	-		Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213
CRF	Endogenous peptide	Light/dark test	Wistar rats (275-300g)	5 µg/4 µl	icv, 0	-		Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (275-300g)	0,5 µg/4 µl	icv, 0	-		Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF	Endogenous peptide	Light/dark test	Wistar rats (275-300g)	0,5 µg/4 µl	icv, 0	-		Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213
CRF	Endogenous peptide	Acoustic startle reflex	Brown Norway rats (11-12-week-old)	0,3 µg/6 µl	icv, 30	+		Conti et al., 2006	Pharmacol. Biochem. Behav. 83:261-272
CRF	Endogenous peptide	Acoustic startle reflex	Brown Norway rats (11-12-week-old)	0,3 µg/6 µl	icv, for 4 days	o	The last infusion was performed 24 hrs prior to testing	Conti et al., 2006	Pharmacol. Biochem. Behav. 83:261-272
CRF	Endogenous peptide	Acoustic startle reflex	Brown Norway rats (11-12-week-old)	0,3 µg/6 µl	icv, for 5 days	o		Conti et al., 2006	Pharmacol. Biochem. Behav. 83:261-272
CRF	Endogenous peptide	Mouse defense test battery	Swiss-Webster mice (4-5-week-old, 30-40g)	100 ng/0.2 µl	dorsal PAG, 15	-	Weak anxiogenic-like effects (only avoidance was increased)	Carvalho-Netto et al., 2007	Behav. Brain Res. 176:222-229
CRF	Endogenous peptide	Rat exposure test	Swiss-Webster mice (4-5-week-old, 30-40g)	30-100 ng/0.2 µl	dorsal PAG, 15	-		Carvalho-Netto et al., 2007	Behav. Brain Res. 176:222-229
CRF	Endogenous peptide	Social interaction	Swiss mice (24-28g)	0.1-0.3 nmol/2 µl	icv, 20	-		Umathe et al., 2008	Neuropeptides 42:399-410
CRF	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.3 µg/3 µl	icv, 0	-	CRF induced burying, grooming and headshakes	Howard et al., 2008	Psychopharmacology 199:569-582
CRF	Endogenous peptide	Stress-induced freezing	Sprague-Dawley rats (10-12-week-old)	30-100 ng/5 µl	icv, 30	o	Shocks of 0.5 mA/1 s were applied	Swiergiel et al., 2007	Behav. Brain Res. 183:178-187
CRF	Endogenous peptide	Stress-induced freezing	Sprague-Dawley rats (10-12-week-old)	100 ng/5 µl	icv, 30	-	(1) Animals were chronically shocked; (2) Shocks of 0.5 mA/1 s were applied	Swiergiel et al., 2007	Behav. Brain Res. 183:178-187
CRF	Endogenous peptide	Stress-induced freezing	Sprague-Dawley rats (10-12-week-old)	100 ng/5 µl	icv, 30	-	(1) Animals were chronically shocked; (2) Shocks of 0.5 mA/1 s were applied 24h prior to testing	Swiergiel et al., 2007	Behav. Brain Res. 183:178-187
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (230-250g)	0.25-1 µg/2 µl	dorsomedial PAG, 15	-		Borelli and Brandão, 2008	Horm. Behav. 53:40-50
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (230-250g)	0.25-1 µg/2 µl	dorsolateral PAG, 15	o		Borelli and Brandão,	Horm. Behav. 53:40-50

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								2008	
CRF	Endogenous peptide	Elevated plus-maze	Wistar rats (230-250g)	0.25-1 µg/2 µl	lateral PAG, 15	o		Borelli and Brandão, 2008	Horm. Behav. 53:40-50
CRF	Endogenous peptide	Open-field	CD1 mice (4-7-week-old)	100 ng/2 µl	icv, 30	-		Swiergiel et al., 2008	Behav. Brain Res. 186:32-40
CRF	Endogenous peptide	Shock-probe burying test	Wistar rats (adult)	30 pmol/0.25 µl	central amygdala, 1	+	Shocks of 1.5 mA/<1 s were delivered	George et al., 2007	Proc. Natl. Acad. Sci. U.S.A. 104:17198-17203
CRF	Endogenous peptide	Conditioned fear	Wistar rats (200-240g)	1 µg/5 µl	icv, 15	-	Shocks of 0.8 mA/1 s were applied	Skórzewska et al., 2009	Neuropharmacology 57:148-156
CRF	Endogenous peptide	Open-field	CD1 mice (50-60-day-old)	1.5 µg/1 µl	medial prefrontal cortex, 5	o		Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
CRF	Endogenous peptide	Elevated plus-maze	CD1 mice (50-60-day-old)	1.5 µg/1 µl	medial prefrontal cortex, 5	o		Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
CRF	Endogenous peptide	Social interaction	Alcohol-preferring inbred P rats (210g)	0.5 µg/5 µl	amygdala, 15	-		Knapp et al., 2011	Psychopharmacology 218:179-189
CRF	Endogenous peptide	Social interaction	Alcohol-preferring inbred P rats (210g)	0.5 µg/5 µl	dorsal raphe nucleus, 15	-		Knapp et al., 2011	Psychopharmacology 218:179-189
CRF	Endogenous peptide	Social interaction	Alcohol-preferring inbred P rats (210g)	0.5 µg/5 µl	nucleus accumbens, 15	o		Knapp et al., 2011	Psychopharmacology 218:179-189
CRF	Endogenous peptide	Social interaction	Alcohol-preferring inbred P rats (210g)	0.5 µg/5 µl	paraventricular nucleus, 15	o		Knapp et al., 2011	Psychopharmacology 218:179-189
CRF	Endogenous peptide	Elevated plus-maze	Swiss mice (25-35g)	75-150 pmol/ 0.1 µl	dorsal PAG, 10	-		Miguel and Nunes-de-Souza, 2011	Horm. Behav. 60:292-300
CRF	Endogenous peptide	Acoustic startle reflex	Brown Norway rats (10-week-old)	0.3 µg/6 µl	icv, 30	o		Conti, 2012	Neuropharmacology 62:256-263
CRF	Endogenous peptide	Acoustic startle reflex	Wistar-Kyoto rats (10-week-old)	0.3 µg/6 µl	icv, 30	o		Conti, 2012	Neuropharmacology 62:256-263
CRF antibodies		Elevated plus-maze	Rats		paraventricular nucleus	+	Elevated plus-maze after social defeat stress	Menzaghi et al., 1992	Soc. Neurosci. Abstr. 18:535

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF antisense	Endogenous peptide	Conditioned fear	Long-Evans rats (275-325g)	2.5 nmol/1 µl	central amygdala	+	(1) Shocks of 1 mA/1 s were delivered; (2) The drug was infused before fear conditioning	Pitts et al., 2009	J. Neurosci. 29:7379-7388
CRF antisense	Endogenous peptide	Conditioned fear	Long-Evans rats (275-325g)	2.5 nmol/1 µl	central amygdala	+	(1) Shocks of 1 mA/1 s were delivered; (2) The drug was infused before fear conditioning and animals tested in a retention test 48 h later	Pitts et al., 2009	J. Neurosci. 29:7379-7388
CRF antisense	Endogenous peptide	Conditioned fear	Long-Evans rats (275-325g)	2.5 nmol/1 µl	central amygdala	o	(1) Shocks of 1 mA/1 s were delivered; (2) The drug was infused before retention test 48 h after fear conditioning	Pitts et al., 2009	J. Neurosci. 29:7379-7388
CRF antiserum	Decrease CRF level	Elevated plus-maze	Wistar rats (180-220g)		icv, for 14 days	o		Sarnyai et al., 1995	Brain Res. 675:89-97
CRF antiserum	Decrease CRF level	Elevated plus-maze	Wistar rats (200-250g)		icv, 24 hrs	o		Biro et al., 1993	Neuroendocrinology 57:340-345
CRF antiserum+CCK-8 (1 µg)	Decrease CRF level	Elevated plus-maze	Wistar rats (200-250g)		icv, 24 hrs	(+)		Biro et al., 1993	Neuroendocrinology 57:340-345
CRF antiserum+Cocaine withdrawal	Decrease CRF level	Elevated plus-maze	Wistar rats (180-220g)		icv, for 14 days	(+)	Antagonism of the anxiogenic effects of cocaine withdrawal	Sarnyai et al., 1995	Brain Res. 675:89-97
CRF+5,7-DHT (150 µg/10 µl)	Endogenous peptide	Free observation	Lister hooded rats (300g)	250 pmol/µl	icv, 0	-	5,7-DHT did not modify freezing produced by CRF	Temel et al., 2003	Neurosci. Lett. 338:139-142
CRF+8-OH-DPAT (0.5 mg/kg)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 10	(o)	The 5-HT_{1A} antagonist blocked the anxiogenic-like effects of CRF	Kagamiishi et al., 2003	Brain Res. 991:212-221
CRF+8-OH-DPAT (1 mg/kg)	Endogenous peptide	Acoustic startle reflex	Brown Norway rats (10-week-old)	0.3 µg/6 µl	icv, 30	(-)		Conti, 2012	Neuropharmacology 62:256-263
CRF+8-OH-DPAT (1 mg/kg)	Endogenous peptide	Acoustic startle reflex	Wistar-Kyoto rats (10-week-old)	0.3 µg/6 µl	icv, 30	(-)		Conti, 2012	Neuropharmacology 62:256-263
CRF+8-OH-DPAT (5-HT_{1A}	Endogenous	Free	Sprague-Dawley	0.8 µg/2 µl	icv, 15	(+)		Lazosky and	Psychopharmacology

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
agonist, 0.25-0.5 mg/kg)	peptide	observation	rats (250-300g)					Britton, 1991	104:132-136
CRF+Adrenalectomy	Endogenous peptide	Colonic function	Rats	210 pmol/rat	intracisternally, 5	-	No antagonism of the effects of CRF on gastric emptying	Hagiwara et al., 1986	Gastroenterology 90:1447
CRF+Adrenalectomy	Endogenous peptide	Colonic function	Sprague-Dawley rats (250-300g)	1 nmol/10 µl	icv, 20	-	No antagonism of the effects of CRF on gastrointestinal transit	Lenz et al., 1988	Gastroenterology 94:598-602
CRF+Alcohol (0.75 mg/kg)	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (250g)	0.5 µg/2 µl	icv, 30	(+)		Thatcher Britton and Koob, 1986	Regul. Pept. 16:315-320
CRF+Amygdala chemical lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	(1) No antagonism of the behavioral effects of CRF; (2) Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6434-6446
CRF+Amygdala lesion	Endogenous peptide	Acoustic startle reflex	Rats		icv	-	Lesion did not block the anxiogenic-like effects of CRF	Lee and Davis, 1995	Soc. Neurosci. Abstr. 21:1697
CRF+Amygdala lesion	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)	1 µg/5 µl	icv, 0	(+)		Liang et al., 1992	J. Neurosci. 12:2313-2320
CRF+Amygdala lesion	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)	1 µg/5 µl	intrathecal, 0	-	No antagonism	Liang et al., 1992	J. Neurosci. 12:2313-2320
CRF+antalarmin (10-20 mg/kg)	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	1 µg/5 µl	icv, 10	(o)	Blockade of the anxiogenic-like effects of CRF	Zorrilla et al., 2002	Brain Res. 952:188-199
CRF+antalarmin (20 mg/kg)	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.3 µg/3 µl	icv, 0	(o)	Antagonism of the anxiogenic-like effects of CRF	Howard et al., 2008	Psychopharmacology 199:569-582
CRF+Anterior commissure electrolytic lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	(1) No antagonism of the behavioral effects of CRF; (2) Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF+antisauvagin-30 (100 pmol)	Endogenous peptide	Elevated plus-maze	BALB/c mice (9-week-old)	500 ng/0,25 µl/side	lateral septum, 30	(o)	Antagonism of the effects of CRF	Radulovic et al., 1999	J. Neurosci. 19:5016-5025
CRF+antisauvagine-30 (0.2 nmol/0.5 µl)	Endogenous peptide	Conditioned place aversion	Long-Evans rats (250-300g)	1 nmol/0.5 µl	bed nucleus of the stria	(o)	Antagonism of the effects of CRF	Sahuque et al., 2006	Psychopharmacology 186:122-132

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					terminalis, 5				
CRF+antisauvagine-30 (0.3 nmol)	Endogenous peptide	Acoustic startle reflex	C57BL/6J mice (6-8-week-old)	0.06-0.6 nmol/5 µl	icv, 60	(o)	Blockade of the anxiogenic-like effects of CRF	Risbrough et al., 2003	Psychopharmacology 170:178-187
CRF+antisauvagine-30 (1 nmol/0.1 µl)	Endogenous peptide	Elevated plus-maze	Swiss mice (25-35g)	150 pmol/ 0.1 µl	dorsal PAG, 10	-	No interaction	Miguel and Nunes-de-Souza, 2011	Horm. Behav. 60:292-300
CRF+antisauvagine-30 (1 nmol/0.5 µl)	Endogenous peptide	Elevated plus-maze	Long-Evans rats (250-300g)	1 nmol/0.5 µl	bed nucleus of the stria terminalis, 5	-	No interaction	Sahuque et al., 2006	Psychopharmacology 186:122-132
CRF+antisauvagine-30 (1-10 nmol)	Endogenous peptide	Acoustic startle reflex	C57BL/6J mice (6-8-week-old)	0.2 nmol/5 µl	icv, 60	(o)	Blockade of the anxiogenic-like effects of CRF	Risbrough et al., 2003	Psychopharmacology 170:178-187
CRF+antisauvagine-30 (3 nmol/5 µl)	Endogenous peptide	Acoustic startle reflex	C57BL/6 mice (6-8-week-old)	0.06-0.6 nmol/5 µl	icv, 60	(o)	Blockade of the anxiogenic-like effects of CRF	Risbrough et al., 2004	J. Neurosci. 24:6545-6552
CRF+Antisauvagine-30 (400 ng)	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (9-week-old)	100 ng	lateral septum, 30	(o)	Antagonism of the anxiogenic-like effects of CRF	Tezval et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:9468-9473
CRF+astressin (5 µg/5 µl)	Endogenous peptide	Elevated plus-maze	Wistar rats (230-270g)	0.5 µg/2 µl	icv, 5-7	(+)	Antagonism of the anxiogenic-like effects of CRF	Spina et al., 2000	Neuropsychopharmacology 22:230-239
CRF+astressin (84 pmol icv)	Endogenous peptide	Elevated plus-maze	BALB/c mice (9-week-old)	21 pmol	icv	-	(1) no antagonism of the anxiogenic-like effects of CRF; (2) Ovice CRF was used	Brauns et al., 2001	Neuropharmacology 41:507-516
CRF+astressin (85 pmol)	Endogenous peptide	Elevated plus-maze	BALB/c mice (9-week-old)	500 ng/0,25 µl/side	lateral septum, 30	(o)	Antagonism of the effects of CRF	Radulovic et al., 1999	J. Neurosci. 19:5016-5025
CRF+Atenolol (100 µg, b1 antagonist)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	(+)		Yang and Dunn, 1990	Pharmacol. Biochem. Behav. 36:847-851
CRF+Atropine (1 mg/kg)	Endogenous peptide	Colonic function	Sprague-Dawley rats (290-370g)	0.6 nmol/100 nl	paraventricular nucleus, 60	(+)	Antagonism of the effects of CRF on colonic motor response	Mönnikes et al., 1992	Am. J. Physiol. 262:G137-43
CRF+Bed nucleus of the stria terminalis chemical lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	(+)	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6434-6446
CRF+Bed nucleus of the stria terminalis lesion	Endogenous peptide	Acoustic startle reflex	Rats		icv	(+)	Lesion blocked the anxiogenic-like effects of CRF	Lee and Davis, 1995	Soc. Neurosci. Abstr. 21:1697

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF+Buspirone (5-HT_{1A} agonist, 2-4 mg/kg)	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.8 µg/2 µl	icv, 15	(+)		Lazosky and Britton, 1991	Psychopharmacology 104:132-136
CRF+CGP 12177 (1 mg/kg, peripheral b antagonist)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	-	No antagonism of the anxiogenic effects of CRF	Yang and Dunn, 1990	Pharmacol. Biochem. Behav. 36:847-851
CRF+CGP 20712A (10 µg, b1 antagonist)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	(+)		Yang and Dunn, 1990	Pharmacol. Biochem. Behav. 36:847-851
CRF+Chlordiazepoxide	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (250-300g)	0.5 µg/2 µl	icv, 60	(+)		Britton et al., 1985	Psychopharmacology 86:170-174
CRF+Chlordiazepoxide	Endogenous peptide	Fear-potentiated startle reflex	Wistar rats (200-220g)	1 µg/rat	icv	(+)		Swerdlow et al., 1986	Psychopharmacology 88:147-152
CRF+Chlordiazepoxide	Endogenous peptide	Social interaction	Hooded Lister rats (250g)	0.1 µg/4 µl	icv, 20	(+)	Light intensity was 30 lux	Dunn and File, 1987	Horm. Behav. 21:193-202
CRF+Chlordiazepoxide	Endogenous peptide	Social interaction			icv	(+)		Rohrbach et al., 1996	Soc. Neurosci. Abstr. 22:1544
CRF+Chlordiazepoxide (10 µg)	Endogenous peptide	Conflict test	Sprague-Dawley rats (276-300g)	1 µg/3 µl	icv, 5	(+)	Rats were trained under a FR20 schedule	de Boer et al., 1992	J. Pharmacol. Exp. Ther. 262:335-342
CRF+Chlordiazepoxide (2.5 mg/kg)	Endogenous peptide	Acoustic startle reflex	Rats	1 µg	icv	(+)		Swerdlow et al., 1985	Soc. Neurosci. Abstr. 11:620
CRF+Chlordiazepoxide (3-10 mg/kg)	Endogenous peptide	Conflict test	White Carneau pigeons (1-year old)	30 µg/5 µl	icv, 60	(+)	A multiple FR schedule was used	Zhang and Barrett, 1990	Biol. Psychiatry 27:953-967
CRF+Chlordiazepoxide (5 mg/kg)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	(+)		Yang et al., 1990	J. Pharmacol. Exp. Ther. 255:1064-1070
CRF+Chlordiazepoxide (5 mg/kg)	Endogenous peptide	Geller-Seifter conflict test	Rats	0.01-1 µg	icv	(+)		Thatcher Britton et al., 1987	Soc. Neurosci. Abstr. 13:1122
CRF+Chlordiazepoxide (5-10 mg/kg)	Endogenous peptide	Conditioned suppression of responding	Wistar rats (200-250g)	0.5-1 µg/2 µl	icv, 60	(+)		Britton et al., 1988	Psychopharmacology 94:306-311
CRF+Clonidine (0.025 mg/kg)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	(+)		Yang et al., 1990	J. Pharmacol. Exp. Ther. 255:1064-1070
CRF+cocaine (30 mg/kg, ip)	Endogenous peptide	Elevated plus-maze	Wistar rats (275-300g)	5 µg/4 µl	icv, 0	-	(1) No interaction; (2) Cocaine was given for 7 days in a distinct environment 10-12 days before testing	Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF+cocaine (30 mg/kg, ip)	Endogenous peptide	Light/dark test	Wistar rats (275-300g)	5 µg/4 µl	icv, 0	-	(1) No interaction; (2) Cocaine was given for 7 days in a distinct environment 10-12 days before testing	Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213
CRF+cocaine (30 mg/kg, ip)	Endogenous peptide	Elevated plus-maze	Wistar rats (275-300g)	0,5 µg/4 µl	icv, 0	-	(1) No interaction; (2) Cocaine was given for 7 days in the home cage 10-12 days before testing	Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213
CRF+cocaine (30 mg/kg, ip)	Endogenous peptide	Light/dark test	Wistar rats (275-300g)	0,5 µg/4 µl	icv, 0	-	(1) No interaction; (2) Cocaine was given for 7 days in the home cage 10-12 days before testing	Erb et al., 2006	Pharmacol. Biochem. Behav. 85:206-213
CRF+CP-154,526 (0.2 nmol/0.5 µl)	Endogenous peptide	Conditioned place aversion	Long-Evans rats (250-300g)	1 nmol/0.5 µl	bed nucleus of the stria terminalis, 5	(o)	Antagonism of the effects of CRF	Sahuque et al., 2006	Psychopharmacology 186:122-132
CRF+CP-154,526 (0.32-3.2 µg)	CRF_1 antagonist	Light/dark test	C57BL mice		icv	(+)		Guanowsky et al., 1997	Soc. Neurosci. Abstr. 23:522
CRF+CP-154,526 (1 nmol/0.5 µl)	Endogenous peptide	Elevated plus-maze	Long-Evans rats (250-300g)	1 nmol/0.5 µl	bed nucleus of the stria terminalis, 5	(o)	Antagonism of the effects of CRF	Sahuque et al., 2006	Psychopharmacology 186:122-132
CRF+CP-154,526 (17.8 mg/kg)	CRF_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats		icv	(+)	Animals were exposed to 120 dB acoustic startle stimuli	Schulz et al., 1996	Proc. Natl. Acad. Sci. U. S. A. 93:10477-10482
CRF+CRF antiserum (5 µg)	Decrease CRF level	Colonic function	NMRI mice (20-30g)	5 µg	icv	(+)	Antagonism of the effects of CRF	Bueno and Gué, 1988	Brain Res. 441:1-4
CRF+CRF_{1-20} (10 nmol)	Inactive *N*-terminal fragment	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-250g)	1 nmol	icv, 45	-	(1) No antagonism of the effects of CRF on colonic motility; (2) Rats were subjected to partial body restraint	Lenz et al., 1988	Gastroenterology 95:1510-1517
CRF+Dexamethasone	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (250-350g)	0.5-1 µg	icv, 60	-		Britton et al., 1986	Life Sci. 39:1281-1286
CRF+Dexamethasone (100 mg/kg)	Endogenous peptide	Free observation	Rats	0.5-1 µg	icv, 10-180	-	(1) Grooming was increased; (2) Effect	Britton et al., 1984	Soc. Neurosci. Abstr. 10:178

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							not altered by pituitary-adrenal system blockade		
CRF+Dexamethasone (100 mg/kg)	Endogenous peptide	Locomotor activity in home cage	Rats	0.5 µg	icv, 0	-	Effect not altered by pituitary-adrenal system blockade	Britton et al., 1986	Life Sci. 38:211-216
CRF+Diazepam (0.5 mg/kg)	Endogenous peptide	Stress-induced colonic motor alterations	Sprague-Dawley rats (350-500g)	0.5 µg/5 µl	icv, 30	-	Diazepam did not antagonize the effects of CRF on colonic motility	Gué et al., 1991	Gastroenterology 100:964-970
CRF+diazepam (1 mg/kg)	Endogenous peptide	Food intake	Wistar rats (200-250g)	0.2 µl/rat	icv, 20	(o)	The benzodiazepine antagonized CRF-induced anorexia	Ciccocioppo et al., 2002	Psychopharmacology 161:113-119
CRF+Diazepam (2 mg/kg)	Endogenous peptide	Open-field	BALB/c mice (20-25g)	0.2 µg/2 µl	icv, 3 hrs	(+)		Lee et al., 1987	Psychopharmacology 93:320-323
CRF+dl-propranolol (5 mg/kg)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	(+)		Yang et al., 1990	J. Pharmacol. Exp. Ther. 255:1064-1070
CRF+DMP696 (10-30 mg/kg)	Endogenous peptide	Social interaction	Sprague-Dawley rats (245-255g)	1 µg/0.5 µl	icv, 30	(o)	Antagonism of the anxiogenic-like effects of CRF	Campbell et al., 2004	Pharmacol. Biochem. Behav. 77:447-455
CRF+DMP696 (30 mg/kg)	Endogenous peptide	Open-field	Sprague-Dawley rats (245-255g)	1 µg/0.5 µl	icv, 30	(o)	Antagonism of the anxiogenic-like effects of CRF	Campbell et al., 2004	Pharmacol. Biochem. Behav. 77:447-455
CRF+DOI (0.15 mg/kg)	Endogenous peptide	Open-field	CD1 mice (50-60-day-old)	1.5 µg/1 µl	medial prefrontal cortex, 5	(-)		Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
CRF+DOI (0.15 mg/kg)	Endogenous peptide	Elevated plus-maze	CD1 mice (50-60-day-old)	1.5 µg/1 µl	medial prefrontal cortex, 5	(-)		Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
CRF+Dorsal hippocampus electrolytic lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	(1) No antagonism of the behavioral effects of CRF; (2) Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF+D-Phe CRF_{12-41} (3.2 µg)	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats		icv, 80	(+)	Animals were exposed to 120 dB acoustic startle stimuli	Schulz et al., 1996	Proc. Natl. Acad. Sci. U. S. A. 93:10477-10482
CRF+d-propranolol (2.5-10 mg/kg)	Endogenous peptide	Conditioned suppression of	Rats (160-180g)	0.5 µg/1 µl	icv, 30	-		Cole and Koob, 1988	J. Pharmacol. Exp. Ther. 247:902-910

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		responding							
CRF+DSP-4 (50 mg/kg)	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.3 µg/3 µl	icv, 0	(o)	Antagonism of the anxiogenic-like effects of CRF	Howard et al., 2008	Psychopharmacology 199:569-582
CRF+D-Trp-6-LRH (20-40 ng/mouse)	Endogenous peptide	Social interaction	Swiss mice (24-28g)	0.3 nmol/2 µl	icv, 20	(o)	Antagonism of the anxiogenic-like effects of CRF	Umathe et al., 2008	Neuropeptides 42:399-410
CRF+FG 7142 (10-20 mg/kg)	Endogenous peptide	Conditioned suppression of responding	Wistar rats (200-250g)	0.5-1 µg/2 µl	icv, 60	-	Potentiation of the anxiogenic effects of CRF	Britton et al., 1988	Psychopharmacology 94:306-311
CRF+Fimbria transection	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	(+)	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF+Flumazenil (10 µg)	Endogenous peptide	Conflict test	Sprague-Dawley rats (276-300g)	1 µg/3 µl	icv, 5	(+)	Rats were trained under a FR20 schedule	de Boer et al., 1992	J. Pharmacol. Exp. Ther. 262:335-342
CRF+Flumazenil (3 mg/kg)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats	0.5 µg/5 µl	icv, 20	-	No antagonism of the anxiogenic effects of CRF	Moy et al., 1997	Psychopharmacology 131:354-360
CRF+Flumazenil (4 mg/kg)	Endogenous peptide	Elevated plus-maze	Rats	100 ng	icv	-	Flumazenil did not block the anxiogenic-like effects of CRF	File et al., 1988	Stress Med. 4:221-230
CRF+Flumazenil (4 mg/kg)	Endogenous peptide	Social interaction	Rats	100 ng	icv	-	Flumazenil did not block the anxiogenic-like effects of CRF	File et al., 1988	Stress Med. 4:221-230
CRF+Flumazenil (6-12 mg/kg)	Endogenous peptide	Conditioned suppression of responding	Wistar rats (200-250g)	0.5-1 µg/2 µl	icv, 60	(+)	Antagonism of the anxiogenic effects of CRF	Britton et al., 1988	Psychopharmacology 94:306-311
CRF+fluoxetine (5 mg/kg)	Endogenous peptide	Social interaction	Sprague-Dawley rats (290-340g)	100 ng/5 µl	icv, 20	-		To et al., 1999	Neuroreport 10:553-555
CRF+fluoxetine (5 mg/kg, for 21 days)	Endogenous peptide	Social interaction	Sprague-Dawley rats (290-340g)	100 ng/5 µl	icv, 20	(+)	Attenuation of the anxiogenic-like effects of CRF	To et al., 1999	Neuroreport 10:553-555
CRF+Ganglionic blockade	Endogenous peptide	Colonic function	Sprague-Dawley rats (250-300g)	1 nmol/10 µl	icv, 20	(+)	Antagonism of the effects of CRF on gastric emptying and small bowel transit	Lenz et al., 1988	Gastroenterology 94:598-602
CRF+Hypophysectomy	Endogenous peptide	Elevated plus-maze	Rats	2 µg	icv	-	Anxiogenic-like effects not altered by hypophysectomy	McKay and Adamec, 1993	Soc. Neurosci. Abstr. 19:373

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF+Hypophysectomy	Endogenous peptide	Elevated plus-maze	Wistar rats (140-180g)	2 µg/3 µl	icv, 60	-		Adamec and McKay, 1993	J. Psychopharmacol. 7:346-354
CRF+Hypophysectomy	Endogenous peptide	Exploration behavior	CD1 mice (24-28g)	50 ng/4 µl	icv, 10	-		Berridge and Dunn, 1989	Pharmacol. Biochem. Behav. 34:517-519
CRF+Hypophysectomy	Endogenous peptide	Free observation	Sprague-Dawley rats (150-200g)	20 µg/5 µl	icv, 0	-	Increase in grooming not altered by hypophysectomy	Morley and Levine, 1982	Life Sci. 31:1459-1464
CRF+Hypophysectomy	Endogenous peptide	Colonic function	Sprague-Dawley rats (250-300g)	1 nmol/10 µl	icv, 20	-	No antagonism of the effects of CRF on gastrointestinal transit	Lenz et al., 1988	Gastroenterology 94:598-602
CRF+Hypophysectomy	Endogenous peptide	Stress-induced colonic motor alterations	Sprague-Dawley rats (350-500 g)	0.5 µg/5 µl	icv, 30	-	Hypophysectomy did not antagonize the effects of CRF on colonic motility	Gué et al., 1991	Gastroenterology 100:964-970
CRF+ICI 118551 (0.5 mg/kg, peripheral b_2 antagonist)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	-	No antagonism of the anxiogenic effects of CRF	Yang and Dunn, 1990	Pharmacol. Biochem. Behav. 36:847-851
CRF+Lateral septum electrolytic lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	(1) No antagonism of the behavioral effects of CRF; (2) Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF+leuprolide (10-20 ng/mouse)	Endogenous peptide	Social interaction	Swiss mice (24-28g)	0.3 nmol/2 µl	icv, 20	(o)	Antagonism of the anxiogenic-like effects of CRF	Umathe et al., 2008	Neuropeptides 42:399-410
CRF+l-propranolol (2.5 mg/kg, b antagonist)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	(+)		Yang and Dunn, 1990	Pharmacol. Biochem. Behav. 36:847-851
CRF+l-propranolol (2.5-10 mg/kg)	Endogenous peptide	Conditioned suppression of responding	Rats (160-180g)	0.5 µg/1 µl	icv, 30	(+)		Cole and Koob, 1988	J. Pharmacol. Exp. Ther. 247:902-910
CRF+Medial septum chemical lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	(1) No antagonism of the behavioral effects of CRF; (2) Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF+Medial septum electrolytic lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	(+)	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF+MPA	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	(1) MPA potentiated the effects of CRF; (2) Females were ovariectomized	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF+Naloxone (1.25 mg/kg)	Endogenous peptide	Exploration behavior	CD1 mice (25-35g)	75 ng/4 µl	icv, 10	(+)	Apparatus was a multicompartment chamber	Berridge and Dunn, 1986	Regul. Pept. 16:83-93
CRF+Naloxone (1-5 m/kg)	Endogenous peptide	Isolation-induced behavioral changes	Albino guinea pig pups	7-14 µg	sc, 60	-	No antagonism of the behavioral effects of CRF	Hennessy et al., 1991	Physiol. Behav. 50:17-22
CRF+NBI 27914 (2 nmol/0.1 µl)	Endogenous peptide	Elevated plus-maze	Swiss mice (25-35g)	150 pmol/ 0.1 µl	dorsal PAG, 10	(o)		Miguel and Nunes-de-Souza, 2011	Horm. Behav. 60:292-300
CRF+NBI 27914 (5 mg/kg)	Endogenous peptide	Defensive withdrawal	Rats	0.25-0.5	icv	(+)		Smagin et al., 1998	Soc. Neurosci. Abstr. 24:1198
CRF+NBI 30775 (20 mg/kg)	Endogenous peptide	Acoustic startle reflex	C57BL/6J mice (6-8-week-old)	0.2-0.6 nmol/5 µl	icv, 60	(o)	Blockade of the anxiogenic-like effects of CRF	Risbrough et al., 2003	Psychopharmacology 170:178-187
CRF+NBI 30775 (20 mg/kg)	Endogenous peptide	Acoustic startle reflex	129SvEv mice (6-8-week-old)	0.2 nmol/5 µl	icv, 60	(o)	Blockade of the anxiogenic-like effects of CRF	Risbrough et al., 2004	J. Neurosci. 24:6545-6552
CRF+NE blockade	Endogenous peptide	Colonic function	Sprague-Dawley rats (250-300g)	1 nmol/10 µl	icv, 20	(+)	Antagonism of the effects of CRF on gastric emptying and small bowel transit	Lenz et al., 1988	Gastroenterology 94:598-602
CRF+NGD 98-1 (20 mg/kg)	Endogenous peptide	Acoustic startle reflex	Rats		icv	(+)	Antagonism of the anxiogenic-like effects of CRF	Horvath et al., 2000	XVI Int. Symp. Med. Chem., Bologna, Italy
CRF+NGD 98-1 (20 mg/kg)	Endogenous peptide	Acoustic startle reflex	Rats		icv	(+)	Antagonism of the anxiogenic-like effects of CRF	Horvath et al., 2000	XVI Int. Symp. Med. Chem., Bologna, Italy
CRF+NGD 98-1 (20 mg/kg)	Endogenous peptide	Free observation	Rats		icv	(+)	Antagonism of the effects of CRF on grooming	Horvath et al., 2000	XVI Int. Symp. Med. Chem., Bologna, Italy
CRF+nociceptin (0.1-2 µg icv)	Endogenous peptide	Food intake	Wistar rats (200-250g)	0.2 µg/1 µl/rat	icv, 30	(o)	NC blocked anorexia induced by CRF	Ciccocioppo et al., 2001	Neuroreport 12:1145-1149
CRF+NPY (2250 ng)	Endogenous peptide	Social interaction	WistarF/Han rats (350-390g)	200 ng/0.25 µl/side	lateral septum, 20	(o)	(1) Blockade of the anxiogenic-like effects of CRF; (2)	Kask et al., 2001	Neuroscience 104:799-806

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							Familiar lit area		
CRF+NPY (2-8 µg, icv)	Endogenous peptide	Conflict test	Wistar rats (300-400g)	0.75 µg/2-5 µl	icv, 15	(o)	(1) Antagonism of the effects of CRF; (2) Random-interval 30 s was used	Britton et al., 2000	Peptides 21:37-44
CRF+NPY (4 µg, icv)	Endogenous peptide	Elevated plus-maze	Wistar rats (300-400g)	0.75 µg/2-5 µl	icv, 15	(o)	Antagonism of the effects of CRF	Britton et al., 2000	Peptides 21:37-44
CRF+Opioid blockade	Endogenous peptide	Colonic function	Rats	210 pmol/rat	intracisternally, 5	-	No antagonism of the effects of CRF on gastric emptying	Hagiwara et al., 1986	Gastroenterology 90:1447
CRF+Opioid blockade	Endogenous peptide	Colonic function	Sprague-Dawley rats (250-300g)	1 nmol/10 µl	icv, 20	(+)	Antagonism of the effects of CRF on gastric emptying and small bowel transit	Lenz et al., 1988	Gastroenterology 94:598-602
CRF+Paraventricular nucleus lesion	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)	1 µg/5 µl	icv, 0	-	No antagonism	Liang et al., 1992	J. Neurosci. 12:2313-2320
CRF+PCPA (150 mg/kg)	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.3 µg/3 µl	icv, 0	+	No antagonism of the anxiogenic-like effects of CRF	Howard et al., 2008	Psychopharmacology 199:569-582
CRF+Prazosin (0.1 mg/kg)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	50 ng	icv, 25	(+)		Yang et al., 1990	J. Pharmacol. Exp. Ther. 255:1064-1070
CRF+propranolol (5-10 mg/kg)	Endogenous peptide	Free observation	Sprague-Dawley rats (250-300g)	0.3 µg/3 µl	icv, 0	(o)	Antagonism of the anxiogenic-like effects of CRF	Howard et al., 2008	Psychopharmacology 199:569-582
CRF+Ro 64-6198 (0.3-2.5 mg/kg)	Endogenous peptide	Food intake	Wistar rats (200-250g)	0.2 µl/rat	icv, 20	(o)	The ORL1 agonist antagonized CRF-induced anorexia	Ciccocioppo et al., 2002	Psychopharmacology 161:113-119
CRF+SC241	Endogenous peptide	Social interaction			icv	(+)		Rohrbach et al., 1996	Soc. Neurosci. Abstr. 22:1544
CRF+SCH 23390 (0.05-0.5 mg/kg)	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (about 400g)	1 µg/2 µl	icv, 0	(o)	The D1 antagonist blocked the effects of CRF	Meloni et al., 2006	J. Neurosci. 26:3855-3863
CRF+Six week handling	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	1 µg/2 2 µl	icv, 25	(+)		Ward et al., 1998	Pharmacol. Biochem. Behav. 60:209-215
CRF+Six week phenelzine (3 mg/kg)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	1 µg/2 2 µl	icv, 25	-		Ward et al., 1998	Pharmacol. Biochem. Behav. 60:209-215
CRF+TCAP (300 pmol/3 µl given 5 times)	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	1 µg/2 µl	icv, 30	(-)	TCAP poptentiated the anxiogenic-like effects of CRF	Tan et al., 2007	Behav. Brain Res. 188:195-200

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF+TCAP (300 pmol/3 µl given 5 times)	Endogenous peptide	Open-field	Wistar rats (250-300g)	3 µg/2 µl	icv, 30	(-)	TCAP poptentiated the anxiogenic-like effects of CRF	Tan et al., 2007	Behav. Brain Res. 188:195-200
CRF+TCAP (300 pmol/3 µl given 5 times)	Endogenous peptide	Acoustic startle reflex	Wistar rats (250-300g)	3 µg/2 µl	icv, 30	(-)	TCAP poptentiated the anxiogenic-like effects of CRF	Tan et al., 2007	Behav. Brain Res. 188:195-200
CRF+TCAP-1 (300 pmol given 5 times)	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	1 µg/µl	icv, 30	(o)	TCAP-1 reversed the anxiogenic-like effects of CRF	Al Chawaf et al., 2007	Peptides 28:1406-1415
CRF+TCAP-1 (300 pmol given 5 times)	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	300 pmol	iv, 30	-	No interaction	Al Chawaf et al., 2007	Peptides 28:1406-1415
CRF+TCAP-1 (300 pmol given 5 times)	Endogenous peptide	Open-field	Wistar rats (250-300g)	1 µg/µl	icv, 30	(o)	TCAP-1 reversed the anxiogenic-like effects of CRF	Al Chawaf et al., 2007	Peptides 28:1406-1415
CRF+TCAP-1 (300 pmol given 5 times)	Endogenous peptide	Open-field	Wistar rats (250-300g)	300 pmol	iv, 30	(-)	TCAP-1 further potentiated the anxiogenic-like effects of CRF	Al Chawaf et al., 2007	Peptides 28:1406-1415
CRF+THP (10 mg/kg)	Endogenous peptide	Acoustic startle reflex	Female Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	(o)	Females were ovariectomized	Toufexis et al., 2004	J. Neurosci. 24:10280-10287
CRF+Two week handling	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	1 µg/2 2 µl	icv, 25	(+)		Ward et al., 1998	Pharmacol. Biochem. Behav. 60:209-215
CRF+Two week phenelzine (3 mg/kg)	Endogenous peptide	Defensive withdrawal	Sprague-Dawley rats (250-300g)	1 µg/2 2 µl	icv, 25	-		Ward et al., 1998	Pharmacol. Biochem. Behav. 60:209-215
CRF+Vagotomy	Endogenous peptide	Colonic function	Sprague-Dawley rats (290-370g)	0.6 nmol/100 nl	paraventricular nucleus, 60	-	No antagonism of the effects of CRF on colonic motor response	Mönnikes et al., 1992	Am. J. Physiol. 262:G137-43
CRF+Vagotomy	Endogenous peptide	Colonic function	Sprague-Dawley rats (250-300g)	1 nmol/10 µl	icv, 20	-	No antagonism of the effects of CRF on gastrointestinal transit	Lenz et al., 1988	Gastroenterology 94:598-602
CRF+Vasopressin (10 pmol)	Endogenous peptide	Free observation	Lister hooded rats	50 pmol/0.5 µl	amygdala, 5	-	Self-grooming was increased synergistically	Elkabir et al., 1990	Regul. Pept. 28:199-214
CRF+Vasopressin (100 pmol)	Endogenous peptide	Free observation	Lister hooded rats	50-200 pmol/2 µl	icv, 15	-	Self-grooming was increased synergistically	Elkabir et al., 1990	Regul. Pept. 28:199-214

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CRF+Ventral hippocampus chemical lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	-	(1) No antagonism of the behavioral effects of CRF; (2) Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6434-6446
CRF+volinanserin (0.25 mg/kg)	Endogenous peptide	Elevated plus-maze	CD1 mice (50-60-day-old)	1.5 µg/1 µl	medial prefrontal cortex, 5	-	No interaction	Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
CRF+volinanserin (0.25 mg/kg)+DOI (0.15 mg/kg)	Endogenous peptide	Elevated plus-maze	CD1 mice (50-60-day-old)	1.5 µg/1 µl	medial prefrontal cortex, 5	(o)	Blockade of the anxiogenic-like effects of CRF-DOI combination	Magalhaes et al., 2010	Nat. Neurosci. 13:622-629
CRF+WAY100635 (1 mg/kg)	Endogenous peptide	Acoustic startle reflex	Brown Norway rats (10-week-old)	0.3 µg/6 µl	icv, 30	o		Conti, 2012	Neuropharmacology 62:256-263
CRF+WAY100635 (1 mg/kg)	Endogenous peptide	Acoustic startle reflex	Wistar-Kyoto rats (10-week-old)	0.3 µg/6 µl	icv, 30	(+)		Conti, 2012	Neuropharmacology 62:256-263
CRF+Whole septum electrolytic lesion	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)	1 µg/5 µl	icv, 0	(+)	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6424-6433
CRF+YY941	Endogenous peptide	Social interaction			icv	(+)		Rohrbach et al., 1996	Soc. Neurosci. Abstr. 22:1544
CRF+α-hel CRF_{9-41}	Endogenous peptide	Light/dark test	C57BL mice		icv	(+)		Guanowsky and Seymour, 1993	Soc. Neurosci. Abstr. 19:2
CRF+α-hel CRF_{9-41}	Endogenous peptide	Social interaction			icv	(+)		Rohrbach et al., 1996	Soc. Neurosci. Abstr. 22:1544
CRF+α-hel CRF_{9-41} (0.5 µg/0.5 µl)	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g)		dorsal PAG, 10	(+)		Martins et al., 1997	Neuroreport 8:3601-3604
CRF+α-hel CRF_{9-41} (1 µg)	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-450g)	40 ng/0.5 µl	nucleus reticularis pontis caudalis, 10	(+)	Animals received 60 startle stimuli (105 dB) before and 120 startle stimuli after drug infusion	Birnbaum and Davis, 1998	Brain Res. 782:318-323
CRF+α-hel CRF_{9-41} (1 µg)	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (9-week-old)	200 ng/mouse	icv, 30	(o)	Blockade of anxiety-like behavior induced by CRF	Kishimoto et al., 2000	Nat. Genet. 24:415-19
CRF+α-hel CRF_{9-41} (1 µg/1 µl)	Endogenous peptide	Distress vocalizations	Sprague-Dawley rats 5-6 days old)	0.01 µg	icv, 0	(+)		Insel and Harbaugh, 1989	Pharmacol. Biochem. Behav. 32:197-201
CRF+α-hel CRF_{9-41} (10	Endogenous	Stress-induced	Squirrel monkeys	10 µg	icv, 5	(+)		Winslow et	Pharmacol. Biochem.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
µg/10 µl)	peptide	increase in arousal	(800-1200g)					al., 1989	Behav. 32:919-926
CRF+α-hel CRF_{9-41} (10 µg/5 µl)	Endogenous peptide	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-250g)	1 nmol	icv, 45	(+)	Rats were subjected to partial body restraint	Lenz et al., 1988	Gastroenterology 95:1510-1517
CRF+α-hel CRF_{9-41} (10 nmol)	Endogenous peptide	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-250 g)	1 nmol	iv, 45	-	(1) No antagonism of the effects of CRF on colonic motility; (2) Rats were subjected to partial body restraint	Lenz et al., 1988	Gastroenterology 95:1510-1517
CRF+α-hel CRF_{9-41} (1-25 µg/µl)	Endogenous peptide	Acoustic startle reflex	Wistar rats (200-220g)	1 µg/2 µl	icv, 5	(+)	Rats were presented with five 118 dB white noise bursts	Swerdlow et al., 1989	Neuropsychopharmacology 2:285-292
CRF+α-hel CRF_{9-41} (25-50 µg/5 µl)	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (280-340g)		icv, 5 prior or 90 after CRF	(+)		Liang et al., 1992	J. Neurosci. 12:2303-2312
CRF+α-hel CRF_{9-41} (260 pmol icv)	Endogenous peptide	Elevated plus-maze	BALB/c mice (9-week-old)	21 pmol	icv	(o)	(1) antagonism of the anxiogenic-like effects of CRF; (2) Ovice CRF was used	Brauns et al., 2001	Neuropharmacology 41:507-516
CRF+α-hel CRF_{9-41} (3-6 µg/5 µl)	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (350-430g)		bed nucleus of the stria terminalis, 0	(+)	Rats received 60 startle stimuli of 105 dB	Lee and Davis, 1997	J. Neurosci. 17:6434-6446
CRF+α-hel CRF_{9-41} (5 µg/5 µl)	Endogenous peptide	Stress-induced colonic motor alterations	Sprague-Dawley rats (350-500g)	0.5 µg	icv, 40	(+)		Gué et al., 1991	Gastroenterology 100:964-970
CRF+α-hel CRF_{9-41} (5 µg/5 µl)	Endogenous peptide	Open-field	Wistar rats (310-330g)	0.1-0.4 µg	icv, 30	(+)		Kumar and Karanth, 1996	J. Neural Transm. 103:1117-1126
CRF+α-hel CRF_{9-41} (50 µg)	Endogenous peptide	Conflict test	Sprague-Dawley rats (276-300g)	1 µg/3 µl	icv, 5	(+)	Rats were trained under a FR20 schedule	de Boer et al., 1992	J. Pharmacol. Exp. Ther. 262:335-342
CRF+α-hel CRF_{9-41} (50 µg)	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g)	2 µg	icv, 60	(+)		Adamec et al., 1991	J. Psychopharmacol. 5:175-186
CRF+α-hel CRF_{9-41} (50 µg)	Endogenous peptide	Elevated plus-maze	Rats	2 µg	icv	(+)		McKay and Adamec, 1993	Soc. Neurosci. Abstr. 19:373
CRF+α-hel CRF_{9-41} (50 µg)	Endogenous peptide	Isolation-induced behavioral changes	Albino guinea pig pups	7 µg	sc, 60	(+)	Antagonism of the effects of CRF on behavior (e.g. decrease in	Hennessy et al., 1995	Behav. Neurosci. 109:1137-1145

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							vocalizing, increase in crouch)		
CRF+α-hel CRF_{9-41} (50 µg)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 10	(o)	The CRF antagonist blocked the anxiogenic-like effects of CRF	Kagamiishi et al., 2003	Brain Res. 991:212-221
CRF+α-hel CRF_{9-41} (50 µg/3 µl)	Endogenous peptide	Elevated plus-maze	Wistar rats (140-180g)	2 µg	icv, 60	(+)	Hypophysectomy	Adamec and McKay, 1993	J. Psychopharmacol. 7:346-354
CRF+α-hel CRF_{9-41} (50 µg/5 µl)	Endogenous peptide	Stress-suppressed feeding	Sprague-Dawley rats (300-350g)		icv, 60	(+)	Animals were subjected to immobilization stress	Krahn et al., 1986	Brain Res. Bull. 17:285-289
CRF+α-hel CRF_{9-41} (50-200 µg)	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-250g)		icv, 30	(+)		Britton et al., 1986	Brain Res. 369:303-306
CRF_{1-20}	Inactive *N*-terminal fragment	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-250g)	10 nmol	icv, 15	o	Rats were subjected to partial body restraint	Lenz et al., 1988	Gastroenterology 95:1510-1517
CRF_{6-33}	CRF-binding protein	Elevated plus-maze	Rats	25-125 µg	icv, 15	o		Behan et al., 1995	Nature 378:284-287
CRF_{6-33}	CRF-binding protein	Defensive withdrawal	Wistar rats (300-350g)	5-25 µg/5 µl	icv, 15	o		Heinrichs et al., 2001	Behav. Brain Res. 122:43-50
CRF_{6-33}	CRF-binding protein	Lithium-induced aversion	Wistar rats (300-350g)	0.5-25 µg/5 µl	icv, 15	o		Heinrichs et al., 2001	Behav. Brain Res. 122:43-50
$CRH\text{-}OE_{2122}$	CRF overproduction	Acoustic startle reflex	C57BL/6J background mice (9-13-week-old)			?	Startle was decreased and no habituation to this effect occurred	Dirks et al., 2002	Biol. Psychiatry 51:583-590
$Crhr1^{loxP/loxP}$Camk2-cre	CRF_1 knock-out	Light/dark test	129/Sv x C57BL/6 background mice (3-5-month old)			+	(1) Mutant mice were less anxious; (2) CRF_1 receptor was inactivated postnatally in limbic and forebrain regions	Müller et al., 2003	Nat. Neurosci. 6:1100-1107
$Crhr1^{loxP/loxP}$Camk2-cre	CRF_1 knock-out	Elevated plus-maze	129/Sv x C57BL/6 background mice (3-5-month old)			+	(1) Mutant mice were less anxious; (2) CRF_1 receptor was inactivated postnatally in limbic and forebrain regions	Müller et al., 2003	Nat. Neurosci. 6:1100-1107
cUTSN (12-41)+CRF (0.04 nmol)	$CRF_{1/2}$ antagonist	Open-field	CD1 mice (19-22g)	0.126-10.2 nmol/2.5 µl	icv, 5	(o)	Antagonism of the effects of CRF	Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
cUTSN (12-41)+CRF (0.04 nmol)	$CRF_{1/2}$ antagonist	Free observation	CD1 mice (19-22g)	1 nmol/2.5 µl	icv, 5	(o)	Antagonism of the effects of CRF	Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806
DMP695	CRF_1 antagonist	Vogel conflict test	Wistar rats (200-250g)	40	ip, 30	+	Shock of 0.3 mA/0.5 sec, every 20th lick	Millan et al., 2001	Neuropsychopharmacology 25:585-600
DMP695	CRF_1 antagonist	Social interaction	Wistar rats (200-250g)	40	sc, 30	+	Unfamiliar cage	Millan et al., 2001	Neuropsychopharmacology 25:585-600
DMP695	CRF_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (200-250g)	2.5-40	sc, 30	o		Millan et al., 2001	Neuropsychopharmacology 25:585-600
DMP695	CRF_1 antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.63-40	sc, 30	o		Millan et al., 2001	Neuropsychopharmacology 25:585-600
DMP696	CRF_1 antagonist	Light/dark test	Rats	3-18	po, 60	+		He et al., 2000	J. Biol. Chem. 43:449-56
DMP696	CRF_1 antagonist	Human threat	Monkeys	21	po, 30	+		He et al., 2000	J. Biol. Chem. 43:449-56
DMP696	CRF_1 antagonist	Elevated plus-maze	Long-Evans rats (60-65-day old)	3-30	po, 60	o	Animals were handled on a regular basis	Maciag et al., 2002	Neuropsychopharmacology 26:574-582
DMP696	CRF_1 antagonist	Elevated plus-maze	Long-Evans rats (60-65-day old)	30	po, 60	+	Animals experienced maternal separation as pups	Maciag et al., 2002	Neuropsychopharmacology 26:574-582
DMP696	CRF_1 antagonist	Social interaction	Long-Evans rats (60-65-day old)	30	po, 60	+	Animals were handled on a regular basis	Maciag et al., 2002	Neuropsychopharmacology 26:574-582
DMP696	CRF_1 antagonist	Social interaction	Long-Evans rats (60-65-day old)	30	po, 60	+	Animals experienced maternal separation as pups	Maciag et al., 2002	Neuropsychopharmacology 26:574-582
DMP696	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (180-300g)	3-90	po, 60	+		McElroy et al., 2002	Psychopharmacology 165:86-92
DMP696	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (200-300g)	10 and 90	po, 60	+		Li et al., 2003	J. Pharmacol. Exp. Ther. 305:86-96
DMP696	CRF_1 antagonist	Open-field	Sprague-Dawley rats (245-255g)	10-30	ip, 30	o		Campbell et al., 2004	Pharmacol. Biochem. Behav. 77:447-455
DMP696	CRF_1 antagonist	Social interaction	Sprague-Dawley rats (245-255g)	10-30	ip, 30	o		Campbell et al., 2004	Pharmacol. Biochem. Behav. 77:447-455
DMP696	CRF_1 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rats (9-12-day-old)	3-10	ip, 30	+		Arban et al., 2007	ChemMedChem. 2:528-540
DMP696	CRF_1 antagonist	Stress-induced visceral	Wistar rats (250-275g)	30	po for 11 days, o.d.	+	Rats were subjected to water avoidance	Bradesi et al., 2009	Am. J. Physiol. Gastrointest. Liver Physiol.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		hyperalgesia					stress		296:G302-G309
DMP696	CRF_1 antagonist	Conditioned fear	C57BL/6J mice (6-7-week-old)	3	po, for one week	+	(1) Shocks of 1.5 mA/2 s were applied; (2) The drug attenuated consolidation of remote fear	Thoeringer et al., 2012	Neuropsychopharmacology 37:787-796
DMP904	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-300g)	10-30	po, 60	+		Lelas et al., 2004	J. Pharmacol. Exp. Ther. 309:293-302
DMP904	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (180-300g)	1-30	po, 60	+		Lelas et al., 2004	J. Pharmacol. Exp. Ther. 309:293-302
DMP904	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (180-300g)	0.3-1	po, o.d. for 14 days	+		Lelas et al., 2004	J. Pharmacol. Exp. Ther. 309:293-302
DPC 904	CRF_1 antagonist	Stress-induced freezing	Sprague-Dawley (300-350g)	3-30	po, 60	+	Shock of 0.8 mA/1 s	Ho et al., 2001	Mol. Brain Res. 89:29-40
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Wistar rats (365-435g)	0.2-5 µg/5 µl	icv, 5	+	Experiments were performed in an open-field containing a cylindrical chamber	Rodriguez de Fonseca et al., 1996	J. Pharmacol. Exp. Ther. 276:56-64
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Wistar rats (365-435g)	5 µl	icv, 5	+	(1) Experiments were performed in an open-field containing a cylindrical chamber; (2) animals were exposed to swim stress	Rodriguez de Fonseca et al., 1996	J. Pharmacol. Exp. Ther. 276:56-64
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (300-400g)	5-25 µg	icv, 60	o		Menzaghi et al., 1994	J. Pharmacol. Exp. Ther. 269:564-572
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Isolation-induced behavioral changes	Preweaning guinea pigs (4-6 and 20-26 days)	15-150 µg	sc, 0	?	Vocalizing was increased	Hennessy et al., 1997	Dev. Psychobiol. 31:39-47
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (300-400g)	1-25 µg	icv, 5	+	Following social defeat	Menzaghi et al., 1994	J. Pharmacol. Exp. Ther. 269:564-572
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-240 g)	2.6 nmol/10 µl	intracisternal, 180	+	Stress was induced by abdominal surgery	Hernandez et al., 1993	J. Med. Chem. 36:2860-2867
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Shock-probe burying test	Wistar rats (220-250g)	0,04-1 µg/5 µl	icv, 0	o	Shock of 1,5 mA	Basso et al., 1999	Psychopharmacology 145:21-30

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Conditioned fear	Syrian adult hamster (120-130g)	25 µl/3 µl	icv, 30	+	Conditioned defeat	Jasnow et al., 1999	Soc. Neurosci. Abstr. 25:62 & BR 846:122-8
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Conflict test	Wistar rats (300-400g)	0.2-5 µg/2-5 µl	icv, 15	o	Random-interval 30 s was used	Britton et al., 2000	Peptides 21:37-44
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats	100 ng/0.5 µl/side	lateral septum, 0	+	Three electric shocks of 1.5 mA/1 s every 20 s were applied	Bakshi et al., 2002	J. Neurosci. 22:2926-2935
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (275-325g)	50 ng/1 µl	dorsal raphe nucleus, 15	+	The drug was given 15 min before inescapable shock, and 24 h prior testing	Hammack et al., 2002	J. Neurosci. 22:1020-1026
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (275-325g)	50 ng/1 µl	lateral to dorsal raphe nucleus, 15	o	The drug was given 15 min before inescapable shock, and 24 h prior testing	Hammack et al., 2002	J. Neurosci. 22:1020-1026
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Wistar rats (250-300g)	0.2-5 µg/5 µl	icv, 30	o	Rats were preshocked (10x6 s, 0.5 mA) two weeks prior to testing	Bruijnzeel et al., 2001	Psychopharmacology 158:132-139
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	10 µg/5 µl	icv, 15	+	The drug reversed anxiogenic-like effects of ethanol abstinence+restraint	Valdez et al., 2003	Alcohol 29:55-60
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	10 µg/5 µl	icv, 15	o		Valdez et al., 2003	Alcohol 29:55-60
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	10 µg/5 µl	icv, 15	o	Elevated plus-maze following ethanol abstinence	Valdez et al., 2003	Alcohol 29:55-60
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	10 µg/5 µl	icv, 15	o	Following restraint	Valdez et al., 2003	Alcohol 29:55-60
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Conditioned fear	Syrian hamsters (120-140g)	500 ng/200 nl	dorsal raphe nucleus, 10	+	The compound reduced the acquisition of conditioned defeat	Cooper and Huhman, 2007	Psychopharmacology 194:297-307
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Conditioned fear	Syrian hamsters (120-140g)	500 ng/200 nl	dorsal raphe nucleus, 10	+	The compound reduced the expression of conditioned defeat	Cooper and Huhman, 2007	Psychopharmacology 194:297-307
D-Phe CRF_{12-41}	$CRF_{1/2}$	Free	Sprague-Dawley	100-1000	lateral septum,	o		Bakshi et al.,	J. Neurosci. 27:10568-

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	observation	rats (290-320g)	ng/0.5 µl/side	0			2007	10577
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Stress-induced reinstatement of nicotine-seeking	Wistar rats (250-300g)	25 µg/5 µl	icv, 15	+	Shocks of 0.8 mA/1 s were applied	Zislis et al., 2007	Neuropharmacology 53:958-966
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Social interaction	Sprague Dawley rats (60-day-old)	50-500 ng/0,5 µl	dorsal raphe nucleus, 20	+	Rats were reared in isolation from weaning until midadolescence	Lukkes et al., 2009	J. Neurosci. 29:9955-9960
D-Phe CRF_{12-41}	$CRF_{1/2}$ antagonist	Social interaction	Sprague Dawley rats (60-day-old)	50-500 ng/0,5 µl	dorsal raphe nucleus, 20	o		Lukkes et al., 2009	J. Neurosci. 29:9955-9960
D-Phe CRF_{12-41}+Cocaine withdrawal	$CRF_{1/2}$ antagonist	Shock-probe burying test	Wistar rats (220-250g)	1 µg/5 µl	icv, 0	(o)	(1) Antagonism of the anxiogenic-like effects of cocaine withdrawal; (2) Shock of 1,5 mA	Basso et al., 1999	Psychopharmacology 145:21-30
D-Phe CRF_{12-41}+HU-210 (20 µg, cannabinoid)	$CRF_{1/2}$ antagonist	Defensive withdrawal	Wistar rats (365-435g)	5 µg/5 µl	icv, 5	(+)	Tests were performed in an open-field containing a cylindrical chamber	Rodriguez de Fonseca et al., 1996	J. Pharmacol. Exp. Ther. 276:56-64
D-Phe CRF_{12-41}+NPY (1 µg)	$CRF_{1/2}$ antagonist	Conflict test	Rats	0.2-5 µg	icv	+	Potentiation of the anxiolytic-like effects of NPY	Britton et al., 1997	Soc. Neurosci. Abstr. 23:521
D-Phe CRF_{12-41}+NPY (1 µg, icv)	$CRF_{1/2}$ antagonist	Conflict test	Wistar rats (300-400g)	5 µg/2-5 µl	icv, 15	(+)	(1) Potentiation of the effects of NPY; (2) Random-interval 30 s was used	Britton et al., 2000	Peptides 21:37-44
GSK876008	CRF_1 antagonist	Acoustic startle reflex	Sprague-Dawley rats (300-500g)	10-60	po, 180	+	The drug attenuated the increase in startle induced by CRF (1 µg/5 µl)	Walker et al., 2009	Neuropsychopharmacology 34:1533-1542
GSK876008	CRF_1 antagonist	Light-enhanced startle reflex	Sprague-Dawley rats (300-500g)	1-10	po, 180	+	The effect was lost at 30 and 60 mg/kg	Walker et al., 2009	Neuropsychopharmacology 34:1533-1542
GSK876008	CRF_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-500g)	0.1-60	po, 180	o		Walker et al., 2009	Neuropsychopharmacology 34:1533-1542
GSK876008	CRF_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-500g)	10-60	po, 180	+		Walker et al., 2009	Neuropsychopharmacology 34:1533-1542

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GSK876008	CRF_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-500g)	3	po, 180	-	The drug augmented potentiation response in experimentally naïve rats with strong and weak training	Walker et al., 2009	Neuropsychopharmacology 34:1533-1542
Lenti-CMV-CRF-Ires-GFP	CRF overproduction	Acoustic startle reflex	Female Sprague-Dawley rats (125-150g, 40-day-old)	1 µl	central amygdala, 2 weeks	-		Keen-Rhinehart et al., 2009	Mol. Psychiatry 14:37-50
Lenti-LV-CRFp3.0CRF	CRF overproduction	Elevated plus-maze	Sprague-Dawley rats (275-350g)	2 µl	bed nucleus of the stria terminalis, 14 days	o		Sink et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2011.188
Lenti-LV-CRFp3.0CRF	CRF overproduction	Defensive withdrawal	Sprague-Dawley rats (275-350g)	2 µl	bed nucleus of the stria terminalis, 14 days	o		Sink et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2011.188
Lenti-LV-CRFp3.0CRF	CRF overproduction	Conditioned fear	Sprague-Dawley rats (275-350g)	2 µl	bed nucleus of the stria terminalis, 14 days	-	Shocks of 0.4 mA/500 ms were delivered	Sink et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2011.188
Lenti-siCRFR1	CRF1 knockdown	Open-field	C57BL/6J (8-week-old)		globus pallidus	-		Sztainberg et al., 2011	J. Neurosci. 31:17416-17424
Lenti-siCRFR1	CRF1 knockdown	Elevated plus-maze	C57BL/6J (8-week-old)		globus pallidus	-		Sztainberg et al., 2011	J. Neurosci. 31:17416-17424
Lenti-siCRFR1	CRF1 knockdown	Light/dark transfer test	C57BL/6J (8-week-old)		globus pallidus	-		Sztainberg et al., 2011	J. Neurosci. 31:17416-17424
MJL-1-109-2	CRF_1 antagonist	Shock-probe burying test	Wistar rats (200-225g)	10	ip, 30	+	Shocks of 1.5 mA were delivered	Zhao et al., 2007	J. Pharmacol. Exp. Ther. 323:846-854
MPZP	CRF_1 antagonist	Shock-probe burying test	Wistar rats (adult)	5-20	sc, 60	+	Shocks of 1.5 mA/<1 s were delivered	Richardson et al., 2008	Pharmacol. Biochem. Behav. 88:497-510
MPZP	CRF_1 antagonist	Shock-probe burying test	Wistar rats (adult)	4	sc, 60	o	Shocks of 1.5 mA/<1 s were delivered	George et al., 2007	Proc. Natl. Acad. Sci. U.S.A. 104:17198-17203
MPZP+mecamylamine (1.5 mg/kg)	CRF_1 antagonist	Shock-probe burying test	Wistar rats (adult)	4	sc, 60	o	(1) Shocks of 1.5 mA/<1 s were delivered; (2) No interaction	George et al., 2007	Proc. Natl. Acad. Sci. U.S.A. 104:17198-17203

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MPZP+mecamylamine (1.5 mg/kg)+nicotine (chronic)	CRF_1 antagonist	Shock-probe burying test	Wistar rats (adult)	4	sc, 60	(o)	(1) Shocks of 1.5 mA/<1 s were delivered; (2) antagonism of withdrawal-induced anxiogenesis	George et al., 2007	Proc. Natl. Acad. Sci. U.S.A. 104:17198-17203
MPZP+nicotine (chronic)	CRF_1 antagonist	Shock-probe burying test	Wistar rats (adult)	4	sc, 60	o	(1) Shocks of 1.5 mA/<1 s were delivered; (2) No interaction	George et al., 2007	Proc. Natl. Acad. Sci. U.S.A. 104:17198-17203
MTIP	CRF_1 antagonist	Open-field	Wistar rats (190-250g)	3-10	ip, 30	o		Gehlert et al., 2007	J. Neurosci. 27:2718-2726
MTIP	CRF_1 antagonist	Elevated plus-maze	Wistar rats (190-250g)	3-10	ip, 30	o		Gehlert et al., 2007	J. Neurosci. 27:2718-2726
MTIP	CRF_1 antagonist	Elevated plus-maze	Wistar rats (190-250g)	1-10	ip, 30	+	The drug attenuated the anxiogenic-like effects of a large alcohol dose give 12 hrs prior testing	Gehlert et al., 2007	J. Neurosci. 27:2718-2726
Mutant mice	CRF overproduction	Elevated plus-maze	$CRH\text{-}Tg^+$			-	Animals showed a marked reduction in open arm activity compared with control animals	Stenzel-Poore et al., 1996	Ann. N.Y. Acad. Sci. 780:36-48
Mutant mice	CRF overproduction	Exploration behavior				-		Koob and Gold, 1997	Behav. Pharmacol. 8:652
Mutant mice	CRF overproduction	Open-field	$CRH\text{-}Tg^+$			-	Animals showed a marked reduction in locomotor activity compared with control animals	Stenzel-Poore et al., 1996	Ann. N.Y. Acad. Sci. 780:36-48
Mutant mice	CRF inhibition	Free observation				o	No behavioral differences were observed between mutant and wild-type mice	Miczek, 1997	Behav. Pharmacol. 8:657-658
Mutant mice	CRF-binding protein knock-out	Elevated plus-maze	C57BL/6JxSJL and CD1 mice			+	Weak effects	Burrows et al., 1998	J. Clin. Invest. 101:1439-1447
Mutant mice	CRF_1 knock-	Light/dark test	129/Ola or CD1 mice			+		Timpl et al.,	Nat. Genet. 19:162-166

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	out							1998	
Mutant mice	CRF_1 knock-out	Elevated plus-maze	C57BL/6 mice			+		Smith et al., 1998	Neuron 20:1093-1102
Mutant mice	CRF_1 knock-out	Light/dark test	C57BL/6 mice			+		Smith et al., 1998	Neuron 20:1093-1102
Mutant mice	CRF_1 knock-out	Elevated plus-maze	Mice			+		Contarino et al., 1998	Soc. Neurosci. Abstr. 24:201
Mutant mice	CRF_1 knock-out	Light/dark test	Mice			+		Contarino et al., 1998	Soc. Neurosci. Abstr. 24:201
Mutant mice	CRF-binding protein knock-out	Elevated plus-maze	Mice			-		Ramesh et al., 1998	Soc. Neurosci. Abstr. 24:505
Mutant mice	CRF-binding protein knock-out	Open-field	Mice			-		Ramesh et al., 1998	Soc. Neurosci. Abstr. 24:505
Mutant mice	CRF_1 knock-out	Exploration behavior	Mice			+		Kresse et al., 1998	Soc. Neurosci. Abstr. 24:617
Mutant mice	CRF_1 knock-out	Elevated plus-maze	C57BL/6x129 genetic background			+	Animals showed reduced anxiety-related responses	Contarino et al., 1999	Brain Res. 835:1-9
Mutant mice	CRF_1 knock-out	Light/dark test	C57BL/6x129 genetic background			+	Animals showed reduced anxiety-related responses	Contarino et al., 1999	Brain Res. 835:1-9
Mutant mice	CRF overproduction	Acoustic startle reflex	Mice			o	Not different from wild-type animals	Dirks et al., 1999	Soc. Neurosci. Abstr. 25:64
Mutant mice	CRF-binding protein knock-out	Elevated plus-maze	C57BL/6J-based mice (2-7 months)			-		Karolyi et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:11595-11600
Mutant mice	CRF-binding protein knock-out	Defensive withdrawal	C57BL/6J-based mice (2-7 months)			-		Karolyi et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:11595-11600
Mutant mice	CRF-deficient	Free observation	129SVJ/C57BL6-based mice			o	Not different from wild-type animals	Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
Mutant mice	CRF-deficient	Free observation	129SVJ/C57BL6-based mice			o	Following restraint stress. Not different from wild-type animals	Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
Mutant mice	CRF-deficient	Elevated plus-maze	129SVJ/C57BL6-based mice			o	Not different from wild-type animals	Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
Mutant mice	CRF-deficient	Elevated plus-	129SVJ/C57BL6-based mice			o	Following restraint	Weninger et	Proc. Natl. Acad. Sci. U. S.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		maze					stress. Not different from wild-type animals	al., 1999	A. 96:8283-8288
Mutant mice	CRF-deficient	Acoustic startle reflex	129SVJ/C57BL6-based mice			o	Startle reflex after air puff. Not different from wild-type animals	Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
Mutant mice	CRF-deficient	Conditioned fear	129SVJ/C57BL6-based mice			o	Not different from wild-type animals	Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
Mutant mice	CRF-deficient	Exploration behavior	Mice			o	Not different from wild-type animals	Dunn and Swiergiel, 1999	Brain Res. 845:14-20
Mutant mice	CRF-deficient	Elevated plus-maze	Mice			o	Not different from wild-type animals	Dunn and Swiergiel, 1999	Brain Res. 845:14-20
Mutant mice	CRF_2 receptor-deficient	Elevated plus-maze	Female and male 129SVJ/C57BL6J-based mice			-	Mutant males (not females) mice showed increased anxiety-like behavior	Kishimoto et al., 2000	Nat. Genet. 24:415-19
Mutant mice	CRF_2 receptor-deficient	Light/dark test	Female and male 129SVJ/C57BL6J-based mice			-	Mutant male (not female) mice showed increased anxiety-like behavior	Kishimoto et al., 2000	Nat. Genet. 24:415-19
Mutant mice	CRF_2 receptor-deficient	Open-field	Female and male 129SVJ/C57BL6J-based mice			-	Mutant male (not female) mice showed increased anxiety-like behavior	Kishimoto et al., 2000	Nat. Genet. 24:415-19
Mutant mice	CRF_2 receptor-deficient	Elevated plus-maze	129SVJ/C57BL6J-based mice			o		Coste et al., 2000	Nat. Genet. 24:403-9
Mutant mice	CRF_2 receptor-deficient	Open-field	129SVJ/C57BL6J-based mice			-	Weak increase in anxiety-related behavior (ie time in the centre)	Coste et al., 2000	Nat. Genet. 24:403-9
Mutant mice	CRF_2 receptor-deficient	Elevated plus-maze	Female and male 129SVJ/C57BL6J-based mice			-		Bale et al., 2000	Nat. Genet. 24:410-14
Mutant mice	CRF_2 receptor-deficient	Light/dark test	Female and male 129SVJ/C57BL6J-based mice			o		Bale et al., 2000	Nat. Genet. 24:410-14
Mutant mice	CRF_2 receptor-deficient	Open-field	Female and male 129SVJ/C57BL6J-based mice			-		Bale et al., 2000	Nat. Genet. 24:410-14

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	Urocortin-deficient	Acoustic startle reflex	Female and male 129S7/C57BL/6 (10-14-week-old)			?	Startle response was impaired: lower to lound sound and more sensitive to low sound levels	Wang et al., 2002	Mol. Cell. Biol. 22:6605-6610
Mutant mice	Urocortin-deficient	Open-field	Female and male 129S7/C57BL/6 (10-14-week-old)			o		Wang et al., 2002	Mol. Cell. Biol. 22:6605-6610
Mutant mice	Urocortin-deficient	Elevated plus-maze	Female and male 129S7/C57BL/6 (10-14-week-old)			o		Wang et al., 2002	Mol. Cell. Biol. 22:6605-6610
Mutant mice	Urocortin-deficient	Light/dark test	Female and male 129S7/C57BL/6 (10-14-week-old)			o		Wang et al., 2002	Mol. Cell. Biol. 22:6605-6610
Mutant mice	CRF_1 knock-out	Elevated plus-maze	C57BL/6 background mice (about 50 day-old)			+	KO mice showed reduced anxiety-like behaviors compared to WT animals	Gammie and Stevenson, 2006	Behav. Brain Res. 171:63-59
Mutant mice	CRF_1 knock-out	Elevated plus-maze	Female C57BL/6 background mice (about 50 day-old)			o	(1) KO mice did not display any particular phenotype in this test; (2) Mice were tested on postpartum Day 6	Gammie et al., 2007	BMC Neurosci. 8:17
Mutant mice	CRF_1 knockdown	Light/dark test	Female and male C57BL/6J mice (4-week-old)			+	Knockdown was specific to the basolateral amygdala	Sztainberg et al., 2010	Mol. Psychiatry 15:905-917
Mutant mice	CRF_1 knockdown	Elevated plus-maze	Female and male C57BL/6J mice (4-week-old)			o	Knockdown was specific to the basolateral amygdala	Sztainberg et al., 2010	Mol. Psychiatry 15:905-917
Mutant mice	CRF_1 knockdown	Open-field	Female and male C57BL/6J mice (4-week-old)			+	Knockdown was specific to the basolateral amygdala	Sztainberg et al., 2010	Mol. Psychiatry 15:905-917
Mutant mice	CRF_1 knock-out	Fear-potentiated startle reflex	Female and male C57BL/6J mice (2/3-month-old)			o		Risbrough et al., 2009	Neuropsychopharmacology 34:1494-1503
Mutant mice	CRF_1 knock-out	Acoustic startle reflex	Female and male C57BL/6J mice (2/3-month-old)			+	Shock-induced startle	Risbrough et al., 2009	Neuropsychopharmacology 34:1494-1503
Mutant mice	CRF_2 knock-out	Fear-potentiated startle reflex	Female and male C57BL/6J mice (2/3-month-old)			o		Risbrough et al., 2009	Neuropsychopharmacology 34:1494-1503

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	CRF_2 knock-out	Acoustic startle reflex	Female and male C57BL/6J mice (2/3-month-old)			+	Shock-induced startle	Risbrough et al., 2009	Neuropsychopharmacology 34:1494-1503
Mutant mice	CRF_1 knock-out	Light/dark test	129S2xC57BL/6J mice			+	Receptor was deleted in forebrain glutamatergic circuits	Refojo et al., 2011	Science 333:1903-1907
Mutant mice	CRF_1 knock-out	Light/dark test	129S2xC57BL/6J mice			-	Receptor was deleted in midbrain dopaminergic neurons	Refojo et al., 2011	Science 333:1903-1907
Mutant mice	CRF_1 knock-out	Light/dark test	129S2xC57BL/6J mice			o	Receptor was deleted in 5-HT neurons	Refojo et al., 2011	Science 333:1903-1907
Mutant mice	CRF_1 knock-out	Light/dark test	129S2xC57BL/6J mice			o	Receptor was deleted in forebrain GABAergic neurons	Refojo et al., 2011	Science 333:1903-1907
Mutant mice	CRF overproduction	Light/dark test	Female and male CamKIIa-rtTA+tetO-CRFxC57BL/6J mice (11-14-week-old)			o	CRF was transiently over-expressed in forebrain	Vicentini et al., 2009	Pharmacol. Biochem. Behav. 93:17-24
Mutant mice	CRF_1 knock-out	Conditioned fear	129/OlaxCD1mice (8-14-week-old)			o		Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Mutant mice	CRF_2 knock-out	Conditioned fear	129/OlaxCD1mice (8-14-week-old)			o		Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Mutant mice	CRF overproduction	Light/dark test	C57BL/6xSJL (2-3-month-old)			-		Van Gaalen et al., 2002	Eur. J. Neurosci. 15:2007-2015
Mutant mice	CRF overproduction	Open-field	C57BL/6xSJL (2-3-month-old)			o		Van Gaalen et al., 2002	Eur. J. Neurosci. 15:2007-2015
Mutant mice	CRF overproduction	Vogel conflict test	C57BL/6xSJL (2-3-month-old)			o	Shocks of 0.15 mA/10 ms were delivered	Van Gaalen et al., 2002	Eur. J. Neurosci. 15:2007-2015
Mutant mice	CRF overproduction	Conditioned fear	C57BL/6xSJL (2-3-month-old)			o	Shocks of 0.35 mA/2 s were delivered	Van Gaalen et al., 2002	Eur. J. Neurosci. 15:2007-2015
Mutant mice	CRF overproduction	Open-field	FB-CRHOExC57BL/6 mice (8-12-week-old)			-	CRF was transiently over-expressed in forebrain during early development	Kolber et al., 2010	J. Neurosci. 30:2571-2581
Mutant mice	CRF overproduction	Light/dark test	FB-CRHOExC57BL/6 mice (8-12-week-old)			-	CRF was transiently over-expressed in forebrain during early development	Kolber et al., 2010	J. Neurosci. 30:2571-2581
Mutant mice	CRF overproduction	Open-field	FB-CRHOExC57BL/6 mice (8-12-week-old)			o	CRF was over-expressed in	Kolber et al., 2010	J. Neurosci. 30:2571-2581

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							forebrain during entire life		
Mutant mice	CRF overproduction	Light/dark test	FB-CRHOExC57BL/6 mice (8-12-week-old)			o	CRF was over-expressed in forebrain during entire life	Kolber et al., 2010	J. Neurosci. 30:2571-2581
Mutant mice	Urocortin-3 overexpression	Open-field	BALB/cxC57xB6 mice	1 µl lentivirus	rostral perifornical area, 2 weeks	-		Kuperman et al., 2010	Proc. Natl. Acad. Sci. U.S.A. 107:8393-8398
Mutant mice	Urocortin-3 overexpression	Light/dark transfer test	BALB/cxC57xB6 mice	1 µl lentivirus	rostral perifornical area, 2 weeks	-		Kuperman et al., 2010	Proc. Natl. Acad. Sci. U.S.A. 107:8393-8398
Mutant mice	CRF_1 knock-out	Conditioned fear	$CRHR1^{loxP/loxP;Nes\text{-}Cre}$ 129S2xC57BL/6J mice (6-7-week-old)			+	Shocks of 1.5 mA/2 s were applied	Thoeringer et al., 2012	Neuropsychopharmacology 37:787-796
Mutant mice	CRF_1 knock-out	Conditioned fear	$CRHR1^{loxP/loxP;Camk2a\text{-}Cre}$ 129S2xC57BL/6J mice (6-7-week-old)			+	(1) Shocks of 1.5 mA/2 s were applied; (2) Receptor was deleted in forebrain region	Thoeringer et al., 2012	Neuropsychopharmacology 37:787-796
Mutant mice	CRF_1 knock-out	Conditioned fear	129S2xCD1 mice (6-7-week-old)			+	Shocks of 1.5 mA/2 s were applied	Thoeringer et al., 2012	Neuropsychopharmacology 37:787-796
Mutant mice	Urocortin-3 overexpression	Elevated plus-maze	C57BL/6xBALB/c mice (10-14-week-old)			-		Neufeld-Cohen et al., 2012	Biol. Psychiatry 72:437-447
Mutant mice	Urocortin-3 overexpression	Light/dark transfer test	C57BL/6xBALB/c mice (10-14-week-old)			-		Neufeld-Cohen et al., 2012	Biol. Psychiatry 72:437-447
Mutant mice	Urocortin-3 overexpression	Elevated plus-maze	C57BL/6xBALB/c mice (10-14-week-old)			o	Following 30 min of restraint stress	Neufeld-Cohen et al., 2012	Biol. Psychiatry 72:437-447
Mutant mice	Urocortin-3 overexpression	Light/dark transfer test	C57BL/6xBALB/c mice (10-14-week-old)			+	Following 30 min of restraint stress	Neufeld-Cohen et al., 2012	Biol. Psychiatry 72:437-447
Mutant mice	CRF_1 knock-out	Light/dark test	129S2/SvxC57BL/6J mice (3-month-old)			+	Receptor was deleted in forebrain neurons	Wang et al., 2012	Eur. J. Neurosci. 36:2360-2367
Mutant mice	CRF_1 knock-out	Light/dark test	129S2/SvxC57BL/6J mice (3-month-old)			+	(1) Receptor was deleted in forebrain neurons; (2) Animals were subjected to early life stress	Wang et al., 2012	Eur. J. Neurosci. 36:2360-2367

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							between P2 and P9		
Mutant mice	CRF_1 knock-out	Elevated plus-maze	129S2/SvxC57BL/6J mice (3-month-old)			o	Receptor was deleted in forebrain neurons	Wang et al., 2012	Eur. J. Neurosci. 36:2360-2367
Mutant mice	CRF_1 knock-out	Elevated plus-maze	129S2/SvxC57BL/6J mice (3-month-old)			o	(1) Receptor was deleted in forebrain neurons; (2) Animals were subjected to early life stress between P2 and P9	Wang et al., 2012	Eur. J. Neurosci. 36:2360-2367
Mutant mice	CRF_1 knock-out	Open-field	129S2/SvxC57BL/6J mice (3-month-old)			o	Receptor was deleted in forebrain neurons	Wang et al., 2012	Eur. J. Neurosci. 36:2360-2367
Mutant mice	CRF_1 knock-out	Open-field	129S2/SvxC57BL/6J mice (3-month-old)			+	(1) Receptor was deleted in forebrain neurons; (2) Animals were subjected to early life stress between P2 and P9	Wang et al., 2012	Eur. J. Neurosci. 36:2360-2367
Mutant mice+Ethanol withdrawal	CRF_1 knock-out	Light/dark test	129/Ola or CD1 mice			+		Timpl et al., 1998	Nat. Genet. 19:162-166
Mutant mice+Ethanol withdrawal	CRF_1 knock-out	Exploration behavior	Mice			(+)		Kresse et al., 1998	Soc. Neurosci. Abstr. 24:617
Mutant mice+α-hel CRF_{9-41} (1 μg)	CRF_2 receptor-deficient	Elevated plus-maze	129SVJ/C57BL6J-based mice			(-)	No blockade of anxiety-like behavior	Kishimoto et al., 2000	Nat. Genet. 24:415-19
NBI 27914	CRF_1 antagonist	Elevated plus-maze	Rats	5	sc, 60	+		Smagin et al., 1998	Soc. Neurosci. Abstr. 24:1198
NBI 27914	CRF_1 antagonist	Defensive withdrawal	Rats	5	sc, 60	+		Smagin et al., 1998	Soc. Neurosci. Abstr. 24:1198
NBI 27914	CRF_1 antagonist	Stress-induced freezing	Sprague-Dawley rats	1 μg/0.5 μl/side	central nucleus of the amygdala, 0	+	Three electric shocks of 1.5 mA/1 s every 20 s were applied	Bakshi et al., 2002	J. Neurosci. 22:2926-2935
NBI 27914	CRF_1 antagonist	Stress-induced freezing	Sprague-Dawley rats	1 μg/0.5 μl/side	lateral septum, 0	o	Three electric shocks of 1.5 mA/1 s every 20 s were applied	Bakshi et al., 2002	J. Neurosci. 22:2926-2935
NBI 27914	CRF_1 antagonist	Stress-induced freezing	Sprague-Dawley rats (275-325g)	0.1-1 nmol/0.5 μl	dorsal raphe nucleus, 15	o	The drug was given 15 min before inescapable shock, and 24 h prior testing	Hammack et al., 2002	J. Neurosci. 23:1019-1025
NBI 27914	CRF_1 antagonist	Conditioned fear	Sprague-Dawley rats (275-325g)	0.5 nmol/0.5 μl	central amygdala, 15	+	The drug was given 24 h prior testing	Hammack et al., 2002	J. Neurosci. 23:1019-1025

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NBI 27914	CRF_1 antagonist	Free observation	Sprague-Dawley rats (290-320g)	500-1000 ng/0.5 µl/side	lateral septum, 0	o		Bakshi et al., 2007	J. Neurosci. 27:10568-10577
NBI 27914	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	5	ip, 30	+	The drug reversed anxiogenic-like effects in arthritic (by carrageenan) animals	Ji et al., 2007	Mol. Pain 3:13
NBI 27914	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	100 µM	central amygdala, 30	+	The drug reversed anxiogenic-like effects in arthritic (by carrageenan) animals	Ji et al., 2007	Mol. Pain 3:13
NBI 27914	CRF_1 antagonist	Elevated plus-maze	Swiss mice (25-35g)	2 nmol/ 0.1 µl	dorsal PAG, 10	o		Miguel and Nunes-de-Souza, 2011	Horm. Behav. 60:292-300
NBI 27914+CRF (0.04 nmol)	CRF_1 antagonist	Open-field	CD1 mice (19-22g)	0.13-10.2 nmol/2.5 µl	icv, 5	-	No antagonism of the effects of CRF	Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806
NBI 27914+CRF (0.04 nmol)	CRF_1 antagonist	Free observation	CD1 mice (19-22g)	30 nmol/2.5 µl or 20-40 mg/kg	icv, 5 or po, 30	-	No antagonism of the effects of CRF	Pelleymounter et al., 2000	J. Pharmacol. Exp. Ther. 293:799-806
NBI-30775	CRF_1 antagonist	Fear-potentiated startle reflex	Female and male C57BL/6J mice (2/3-month-old)	20	ip, 30	o		Risbrough et al., 2009	Neuropsychopharmacology 34:1494-1503
NBI-30775	CRF_1 antagonist	Open-field	C57BL/6J (8-week-old)	3.5 µg/0.5 µl	globus pallidus, 20	-		Sztainberg et al., 2011	J. Neurosci. 31:17416-17424
NBI-30775	CRF_1 antagonist	Marble burying	C57BL/6J (8-week-old)	3.5 µg/0.5 µl	globus pallidus, 20	-		Sztainberg et al., 2011	J. Neurosci. 31:17416-17424
NBI-30775+CRF_2 knock-out mice	selective CRF_1 receptor antagonist	Fear-potentiated startle reflex	Female and male C57BL/6J mice (2/3-month-old)	20	ip, 30	o		Risbrough et al., 2009	Neuropsychopharmacology 34:1494-1503
NBI3b1996	CRF_1 antagonist	Social interaction	Wistar rats (275-300g)	10-30	ip, 30	+	Restraint stress-induced decrease in social interaction	Gehlert et al., 2005	Eur. J. Pharmacol. 509:145-153
NBI3b1996+urocortin (100 fmol)	CRF_1 antagonist	Social interaction	Wistar rats (275-300g)	10	ip, 30	(o)	The drug blocked the anxiogenic-like effects of intra-basolateral amygdala UCN	Gehlert et al., 2005	Eur. J. Pharmacol. 509:145-153
NGD 98-1	CRF_1 antagonist	Distress vocalizations	Rat pups	MED=20	ip	+		Horvath et al., 2000	XVI Int. Symp. Med. Chem., Bologna, Italy
NGD 98-1	CRF_1	Vogel conflict	Rats	MED=10	ip	+		Horvath et al.,	XVI Int. Symp. Med.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	test						2000	Chem., Bologna, Italy
NGD 98-1	CRF_1 antagonist	Yohimbine-enhanced startle	Rats	MED=5	ip	+		Horvath et al., 2000	XVI Int. Symp. Med. Chem., Bologna, Italy
NGD 98-1	CRF_1 antagonist	Acoustic startle reflex	Rats	MED=5	ip	+	Shock-elicited startle	Horvath et al., 2000	XVI Int. Symp. Med. Chem., Bologna, Italy
NIH-3	CRF_1 antagonist	Shock-probe burying test	Wistar rats (250-300g)	5-20	sc, 45	+	Shock of 1.5 mA was applied	Zorrilla et al., 2003	Eur. Neuropsychopharmacology 13 (Suppl. 4):S130
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Open-field	C57BL/6J (4-month-old)	2 µl	bed nucleus of the stria terminalisdl, 4 month	o		Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Open-field	C57BL/6J (4-month-old)	2 µl	bed nucleus of the stria terminalisdl, 4 month	o	Animals were subjected to restraint stress	Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Open-field	C57BL/6J (4-month-old)	2 µl	central amygdala, 4 month	o		Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Open-field	C57BL/6J (4-month-old)	2 µl	central amygdala, 4 month	+	Animals were subjected to restraint stress	Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Light/dark transfer test	C57BL/6J (4-month-old)	2 µl	bed nucleus of the stria terminalisdl, 4 month	o		Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Light/dark transfer test	C57BL/6J (4-month-old)	2 µl	bed nucleus of the stria terminalisdl, 4 month	o	Animals were subjected to restraint stress	Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Light/dark transfer test	C57BL/6J (4-month-old)	2 µl	central amygdala, 4 month	o		Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Light/dark transfer test	C57BL/6J (4-month-old)	2 µl	central amygdala, 4 month	+	Animals were subjected to restraint stress	Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Acoustic startle reflex	C57BL/6J (4-month-old)	2 µl	bed nucleus of the stria terminalisdl, 4	o		Regev et al., 2011	Mol. Psychiatry 16:714-728

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					month				
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Acoustic startle reflex	C57BL/6J (4-month-old)	2 µl	bed nucleus of the stria terminalisdl, 4 month	o	Animals were subjected to restraint stress	Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Acoustic startle reflex	C57BL/6J (4-month-old)	2 µl	central amygdala, 4 month	o		Regev et al., 2011	Mol. Psychiatry 16:714-728
pCSC-SP-PW-rCRF-TRES/GFP	CRF overproduction	Acoustic startle reflex	C57BL/6J (4-month-old)	2 µl	central amygdala, 4 month	+	Animals were subjected to restraint stress	Regev et al., 2011	Mol. Psychiatry 16:714-728
PD171,729	CRF_1 antagonist	Tonic immobility	Japanese quails	10	ip, 60	o		Richard et al., 2001	Behav. Pharmacol. 12 (Suppl. 1):S82
PD171,729	CRF_1 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	10	ip, 30	+	All defensive behaviors were decreased	Blanchard et al., 2003	Eur. J. Pharmacol. 463:97-116
R121919 (NBI 30775)	CRF_1 antagonist	Elevated plus-maze	Wistar rats bred for high anxiety-related behavior (280-320g)	20	sc, 60	+		Keck et al., 2001	Eur. J. Neurosci. 13:373-380
R121919 (NBI 30775)	CRF_1 antagonist	Elevated plus-maze	Wistar rats bred for low anxiety-related behavior (280-320g)	20	sc, 60	o		Keck et al., 2001	Eur. J. Neurosci. 13:373-380
R121919 (NBI 30775)	CRF_1 antagonist	Elevated plus-maze	Wistar rats (240-300g)	2.5-20	po, 60	+	Elevated plus-maze after swim stress	Heinrichs et al., 2002	Neuropsychopharmacology 27:194-202
R121919 (NBI 30775)	CRF_1 antagonist	Shock-probe burying test	Wistar rats (240-300g)	10-20	po, 60	+		Heinrichs et al., 2002	Neuropsychopharmacology 27:194-202
R121919 (NBI 30775)	CRF_1 antagonist	Defensive withdrawal	Wistar rats (240-300g)	0.63-20	po, 60	+		Heinrichs et al., 2002	Neuropsychopharmacology 27:194-202
R121919 (NBI 30775)	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (225-250g)	10	sc, 60	+		Gutman et al., 2003	J. Pharmacol. Exp. Ther. 304:874-880
R121919 (NBI 30775)	CRF_1 antagonist	Acoustic startle reflex	C57BL/6J mice (6-8-week-old)	20	ip, 70	o		Risbrough et al., 2003	Psychopharmacology 170:178-187
R121919 (NBI 30775)	CRF_1 antagonist	Acoustic startle reflex	129SvEv mice (6-8-week-old)	20	ip, 60	o		Risbrough et al., 2004	J. Neurosci. 24:6545-6552
R121919 (NBI 30775)	CRF_1 antagonist	Holeboard	DBA/2 mice (12-week-old)	1	po, 30	+		Post et al., 2005	Psychopharmacology 180:150-158

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
R121919 (NBI 30775)	CRF_1 antagonist	Light/dark test	DBA/2 mice (12-week-old)	1	po, 30	+		Post et al., 2005	Psychopharmacology 180:150-158
R121919 (NBI 30775)	CRF_1 antagonist	Defensive withdrawal	Sprague-Dawley rats (225-250g)	5	sc, 60	+	R121919 was tested after flumazenil precipitation of withdrawal from lorazepam	Skelton et al., 2007	Psychopharmacology 192:385-396
R121919 (NBI 30775)	CRF_1 antagonist	Holeboard	DBA/2 mice (20-30g, 8-9-week-old)	1	po, for 21 days, o.d.	+	The drug reversed the directed exploration to control level after chronic social defeat	Erhardt et al., 2009	J. Psychopharmacol. 23:31-39
R121919 (NBI 30775)	CRF_1 antagonist	Light/dark test	BALB/c mice (18.9-25.6g)	30	po, 60	+		Takahashi et al., 2012	J. Med. Chem. 55:8450-8463
R278995/CRA0450	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (220-240g)	0.1-3	po, 30	o		Chaki et al., 2004	Eur. J. Pharmacol. 485:145-158
R278995/CRA0450	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (220-240g)	1-3	po, 30	+	The drug reversed heighened anxiety induced by swim stress	Chaki et al., 2004	Eur. J. Pharmacol. 485:145-158
R278995/CRA0450	CRF_1 antagonist	Conflict test	Wistar rats (220-240g)	0.1-10	ip, 30	o	Rats received an electric shock of 0.5 mA/500 ms	Chaki et al., 2004	Eur. J. Pharmacol. 485:145-158
SC241	CRF_1 antagonist	Social interaction				+		Rohrbach et al., 1996	Soc. Neurosci. Abstr. 22:1544
SSR125543	CRF_1 antagonist	Conflict test	Sprague-Dawley rats (180-330g)	20-30	ip, 60	+	The shock intensity was 0.6 mA/500 ms	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-330g)	3-30	po, 60	o		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Stress-induced hyperthermia	Sprague-Dawley rats (180-330g)	3-10	po, 60	+		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Light/dark test	BALB/c mice (17-32g)	1-30	po, 60	o		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Four-plate test	NMRI mice	1-10	po, 60	+	The shock intensity was 1 mA/0.2 ms	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Four-plate test	NMRI mice	3-10	po, o.d. 8 days	+	The shock intensity was 1 mA/0.2 ms	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Four-plate test	NMRI mice	3	po, 2-6 h	+	The shock intensity was 1 mA/0.2 ms	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1	Elevated plus-	CD1 mice (17-	10-30	po, 60	+	Following social	Griebel et al.,	J. Pharmacol. Exp. Ther.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	maze	32g)				defeat	2002	301:333-345
SSR125543	CRF_1 antagonist	Mouse defense test battery	OF1 mice (10-week-old)	3-30	po, 120	+	The drug reduced mainly defensive aggression	Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Distress vocalizations	Guinea pig pups (9-day old)	10	ip, 180	+		Griebel et al., 2002	J. Pharmacol. Exp. Ther. 301:333-345
SSR125543	CRF_1 antagonist	Social interaction	FSL rats (70-75-day-old, 350-370g)	20-30	ip, for 14 days, o.d.	+		Overstreet and Griebel, 2004	Eur. J.Pharmacol. 497:49-53
SSR125543	CRF_1 antagonist	Stress-induced cognitive impairment	Swiss mice (28-32g)	10	ip, 30	+	Object recognition test following rat exposure	Urani et al., 2011	Pharmacol. Biochem. Behav. 98:425-431
SSR125543	CRF_1 antagonist	Social interaction	Alcohol-preferring inbred P rats (210g)	10 µg/5 µl	amygdala, 15	+	Animals were subjected to ethanol deprivation stress	Knapp et al., 2011	Psychopharmacology 218:179-189
SSR125543	CRF_1 antagonist	Social interaction	Alcohol-preferring inbred P rats (210g)	10 µg/5 µl	dorsal raphe nucleus, 15	+	Animals were subjected to ethanol deprivation stress	Knapp et al., 2011	Psychopharmacology 218:179-189
SSR125543	CRF_1 antagonist	Social interaction	Alcohol-preferring inbred P rats (210g)	10 µg/5 µl	nucleus accumbens, 15	o	Animals were subjected to ethanol deprivation stress	Knapp et al., 2011	Psychopharmacology 218:179-189
SSR125543	CRF_1 antagonist	Stress-induced cognitive impairment	Swiss mice (20-22g)	3-30	ip, 60	+	Shocks of 1.5 mA/2 s were applied 2 weeks prior to testing in the object recognition procedure	Philbert et al., 2012	Pharmacol. Biochem. Behav. 102:415-422
SSR125543+dexamethasone (0.5 mg/kg)	CRF_1 antagonist	Stress-induced cognitive impairment	Swiss mice (20-22g)	3-30	ip, 60	+	(1) No interaction; (2) Shocks of 1.5 mA/2 s were applied 2 weeks prior to testing in the object recognition procedure	Philbert et al., 2012	Pharmacol. Biochem. Behav. 102:415-422
$Stressin_1$-A	CRF_1 agonist	Shock-probe burying test	Wistar rats (200-225g)	0.04 nmol/5 µl	icv, 10	-	Shocks of 1.5 mA were delivered	Zhao et al., 2007	J. Pharmacol. Exp. Ther. 323:846-854
$Stressin_1$-A	CRF_1 agonist	Social interaction	Wistar rats (200-225g)	0.04-1 nmol/5 µl	icv, 10	-		Zhao et al., 2007	J. Pharmacol. Exp. Ther. 323:846-854
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Wistar rats (220-250g)	0.1 nmol/5 µl	icv, 30	-		Moreau et al., 1997	Neuroreport 8:1697-1701

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Sprague-Dawley rats (250-275g)	0.1-1 µg	icv, 30	-		Jones et al., 1997	Br. J. Pharmacol. 120 (Suppl.):363P
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Wistar rats	0.01-10 µg/2 µl	icv, 5	o		Spina et al., 1996	Science 273:1561-1564
Urocortin	Endogenous CRF_2 ligand	Light/dark test	BALB/c mice (10 week-old)	0.02-0.06 nmol	icv, 30	-		Moreau et al., 1997	Neuroreport 8:1697-1701
Urocortin	Endogenous CRF_2 ligand	Free observation	Sprague-Dawley rats (250-275g)	0.1-1 µg	icv, 10	-	Grooming was increased	Jones et al., 1997	Br. J. Pharmacol. 120 (Suppl.):363P
Urocortin	Endogenous CRF_2 ligand	Open-field	BALB/c mice (10-week-old)	0.06 nmol	icv, 30	-		Moreau et al., 1997	Neuroreport 8:1697-1701
Urocortin	Endogenous CRF_2 ligand	Free observation	Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 0	-	Grooming was increased	Jones et al., 1998	Psychopharmacology 138:124-132
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Sprague-Dawley rats (250-300g)	1 µg/5 µl	icv, 30	-		Jones et al., 1998	Psychopharmacology 138:124-132
Urocortin	Endogenous CRF_2 ligand	Acoustic startle reflex	Sprague-Dawley rats (250-300g)	1-10 µg/5 µl	icv, 30	o	Ten 50-ms bursts of white noise (100 dB) spaced 60 s apart	Jones et al., 1998	Psychopharmacology 138:124-132
Urocortin	Endogenous CRF_2 ligand	Defensive withdrawal	Rats	0.25	icv	-		Smagin et al., 1998	Soc. Neurosci. Abstr. 24:1198
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-350g)	25-100 fmol/100 nl	basolateral amygdala, 30	-		Sajdyk et al., 1999	Behav. Brain Res. 100:207-215
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-350g)	6 fmol/100 nl	basolateral amygdala, for 3 days	-	Sensitization	Sajdyk et al., 1999	Behav. Brain Res. 100:207-215
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats	3 fmol/100 nl	amygdala, for 5 days	-		Sajdyk et al., 1999	Soc. Neurosci. Abstr. 25:65
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Wistar rats	3 fmol/100 nl	amygdala, for 5 days	-		Sajdyk et al., 1999	Soc. Neurosci. Abstr. 25:65
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300g)	6 fmol/100 nl	amygdala, for 5 days	-		Bergeron et al., 1999	Soc. Neurosci. Abstr. 25:651
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300g)	25 fmol/100 nl	amygdala	-		Bergeron et al., 1999	Soc. Neurosci. Abstr. 25:651
Urocortin	Endogenous CRF_2 ligand	Free observation	White breed prebubertal boars (25kg)	100 µg/400 µl	icv, 0	-	Porcine CRF was used	Parrott et al., 2000	Pharmacol. Biochem. Behav. 65:123-9
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-325g)	60-100 fmol/100 nl	basolateral amygdala	-	Low light familiar condition	Sajdyk and Gehlert, 2000	Brain Res. 877:226-234
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-325g)	6 fmol/100 nl once for 3 days	basolateral amygdala	-	Low light familiar condition	Sajdyk and Gehlert, 2000	Brain Res. 877:226-234

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Wistar rats (200g)	0.01-1 µg/2 µl	icv, 30 and 120	-		Spina et al., 2002	Psychopharmacology 160:113-121
Urocortin	Endogenous CRF_2 ligand	Defensive withdrawal	Wistar rats (200g)	0.1-1 µg/2 µl	icv, 5 and 30	-		Spina et al., 2002	Psychopharmacology 160:113-121
Urocortin	Endogenous CRF_2 ligand	Geller-seifter conflict test	Wistar rats (200g)	0.25-1 µg/2 µl	icv, 30	-		Spina et al., 2002	Psychopharmacology 160:113-121
Urocortin	CRF_2 agonist	Elevated plus-maze	BALB/c mice (18-20g)	0.03-3 nmol/5 µl	icv, 30	-		Pelleymounter et al., 2002	J. Pharmacol. Exp. Ther. 302:145-152
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	25 fmol/100 nl/site	basolateral amygdala, 30	-		Rainnie et al., 2004	J. Neurosci. 24:3471-3479
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	6 fmol/100 nl/site	basolateral amygdala, o.d. for 5 days, 30 min, 1 or 5 weeks	-		Rainnie et al., 2004	J. Neurosci. 24:3471-3479
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Wistar rats (275-300g)	6 fmol/100 nl/site	basolateral amygdala, o.d. for 5 days, 30	-		Rainnie et al., 2004	J. Neurosci. 24:3471-3479
Urocortin	Endogenous CRF_2 ligand	Acoustic startle reflex	C57BL/6J mice (6-8-week-old)	1-6 nmol/5 µl	icv, 60	-		Risbrough et al., 2003	Psychopharmacology 170:178-187
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-350g)	50 fmol/100 nl	basolateral amygdala, 30	-		Spiga et al., 2006	Neuroscience 138:1265-1276
Urocortin	Endogenous CRF_2 ligand	Floor choice test	Wistar rats (275-300g)	100 fmol/100 nl	basolateral amygdala, for 5 days, o.d.	-		Sajdyk et al., 2006	Stress 9:21-28
Urocortin	Endogenous CRF_2 ligand	Free observation	Sprague-Dawley rats (290-320g)	250 ng/0.5 µl/side	lateral septum, 0	-	The drug increased grooming	Bakshi et al., 2007	J. Neurosci. 27:10568-10577
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Sprague-Dawley rats (290-320g)	125 ng/0.5 µl/side	lateral septum, 0	-		Bakshi et al., 2007	J. Neurosci. 27:10568-10577
Urocortin	Endogenous CRF_2 ligand	Free observation	Sprague-Dawley rats (290-320g)	250 ng/0.5 µl/side	icv, 0	o		Bakshi et al., 2007	J. Neurosci. 27:10568-10577
Urocortin	Endogenous CRF_2 ligand	Free observation	Sprague-Dawley rats (290-320g)	250 ng/0.5 µl/side	medial caudate, 0	o		Bakshi et al., 2007	J. Neurosci. 27:10568-10577
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	20-100 fmol/100 nl	bed nucleus of the stria terminalis, 30	-		Lee et al., 2008	Neuropsychopharmacology 33:2586-2594
Urocortin	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	20-100 fmol/100 nl	nucleus accumbens, 30	o		Lee et al., 2008	Neuropsychopharmacology 33:2586-2594
Urocortin	Endogenous	Social	Wistar rats (275-	6 fmol/100	bed nucleus of	-	Anxiogenic-like	Lee et al.,	Neuropsychopharmacology

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	CRF_2 ligand	interaction	300g)	nl for 5 days	the stria terminalis		effects lasted at least 4 weeks	2008	33:2586-2594
Urocortin	Endogenous CRF_2 ligand	Elevated plus-maze	Wistar rats (275-300g)	6 fmol/100 nl for 5 days	bed nucleus of the stria terminalis	o		Lee et al., 2008	Neuropsychopharmacology 33:2586-2594
Urocortin II	CRF_2 agonist	Elevated plus-maze	Wistar rats (200-250g)	1 µg/5 µl	icv, 4 h	+		Valdez et al., 2002	Brain Res. 943:142-150
Urocortin II	CRF_2 agonist	Elevated plus-maze	Wistar rats (200-250g)	1 µg/5 µl	icv, 10 min, 1 or 6 h	o		Valdez et al., 2002	Brain Res. 943:142-150
Urocortin II	CRF_2 agonist	Elevated plus-maze	Wistar rats (200-250g)	1 µg/5 µl	icv, 1, 4 or 6 h	o		Valdez et al., 2002	Brain Res. 943:142-150
Urocortin II	CRF_2 agonist	Conditioned fear	Sprague-Dawley rats (275-325g)	0.00021-0.021 nmol/0.5 µl	dorsal raphe nucleus, 15	-	The drug was given 24 h prior testing	Hammack et al., 2002	J. Neurosci. 23:1019-1025
Urocortin II	CRF_2 agonist	Acoustic startle reflex	C57BL/6 mice (6-8-week-old)	6 nmol/5 µl	icv, 60	-		Risbrough et al., 2004	J. Neurosci. 24:6545-6552
Urocortin II	CRF_2 agonist	Light/dark test	ICR mice	240 pmol/0,25 µl/side	lateral septum, 30	-		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Open-field	ICR mice	240 pmol/0,25 µl/side	lateral septum, 40	-		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Novel object test	ICR mice	48 and 240 pmol/0,25 µl/side	lateral septum, 50	-		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Light/dark test	ICR mice	24-1200 pmol/0,25 µl/side	icv, 30	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Open-field	ICR mice	24-1200 pmol/0,25 µl/side	icv, 40	o	Locomotion was decreased	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Novel object test	ICR mice	24-1200 pmol/0,25 µl/side	icv, 50	o	Locomotion was decreased	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Light/dark test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 30	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Open-field	ICR mice	48 pmol/0,25 µl/side	lateral septum, 40	o		Henry et al., 2006	J. Neurosci. 26:9142-9152

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Urocortin II	CRF_2 agonist	Novel object test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 50	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Light/dark test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 30	-	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Open-field	ICR mice	48 pmol/0,25 µl/side	lateral septum, 40	-	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Novel object test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 50	-	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Light/dark test	C57BL/6x129 genetic background mice	0,48-48 pmol/0,25 µl/side	lateral septum, 30	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Open-field	C57BL/6x129 genetic background mice	0,48-48 pmol/0,25 µl/side	lateral septum, 40	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Novel object test	C57BL/6x129 genetic background mice	0,48-48 pmol/0,25 µl/side	lateral septum, 50	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Light/dark test	C57BL/6x129 genetic background mice	48 pmol/0,25 µl/side	lateral septum, 30	-	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Open-field	C57BL/6x129 genetic background mice	48 pmol/0,25 µl/side	lateral septum, 40	-	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Novel object test	C57BL/6x129 genetic background mice	48 pmol/0,25 µl/side	lateral septum, 50	-	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Light/dark test	C57BL/6x129 genetic background CRF2 knock-out mice	48 pmol/0,25 µl/side	lateral septum, 30	o		Henry et al., 2006	J. Neurosci. 26:9142-9152

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Urocortin II	CRF_2 agonist	Open-field	C57BL/6x129 genetic background CRF2 knock-out mice	48 pmol/0,25 µl/side	lateral septum, 40	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Novel object test	C57BL/6x129 genetic background CRF2 knock-out mice	48 pmol/0,25 µl/side	lateral septum, 50	o		Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Light/dark test	C57BL/6x129 genetic background CRF2 knock-out mice	48 pmol/0,25 µl/side	lateral septum, 30	o	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Open-field	C57BL/6x129 genetic background CRF2 knock-out mice	48 pmol/0,25 µl/side	lateral septum, 40	o	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II	CRF_2 agonist	Novel object test	C57BL/6x129 genetic background CRF2 knock-out mice	48 pmol/0,25 µl/side	lateral septum, 50	o	Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+antalarmin (264-792 pmol/0,25 µl/side)	CRF_2 agonist	Light/dark test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 30	-	No interaction	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+antalarmin (264-792 pmol/0,25 µl/side)	CRF_2 agonist	Open-field	ICR mice	48 pmol/0,25 µl/side	lateral septum, 40	-	No interaction	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+antalarmin (264-792 pmol/0,25 µl/side)	CRF_2 agonist	Novel object test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 50	-	No interaction	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+astressin (24-192 pmol/0,25 µl/side)	CRF_2 agonist	Light/dark test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 30	o	No interaction	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+astressin (24-192 pmol/0,25 µl/side)	CRF_2 agonist	Open-field	ICR mice	48 pmol/0,25 µl/side	lateral septum, 40	o	No interaction	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+astressin (24-192 pmol/0,25 µl/side)	CRF_2 agonist	Novel object test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 50	o	No interaction	Henry et al., 2006	J. Neurosci. 26:9142-9152

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Urocortin II+astressin (24-192 pmol/0,25 µl/side)	CRF_2 agonist	Light/dark test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 30	(o)	(1) Astressin blocked the anxiogenic-like effects of urocortin II; (2) Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+astressin (24-192 pmol/0,25 µl/side)	CRF_2 agonist	Open-field	ICR mice	48 pmol/0,25 µl/side	lateral septum, 40	(o)	(1) Astressin blocked the anxiogenic-like effects of urocortin II; (2) Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin II+astressin (24-192 pmol/0,25 µl/side)	CRF_2 agonist	Novel object test	ICR mice	48 pmol/0,25 µl/side	lateral septum, 50	(o)	(1) Astressin blocked the anxiogenic-like effects of urocortin II; (2) Animals were subjected to a 30-min immobilization stress prior to testing	Henry et al., 2006	J. Neurosci. 26:9142-9152
Urocortin III	CRF_2 agonist	Elevated plus-maze	Wistar rats (200-250g)	0.1-1 µg/5 µl	icv, 10	+		Valdez et al., 2003	Brain Res. 980:206-212
Urocortin III	CRF_2 agonist	Elevated plus-maze	Wistar rats (200-250g)	0.1-10 µg/5 µl	icv, 30 or 60	o		Valdez et al., 2003	Brain Res. 980:206-212
Urocortin III	CRF_2 agonist	Elevated plus-maze	C57BL/6 mice (8-week-old)	20 ng/4 µl	icv, 10	o		Venihaki et al., 2004	J. Neuroendocrinol. 16:411-422
Urocortin III	CRF_2 agonist	Elevated plus-maze	C57BL/6 mice (8-week-old)	20 ng/4 µl	icv, 10	o	No reversal of the anxiogenic-like effects of restraint	Venihaki et al., 2004	J. Neuroendocrinol. 16:411-422
Urocortin III	CRF_2 agonist	Open-field	C57BL/6 mice (8-week-old)	20 ng/4 µl	icv, 5	+		Venihaki et al., 2004	J. Neuroendocrinol. 16:411-422
Urocortin III	CRF_2 agonist	Dark-light emergence test	C57BL/6 mice (8-week-old)	20 ng/4 µl	icv, 10	+		Venihaki et al., 2004	J. Neuroendocrinol. 16:411-422
Urocortin III	CRF_2 agonist	Acoustic startle reflex	129SvEv mice (6-8-week-old)	0.8-2.4 nmol/5 µl	icv, 60	-		Risbrough et al., 2004	J. Neurosci. 24:6545-6552
Urocortin III	CRF_2 agonist	Shock-probe burying test	Wistar rats (200-225g)	0.04-1 nmol/5 µl	icv, 10	o	Shocks of 1.5 mA were delivered	Zhao et al., 2007	J. Pharmacol. Exp. Ther. 323:846-854
Urocortin III	CRF_2 agonist	Social interaction	Wistar rats (200-225g)	0.04-1 nmol/5 µl	icv, 10	o		Zhao et al., 2007	J. Pharmacol. Exp. Ther. 323:846-854

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Urocortin III	CRF_2 agonist	Defensive withdrawal	Wistar rats (200-225g)	2 nmol/5 µl	icv, 10	+		Zhao et al., 2007	J. Pharmacol. Exp. Ther. 323:846-854
Urocortin+alprazolam (1 mg/kg)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	6 fmol/100 nl/site	basolateral amygdala, o.d. for 5 days, 5 weeks	(o)	Alprazolam blocked the anxiogenic-like effects of urocortin priming	Rainnie et al., 2004	J. Neurosci. 24:3471-3479
Urocortin+AP-5 (100 pmol)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	6 fmol/100 nl/site	basolateral amygdala, o.d. for 5 days, 30	(o)	The NMDA antagonist blocked the anxiogenic-like effects of urocortin priming	Rainnie et al., 2004	J. Neurosci. 24:3471-3479
Urocortin+astressin (120 fmol/100 nl)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	6 fmol/100 nl for 5 days	bed nucleus of the stria terminalis	(o)		Lee et al., 2008	Neuropsychopharmacology 33:2586-2594
Urocortin+astressin (60 pmol)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-325g)	100 fmol/100 nl	basolateral amygdala	(o)	(1) Antagonism of the effects of urocortin; (2) Low light familiar condition	Sajdyk and Gehlert, 2000	Brain Res. 877:226-234
Urocortin+CRF_{6-33}	Endogenous CRF_2 ligand	Open-field	Rats	0.1 µg	icv	o		Zorrilla et al., 1998	Soc. Neurosci. Abstr. 24:590
Urocortin+CRF-OH	Endogenous CRF_2 ligand	Open-field	Rats	0.1 µg	icv	o		Zorrilla et al., 1998	Soc. Neurosci. Abstr. 24:590
Urocortin+Diazepam (0.1-1)	Endogenous CRF_2 ligand	Open-field	BALB/c mice (10-week-old)	0.06 nmol	icv, 30	(+)		Moreau et al., 1997	Neuroreport 8:1697-1701
Urocortin+D-Phe CRF_{12-41} (100-100 ng/0.5 µl)	Endogenous CRF_2 ligand	Elevated plus-maze	Sprague-Dawley rats (290-320g)	125 ng/0.5 µl/side	lateral septum, 0	(o)	Antagonism of urocortin-induced increase in grooming	Bakshi et al., 2007	J. Neurosci. 27:10568-10577
Urocortin+KN62 (1 fmol)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	6 fmol/100 nl/site	basolateral amygdala, o.d. for 5 days, 30	(o)	The CaMKII antagonist blocked the anxiogenic-like effects of urocortin priming	Rainnie et al., 2004	J. Neurosci. 24:3471-3479
Urocortin+NBI 27914 (5 mg/kg)	Endogenous peptide	Defensive withdrawal	Rats	0.25-0.5	icv	-		Smagin et al., 1998	Soc. Neurosci. Abstr. 24:1198
Urocortin+NBI 27914 (500-100 ng/0.5 µl)	Endogenous CRF_2 ligand	Elevated plus-maze	Sprague-Dawley rats (290-320g)	125 ng/0.5 µl/side	lateral septum, 0	-	No interaction	Bakshi et al., 2007	J. Neurosci. 27:10568-10577
Urocortin+NBI 27914 (500-100 ng/0.5 µl)	Endogenous CRF_2 ligand	Elevated plus-maze	Sprague-Dawley rats (290-320g)	125 ng/0.5 µl/side	lateral septum, 0	(o)	Antagonism of urocortin-induced increase in grooming	Bakshi et al., 2007	J. Neurosci. 27:10568-10577

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Urocortin+sodium lactate	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-350g)	6 fmol/100 nl	basolateral amygdala, for 3 days	-		Sajdyk et al., 1999	Behav. Brain Res. 100:207-215
Urocortin+sodium lactate (0.5-10 mg/kg)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (300-325g)	6 fmol/100 nl once for 3 days	basolateral amygdala	-	(1) No interaction; (2) Low light familiar condition	Sajdyk and Gehlert, 2000	Brain Res. 877:226-234
Urocortin+sodium lactate (10 mg/kg)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	6 fmol/100 nl/site	basolateral amygdala, o.d. for 3 days, 30	-		Rainnie et al., 2004	J. Neurosci. 24:3471-3479
Urocortin+sodium lactate (10 mg/kg)	Endogenous CRF_2 ligand	Social interaction	Wistar rats (275-300g)	6 fmol/100 nl for 5 days	bed nucleus of the stria terminalis	-	No interaction	Lee et al., 2008	Neuropsychopharmacology 33:2586-2594
Urocortin+α-hel CRF_{9-41} (2.6-8 nmol)	Endogenous CRF_2 ligand	Open-field	BALB/c mice (10-week-old)	0.06 nmol	icv, 30	(+)		Moreau et al., 1997	Neuroreport 8:1697-1701
Urotensin	Endogenous CRF_2 ligand	Elevated plus-maze	Wistar rats	10 µg/2 µl	icv, 5	-	Weak effects	Spina et al., 1996	Science 273:1561-1564
YY941	CRF_1 antagonist	Social interaction				+		Rohrbach et al., 1996	Soc. Neurosci. Abstr. 22:1544
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Acoustic startle reflex	Wistar rats (200-220g)	25 µg/2 µl	icv, 5	o	Rats were presented with five 118 dB white noise bursts	Swerdlow et al., 1989	Neuropsychopharmacology 2:285-292
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Conditioned emotional response	Rats	1-25 µg/5 µl	icv, 30	+	Four pairings of a light stimulus and 0.5 s, 2.1 mA footshock were presented	Cole et al., 1987	Soc. Neurosci. Abstr. 13:427
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Female Sprague-Dawley rats (150-200g)	50 µg	icv	+	Wrapping restraint stress was used	Williams et al., 1987	Am. J. Physiol. 253:G582-6
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Female Sprague-Dawley rats (150-200g)	50 µg	iv	+	Wrapping restraint stress was used	Williams et al., 1987	Am. J. Physiol. 253:G582-6
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Shock-probe burying test	Wistar rats			+		Korte et al., 1994	Physiol. Behav. 56:115-120
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Sprague-Dawley rats (230-335g)	20 µg/2 µl	icv, 20	+	The drug reduced the latency to emerge in an unfamiliar open-field	Takahashi et al., 1989	Behav. Neurosci. 103:648-654
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Sprague-Dawley rats (305g)	20 µg/1 µl	icv, 20	+	Animals were exposed to an open-field containing	Takahashi et al., 1990	Behav. Neurosci. 104:386-389

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							odors of stressed conspecifics		
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Rats	20 µg	icv, 20	+	Experiments were performed in an open-field containing a darkened compartment	Takahashi and Kalin, 1989	In: Ethoexperimental Approaches to the Study of Behavior, pp. 580-592
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Rats	20 µg	icv, 20	+	Experiments were performed in an open-field contained urine and feces collected from a stressed (footshocks) conspecific	Takahashi and Kalin, 1989	In: Ethoexperimental Approaches to the Study of Behavior, pp. 580-592
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	50-100 µg	icv, 60	+		Adamec et al., 1991	J. Psychopharmacol. 5:175-186
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	BALB/c mice (20g)	25-50 µg/5 µl	icv, 60	+		Conti et al., 1994	Pharmacol. Biochem. Behav. 48:497-503
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (300-400g)	5-25 µg	icv, 60	-		Menzaghi et al., 1994	J. Pharmacol. Exp. Ther. 269:564-572
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	50 µg	icv, 60	o	Rats were stressed with repeated handling	Adamec et al., 1991	J. Psychopharmacol. 5:175-186
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-220g)	5-50 µg/5 µl	icv, 30	o		Baldwin et al., 1991	Psychopharmacology 103:227-232
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.001-1 µg/2 µl	icv, 60	o		Biro et al., 1993	Neuroendocrinology 57:340-345
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	NIH mice (20g)	25-50 µg/5 µl	icv, 60	o		Conti et al., 1994	Pharmacol. Biochem. Behav. 48:497-503
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	CD mice (20g)	25-50 µg/5 µl	icv, 60	o		Conti et al., 1994	Pharmacol. Biochem. Behav. 48:497-503
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	CF-1 mice (20g)	25-50 µg/5 µl	icv, 60	o		Conti et al., 1994	Pharmacol. Biochem. Behav. 48:497-503
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.5 µg/0.5 µl	dorsal PAG, 10	o		Martins et al., 1997	Neuroreport 8:3601-3604
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-220g)	250-500 ng/0.5 µl	amygdala, 30	o		Rassnick et al., 1993	Brain Res. 605:25-32
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Exploration behavior	CD1 mice (25-35g)	10-50 µg/4 µl	icv, 45	+	Following restraint stress. The drug increased the time	Berridge and Dunn, 1987	Horm. Behav. 21:393-401

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							spent in contact with novel stimuli		
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Rats	25 µg	icv, 24	+	Rats received footshocks of 1 mA, 1 s each, 20 s apart	Sherman et al., 1987	Soc. Neurosci. Abstr. 13:427
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Geller-Seifter conflict test	Rats	1-25 µg/5 µl	icv, 30	+	Random interval 60 s schedule	Koob, 1991	In: Stress, Neurobiology and Neuroendocrinology, pp. 255-271
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Geller-Seifter conflict test	Wistar rats (200-250g)	25-200 µg	icv, 30	o		Britton et al., 1986	Brain Res. 369:303-306
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Holeboard	Wistar rats (200-250g)	50 µg	icv, 60	+	Rats were stressed with repeated handling and surgery	Adamec et al., 1991	J. Psychopharmacol. 5:175-186
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Isolation-induced behavioral changes	Preweaning guinea pigs	25 µg/5 µl	icv (cannula), 90	+	Vocalizing was increased	Hennessy et al., 1992	Pharmacol. Biochem. Behav. 43:37-43
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Isolation-induced behavioral changes	Preweaning guinea pigs	50 µg	sc, 0	?	Vocalizing and locomotor activity was increased	McInturf and Hennessy, 1996	Physiol. Behav. 60:707-710
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (350-500 g)	5 µg/5 µl	icv, 30	o	Rats received 6 series of electric footshocks (1.5 mA, 180 ms)	Gué et al., 1991	Gastroenterology 100:964-970
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Open-field	Wistar rats (310-330g)	5 µg/5 µl	icv, 30	o		Kumar and Karanth, 1996	J. Neural Transm. 103:1117-1126
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Open-field	BALB/c mice (10 week-old)	0.8-8 nmol	icv, 30	o		Moreau et al., 1997	Neuroreport 8:1697-1701
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Sprague-Dawley rats (250-300g)	25-50 µg	icv, 20	+	Phenylephrine-induced defensive-withdrawal. The drug decreased pattern of defensive-withdrawal	Yang et al., 1990	J. Pharmacol. Exp. Ther. 255:1064-1070
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Fear-potentiated startle reflex	Wistar rats (200-260g)	0.1-0.3 µg	caudal pontine reticular nucleus, 5	+	Unconditioned stimulus was a 0.6 mA footshock	Fendt et al., 1997	Eur. J. Neurosci. 9:299-305
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Fear-potentiated startle reflex	Wistar rats (200-220g)	5-25 µg/2 µl	icv, 5	+	Startle reflex was potentiated by pairing 65 dB sound and 0.4 mA	Swerdlow et al., 1989	Neuropsychopharmacology 2:285-292

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							footshocks		
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Distress vocalizations	Sprague-Dawley rats 5-6 days old)	1 µg/1 µl	icv, 0	?	Vocalizing was increased	Insel and Harbaugh, 1989	Pharmacol. Biochem. Behav. 32:197-201
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Exploration behavior	Mice	10-50 µg	icv, 10	+	Testing was performed in a multicompartment chamber following restraint stress	Berridge and Dunn, 1987	Soc. Neurosci. Abstr. 13:427
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Sprague-Dawley rats (300-350g)	1 µg/300 nl	locus coeruleus, 40	+	Restraint-induced defensive-withdrawal	Smagin et al., 1996	Neurosci. Lett. 220:167-170
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Sprague-Dawley rats (250-300g)	25 µg	icv, 20	+	The drug decreased pattern of defensive-withdrawal	Yang et al., 1990	J. Pharmacol. Exp. Ther. 255:1064-1070
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (250-400g)	20 µg/2 µl	icv, 20	+	Rats received 3 1-s footshocks (0.79 mA) at 20-s intervals	Kalin and Takahashi, 1990	Brain Res. 509:80-84
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (180-200g)	25 µg	icv, 20	+	Rats received 3 1-s footshocks (0.79 mA) at 20-s intervals	Kalin et al., 1988	Brain Res. 457:130-135
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (180-200g)	25 µg	icv, 40	o	Rats received 3 1-s footshocks (0.79 mA) at 20-s intervals	Kalin et al., 1988	Brain Res. 457:130-135
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (275-325g)	5-25 µg	icv, 5	+	Antagonism of the anxiogenic effects of social defeat	Heinrichs et al., 1992	Brain Res. 581:190-197
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (275-325g)	125-500 ng	amygdala, 0	+	Antagonism of the anxiogenic effects of social defeat	Heinrichs et al., 1992	Brain Res. 581:190-197
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (300-400g)	25 µg	icv, 5	+	Following social defeat	Menzaghi et al., 1994	J. Pharmacol. Exp. Ther. 269:564-572
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced increase in arousal	Squirrel monkeys (800-1200g)	10 µg/10 µl	icv, 5	-		Winslow et al., 1989	Pharmacol. Biochem. Behav. 32:919-926
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (300-350 g)	13 nmol/rat	paraventricular nucleus, 15	+	Stress was induced by avoiding water by standing on a small cube	Mönnikes et al., 1993	Gastroenterology 104:716-723
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor	Sprague-Dawley rats (290-370g)	13 nmol/100 nl	paraventricular nucleus, 60	+	Animals were subjected to restraint	Mönnikes et al., 1992	Am. J. Physiol. 262:G137-43

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		alterations					stress		
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (250-300 g)	50 µg/10 µl	icv, 10	+	Stress was induced by avoiding water by standing on a small cube	Bonaz and Taché, 1994	Brain Res. 641:21-28
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-suppressed feeding	Sprague-Dawley rats (300-350g)	50 µg/5 µl	icv, 60	+	Animals were subjected to restraint	Krahn et al., 1986	Brain Res. Bull. 17:285-289
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-240g)	13 nmol/10 µl	intracisternal, 180	+	Stress was induced by abdominal surgery	Hernandez et al., 1993	J. Med. Chem. 36:2860-2867
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced fighting	Wistar rats (180-200g)	5-25 µg/2 µl	icv, 5	+	Pair of rats were exposed to inescapable footshocks (0.6 mA)	Tazi et al., 1987	Regul. Pept. 18:37-42
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (180-220g)	25-50 µg	icv, 20	+	Rats received 3 brief (1.0 s) footshocks at 20-s intervals	Kalin et al., 1988	Brain Res. 457:130-135
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (300-350g)	50-100 ng/1 µl	central amygdaloid nucleus, 3	+	Freezing was induced by 3 footshocks of 1 mA/1 s and animals tested immediately thereafter	Swiergiel et al., 1993	Brain Res. 623:229-234
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (300-350g)	50-100 ng/1 µl	central amygdaloid nucleus, 3	+	Freezing was induced by 3 footshocks of 1 mA/1 s and animals tested 24 hrs later	Swiergiel et al., 1993	Brain Res. 623:229-234
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-250g)	10 µg/5 µl	icv, 15	+	Rats were subjected to partial body restraint	Lenz et al., 1988	Gastroenterology 95:1510-1517
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced colonic motor alterations	Sprague-Dawley rats (200-250g)	10 nmol	iv, 45	o	Rats were subjected to partial body restraint	Lenz et al., 1988	Gastroenterology 95:1510-1517
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Open-field	Wistar rats (300-420g)	10 µg/2 µl	icv, 0	+	Stress was induced by placing rats in water during 60 min	Morimoto et al., 1993	J. Physiol. 460:221-229
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal		20 µg/rat	icv	+		Weidemann et al., 1996	Soc. Neurosci. Abstr. 22:1544

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Social interaction			icv	+		Weidemann et al., 1996	Soc. Neurosci. Abstr. 22:1544
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Rats		icv	o		Jahn et al., 1998	Int. J. Neuropsychopharmacology 1 (Suppl. 1):S186
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Circadian locomotor rhythm	Golden hamsters (110-120g)	2 µg/1 µl	icv	+	Social stress was produced using a resident-intruder confrontation	Seifritz et al., 1998	Pharmacol. Biochem. Behav. 60:855-862
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Light/dark test	AT_2-deficient mice	1-10 µg/5 µl	icv, 20	o	No antagonism of anxiogenic-like effects of AT_2 knockout	Okuyama et al., 1999	Brain Res. 821:150-159
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced weight loss	Sprague-Dawley rats (300g)	50 µg/3 µl	lateral ventricle, 10 before each restraint (x3)	+	(1) Animals were restrained once a day for 3 days; (2) the drugs was active the first day only	Smagin et al., 1999	Am. J. .Physiol. 276:R1461-R1468
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced weight loss	Sprague-Dawley rats (300g)	10 µg/3 µl	third ventricle, 10 before each restraint (x3)	+	Animals were restrained once a day for 3 days	Smagin et al., 1999	Am. J. .Physiol. 276:R1461-R1468
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-suppressed feeding	Wistar rats (180g)	50 µg/5 µl	icv, 15	+	Rats were exposed to stressed (shocked) congeners	Hotta et al., 1999	Brain Res. 823: 221-225
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (275-300g)	100 ng/side/0,5 µl	lateral septum, 0	+	Freezing was elicited by electric footshocks	Bakshi et al., 1999	Soc. Neurosci. Abstr. 25:62
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats (275-300g)		icv, 0	o	Freezing was elicited by electric footshocks	Bakshi et al., 1999	Soc. Neurosci. Abstr. 25:62
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	CRF-deficient mice (129SVJ/C57BL6 background)	25 µg/4 µl	icv, 18	+		Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	129SVJ/C57BL6 background mice	25 µg/4 µl	icv, 18	+		Weninger et al., 1999	Proc. Natl. Acad. Sci. U. S. A. 96:8283-8288
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	129SVJ/C57BL6J-based CRF_2 deficient mice	1 µg/mouse	icv, 30	o		Kishimoto et al., 2000	Nat. Genet. 24:415-19
α-hel CRF_{9-41}	$CRF_{1/2}$	Elevated plus-	Wistar rats (250-	25 µg/5 µl	icv, 5	o		Jahn et al.,	Brain Res. 893:21-28

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist	maze	300g)					2001	
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Ultrasonic distress vocalizations	Wistar rats (9-10-week-old)	20 µg/4 µl	icv, 20	+	(1) Rats were tested for 8 consecutive sessions (acquisition of conditioning); (2) Shock of 1.5 mA	Kikusui et al., 2000	Physiol. Behav. 71:323-328
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Ultrasonic distress vocalizations	Wistar rats (9-10-week-old)	20 µg/4 µl	icv, 15 or 30	+	(1) Rats were tested after conditioning of 8 consecutive sessions; (2) Shock of 1.25 mA	Kikusui et al., 2000	Physiol. Behav. 71:323-328
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats	100 ng/0.5 µl/side	lateral septum, 0	+	Three electric shocks of 1.5 mA/1 s every 20 s were applied	Bakshi et al., 2002	J. Neurosci. 22:2926-2935
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats	100 ng/0.5 µl/side	lateral ventricle, 0	o	Three electric shocks of 1.5 mA/1 s every 20 s were applied	Bakshi et al., 2002	J. Neurosci. 22:2926-2935
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Stress-induced freezing	Sprague-Dawley rats	100 ng/0.5 µl/side	nucleus of the horizontal limb, 0	o	Three electric shocks of 1.5 mA/1 s every 20 s were applied	Bakshi et al., 2002	J. Neurosci. 22:2926-2935
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Defensive withdrawal	Wistar rats (250-300g)	5 µg/5 µl	icv, 30	+	Rats were preshocked (10x6 s, 0.5 mA) two weeks prior to testing	Bruijnzeel et al., 2001	Psychopharmacology 158:132-139
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Conditioned fear	Sprague-Dawley rats (270-300g)	3 µg/0.2 µl/bilateral	basolateral amygdala, 48 h	+	(1) The drug impaired fear memory retention; (2) Shock of 0.55 mA, 1 s	Roozendaal et al., 2002	Proc. Natl. Acad. Sci. U. S. A. 99:13908-13913
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Conditioned fear	Sprague-Dawley rats (270-300g)	3 µg/0.2 µl/bilateral	basolateral amygdala, 48 h	+	(1) The drug impaired fear memory retention; (2) Shock of 0.60 mA, 1.5 s	Roozendaal et al., 2002	Proc. Natl. Acad. Sci. U. S. A. 99:13908-13913
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Light-enhanced startle reflex	Female and male Wistar rats (300-350g)	5 µg/2 µl	icv, 0	+		de Jongh et al., 2003	Biol. Psychiatry 54:1041-1048
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Fear-potentiated startle reflex	Female and male Wistar rats (300-350g)	1-25 µg/2 µl	icv, 0	o		de Jongh et al., 2003	Biol. Psychiatry 54:1041-1048

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	ddY mice (23-28g)	10-20 pmol/5 µl/mouse	icv, 20	o		Nishikawa et al., 2004	Biol. Pharm. Bull. 27:352-356
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	ddY mice (23-28g)	0.38-0.75 pmol/5 µl/mouse	icv, 20	+	Mice were subjected to repeated cold stress prior to testing	Nishikawa et al., 2004	Biol. Pharm. Bull. 27:352-356
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Novelty-suppressed feeding	Sprague-Dawley rats (400-550g)	0.5-3 µg/0.5 µl	amygdala, 20	o		Merali et al., 2004	Eur. J. Neurosci. 20:229-239
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Social interaction	Swiss mice (24-28g)	1-10 nmol/2 µl	icv, 20	+		Umathe et al., 2008	Neuropeptides 42:399-410
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Elevated plus-maze	Sprague-Dawley rats (210-230g)	1 µg/0.26 nmol	paraventricular nucleus thalamus, 5	o		Yonghui Li et al., 2015	Psychopharmacology 212:251-270
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Conditioned fear	Wistar rats (200-240g)	1 µg/5 µl	icv, 15	+	Shocks of 0.8 mA/1 s were applied	Skórzewska et al., 2009	Neuropharmacology 57:148-156
α-hel CRF_{9-41}	$CRF_{1/2}$ antagonist	Open-field	C57BL/6 mice (>50-day-old)	500 ng/200 nl	nucleus accumbens, for 3 days	o		Lemos et al., 2012	Nature 490:402-406
α-hel CRF_{9-41}+BIBP3226 (5 µg, NPY1 antagonist)	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (330-380g)	1 µg/5 µl	icv, 60	(+)		Kask et al., 1997	Neuroreport 8:3645-3647
α-hel CRF_{9-41}+CCK-8 (1 µg)	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.001-1 µg/2 µl	icv, 60	(+)		Biro et al., 1993	Neuroendocrinology 57:340-345
α-hel CRF_{9-41}+CNP (2 µg)	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (250-300g)	25 µg/5 µl	icv, 5	(o)	Antagonism of the anxiogenic-like effects of CNP	Jahn et al., 2001	Brain Res. 893:21-28
α-hel CRF_{9-41}+D-Trp-6-LRH (20 ng/mouse)	$CRF_{1/2}$ antagonist	Social interaction	Swiss mice (24-28g)	0.1 nmol/2 µl	icv, 20	(+)	Potentiation of the anxiolytic-like effects of the CRF antagonist	Umathe et al., 2008	Neuropeptides 42:399-410
α-hel CRF_{9-41}+Ethanol withdrawal	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-220g)	5-25 µg/5 µl	icv, 30	(+)	Antagonism of the anxiogenic effects of ethanol withdrawal	Baldwin et al., 1991	Psychopharmacology 103:227-232
α-hel CRF_{9-41}+Ethanol withdrawal	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-220g)	250 ng/0.5 µl	amygdala, 30	(+)	Antagonism of the anxiogenic effects of ethanol withdrawal	Rassnick et al., 1993	Brain Res. 605:25-32
α-hel CRF_{9-41}+Ethanol withdrawal	$CRF_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (200-220g)	250 ng/0.5 µl	icv, 30	-	No antagonism of the anxiogenic effects of ethanol withdrawal	Rassnick et al., 1993	Brain Res. 605:25-32
α-hel CRF_{9-41}+leuprolide	$CRF_{1/2}$	Social	Swiss mice (24-	0.1 nmol/2	icv, 20	(+)	Potentiation of the	Umathe et al.,	Neuropeptides 42:399-410

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(10 ng/mouse)	antagonist	interaction	28g)	µl			anxiolytic-like effects of the CRF antagonist	2008	
α-hel CRF_{9-41}+nicotine (0.1 mg/kg)	$CRF_{1/2}$ antagonist	Social interaction	Rats	5 µg	icv	(o)	The drug blocked the anxiogenic-like effects of nicotine	Tucci et al., 2002	Eur. Neuropsychopharmacology 12 (suppl. 3): S334
α-hel CRF_{9-41}+Strychnine (0.75 mg/kg)	$CRF_{1/2}$ antagonist	Acoustic startle reflex	Wistar rats (200-220g)	25 µg/2 µl	icv, 5	-	No antagonism of the anxiogenic-like effects of strychnine	Swerdlow et al., 1989	Neuropsychopharmacology 2:285-292

CCK

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
3S-(-)-L-365,260	CCK1/B antagonist	Elevated plus-maze	CD1 mice	0.1-10	ip, 30	o		Rataud et al., 1991	Brain Res. 548:315-317
A-71378	CCK1 agonist	Elevated plus-maze	Guinea pigs (360-440g)	10-40 µg	ip	o		Rex and Fink, 1998	Peptides 19:519-526
Antisense ODN	CCK precursor protein inhibition	Elevated plus-maze	Sprague-Dawley rats		Three days of treatment	+		Cohen et al., 1998	Biol. Psychiatry 44:915-917
Antisense ODN	CCK precursor protein inhibition	Elevated plus-maze	Hooded rats (150-200g)	10 µg/10 µl	icv, for 5 days	-		Cohen et al., 2002	Neuropeptides 36:341-352
Antisense ODN	CCK precursor protein inhibition	Elevated plus-maze	Hooded rats (150-200g)	10 µg/10 µl	icv, for 5 days	-	Rats were pre-exposed to a cat for 10 min	Cohen et al., 2002	Neuropeptides 36:341-352
Antisense ODN	CCK2 blockade	Conditioned fear	Wistar rats (280-440g)	0.5 µg/µl	icv, for 7 days	+	ODN reduced freezing	Tsutsumi et al., 2001	Pharmacopsychiatry 34:232-237
Antisense ODN	CCK precursor protein inhibition	Elevated plus-maze	Wistar rats (150-220g)	10 µg/10 µl	ip, for 5 days	-		Cohen et al., 2004	Depress. Anxiety 20:139-152
Antisense ODN+benzotrip (1 mg/kg)	CCK precursor protein inhibition	Elevated plus-maze	Wistar rats (150-220g)	10 µg/10 µl	ip, for 5 days	-	No blockade of the anxiogenic-like effects of the antisense ODN	Cohen et al., 2004	Depress. Anxiety 20:139-152
Antisense ODN+PD135158 (10 µg/kg)	CCK precursor protein inhibition	Elevated plus-maze	Wistar rats (150-220g)	10 µg/10 µl	ip, for 5 days	(o)	Blockade of the anxiogenic-like effects of the antisense ODN	Cohen et al., 2004	Depress. Anxiety 20:139-152
BC 197	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3	ip, 30	-		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
BC 197	CCK2 agonist	Light/dark test	Mice	0.001-3	ip, 30	-		Daugé and Roques, 1995	In: Cholecystokinin and Anxiety: from Neuron to Behavior, pp. 152-171
BC 197+CI-988	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3	ip, 30	(+)		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
BC 197+CI988 (0.1 mg/kg)	CCK2 agonist	Light/dark test	Mice	0.01	ip, 30	(+)		Daugé and Roques, 1995	In: Cholecystokinin and Anxiety: from Neuron to Behavior, pp. 152-171
BC 264	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.003-300 pmol/0.2 µl	posterior nucleus accumbens, 15	o		Daugé et al., 1990	Synapse 6:73-80
BC 264	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.03-300 pmol/0.2 µl	anterior nucleus accumbens, 15	o		Daugé et al., 1990	Synapse 6:73-80
BC 264	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.03-10	ip, 30	o		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
BC 264	CCK2 agonist	Elevated plus-maze	Vagotomized Wistar rats (250g)	0.3-300 µg/kg	ip, 30	o		Ladurelle et al., 1997	Eur. J. Neurosci. 9:1804-1814
BC 264	CCK2 agonist	Four-hole box	Wistar rats (200-220g)	0.003-300 pmol/0.2 µl	posterior nucleus accumbens, 15	o		Daugé et al., 1990	Synapse 6:73-80
BC 264	CCK2 agonist	Four-hole box	Wistar rats (200-220g)	0.03-300 pmol/0.2 µl	anterior nucleus accumbens, 15	o		Daugé et al., 1990	Synapse 6:73-80
BC 264	CCK2 agonist	Safety signal withdrawal conflict procedure	Wistar rats (300-400g)	0.004-1	ip, 30	o		Charrier et al., 1995	Psychopharmacology 121:127-134
BC 264	CCK2 agonist	Stress-induced freezing	PVG hooded rats (250 g, 16-18-week-old)	0.003	ip, 10	-	Following cat exposure. The drug reversed freezing habituation on day 8	Farook et al., 2004	Neuroci. Lett. 355:205-208
BC 264	CCK2 agonist	Stress-induced freezing	Sprague-Dawley rats (250 g, 16-18-week-old)	0.003	ip, 10	o	Following cat exposure.	Farook et al., 2004	Neuroci. Lett. 355:205-208
BC 264+CI-988	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3	ip, 30	+	Co-administration produced	Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							anxiolytic-like effects		
BC 264+L-365,260	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3	ip, 30	-	No antagonism of the anxiogenic-like effects	Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
BDNL	CCK1/B agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3-3	ip, 30	-		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
BDNL+CI-988	CCK1/B agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3	ip, 30	(+)		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
BDNL+Devazepide	CCK1/B agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3	ip, 30	(+)		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
BDNL+L-365,260	CCK1/B agonist	Elevated plus-maze	Wistar rats (200-220g)	0.3	ip, 30	-	No antagonism of the anxiogenic-like effects	Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
Benzotript	CCK1 antagonist	Exploration behavior	Swiss-Webster mice (20-25g)	0.1-100	ip, 5	o	Mice were confronted with a novel fringed cardboard object	Crawley et al., 1986	J. Pharmacol. Exp. Ther. 236:320-330
Benzotript	CCK1 antagonist	Elevated plus-maze	Wistar rats (150-220g)	1	ip, for 6 days	o		Cohen et al., 2004	Depress. Anxiety 20:139-152
Benzotript+CCK-8s (5 µg)	CCK1 antagonist	Exploration behavior	Swiss-Webster mice (20-25g)	0.1-100	ip, 5	(+)	Mice were confronted with a novel fringed cardboard object	Crawley et al., 1986	J. Pharmacol. Exp. Ther. 236:320-330
BOC-CCK_4	CCK2 agonist	Conflict test	Wistar and Lister rats (225-325g)	0.01-0.05	ip, 30	-		Rex et al., 1994	Neurosci. Lett. 172:139-142
BOC-CCK_4	CCK2 agonist	DPAG stimulation	Wistar rats (300g)	0.1-10	ip, 30	o		Jenck et al., 1996	Eur. Neuropsychopharmacol. 6:291-298
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Vagotomized Wistar rats (250g)	300 µg/kg	ip, 30	-		Ladurelle et al., 1997	Eur. J. Neurosci. 9:1804-1814
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Wistar and Lister rats (225-325g)	0.01	ip, 30	-		Rex et al., 1994	Neurosci. Lett. 172:139-142
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Female coloured-BFA guinea-pigs	0.01	ip, 40	-		Rex et al., 1994	Neuropharmacology 33:559-565

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			(395-445g)						
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Rats	5 µg		-	Animals were brought to the experimental room just before testing	Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Rats	5 µg		o	Animals were handled, habituated and non-isolated	Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats (250-300g)	20 ng/0.5 µl	amygdala, 0	o		Huston et al., 1998	Peptides 19:27-37
BOC-CCK_4	CCK2 agonist	Flight induced by DLH injection into the DPAG	Lister Hooded rats (180-265g)	0.15	ip, 0	-		Mongeau and Marsden, 1997	Biol. Psychiatry 42:335-344
BOC-CCK_4	CCK2 agonist	Light/dark test	Wistar and Lister rats (225-325 g)	0.002 and 0.05	ip, 30	-		Rex et al., 1994	Neurosci. Lett. 172:139-142
BOC-CCK_4	CCK2 agonist	Ultrasonic distress vocalizations	Wistar and Lister rats (225-325g)	0.01	ip, 30	-		Rex et al., 1994	Neurosci. Lett. 172:139-142
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Guinea pigs (360-440g)	10 µg	ip	-		Rex and Fink, 1998	Peptides 19:519-526
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats (250-300g)	1-50 µg	sc, 15	-		Koks et al., 1998	Neuropeptides 32:235-240
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats	0.25-50 µg		-		Koks et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S51
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats	0.25-50 µg		o	Animals were handled	Koks et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S51
BOC-CCK_4	CCK2 agonist	Ultrasonic distress vocalizations	Long Evans hooded rat pups (12-day-old)	5-40 µg	ip, 15	o		Mendella et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S62
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats (250-300g)	10-50 µg	ip, 20	-		Kõks et al., 1999	Neuropeptides 33:63-69
BOC-CCK_4	CCK2 agonist	Ultrasound-induced defense response	Hooded Lister rats (350-400g)	50 µg	ip, 10	-	95 dB ultrasound was given	Voits et al., 1999	Peptides 20:383-386
BOC-CCK_4	CCK2 agonist	Ultrasonic distress vocalizations	Long Evans hooded rat pups (12-day-old)	5-40 µg	ip, 15	o		Mendella et al., 1999	Behav. Pharmacol. 10 (Suppl 1):S61

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Fawn-Hooded rats (12-week-old)	10 µg	ip, 40	+	Rats were individually housed	Lodge et al., 2003	Life Sci. 74:1-12
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Fawn-Hooded rats (12-week-old)	10 µg	ip, 40	+	Rats were group housed	Lodge et al., 2003	Life Sci. 74:1-12
BOC-CCK_4	CCK2 agonist	Elevated plus-maze	Wistar-Kyoto rats (12-week-old)	10 µg	ip, 40	o	Rats were group housed	Lodge et al., 2003	Life Sci. 74:1-12
BOC-CCK_4+L-365,260 (10 µg)	CCK2 agonist	Ultrasound-induced defense response	Hooded Lister rats (350-400g)	50 µg	ip, 10	(o)	(1) Antagonism of the anxiogenic-like effects, (2) 95 dB ultrasound was given	Voits et al., 1999	Peptides 20:383-386
BOC-CCK_4+morphine (1 mg/kg)	CCK2 agonist	Elevated plus-maze	Wistar rats (250-300g)	10 µg	ip, 20	(o)	Antagonism of the anxiolytic-like effects of morphine	Kõks et al., 1999	Neuropeptides 33:63-69
BOC-CCK_4+Naloxone (0.5 mg/kg)	CCK2 agonist	Elevated plus-maze	Rats	1 µg		-		Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
BOC-CCK_4+Naloxone (0.5 mg/kg)	CCK2 agonist	Elevated plus-maze	Wistar rats (250-300g)	1 µg	sc, 15	-	Potentiation of the anxiolgenic-like effects	Koks et al., 1998	Neuropeptides 32:235-240
BOC-CCK_4+Naloxone (10 mg/kg)	CCK2 agonist	Elevated plus-maze	Wistar rats	0.25-50 µg		-	Naloxone potentiated the anxiogenic-like effects	Koks et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S51
BOC-CCK_4+Naloxone (10 mg/kg)	CCK2 agonist	Elevated plus-maze	Wistar rats	0.25-50 µg		(+)	Animals were handled	Koks et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S51
Caerulein	CCK1/B agonist	Elevated plus-maze	Wistar rats	0.05	sc, 15	-		Gacsalyi et al., 1997	Drug Dev. Res. 40:333-348
Caerulein	CCK1/B agonist	Elevated plus-maze	Albino mice (22-25g)	100 ng-10 µg	ip, 15	-		Harro et al., 1992	Naunyn Schmiedeberg's Arch. Pharmacol. 341:62-67
Caerulein	CCK1/B agonist	Elevated plus-maze	Female and male Wistar rats (220-280g)	5 µg	sc, 15	-		Männistö et al., 1994	Naunyn-Schmiedeberg's Arch. Pharmacol. 349:478-484
Caerulein	CCK1/B agonist	Elevated plus-maze	Hooded Lister rats (200-250g)	1-10 nmol/5 µl	icv, 15	-		Singh et al., 1991	Proc. Natl. Acad. Sci. U. S. A. 88:1130-1133
Caerulein	CCK1/B	Elevated plus-maze	Mice			-		Vasar et al.,	Behav. Pharmacol. 5:31

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	agonist							1994	
Caerulein	CCK1/B agonist	Elevated plus-maze	Rats	5 µg		-	Animals were brought to the experimental room just before testing	Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
Caerulein	CCK1/B agonist	Elevated plus-maze	Albino mice (22-25g)	500 ng	ip, 15	o	Animals were handled daily during 10 days	Harro et al., 1992	Naunyn Schmiedeberg's Arch. Pharmacol. 341:62-67
Caerulein	CCK1/B agonist	Elevated plus-maze	Rats	5 µg		o	Animals were handled, habituated and non-isolated	Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
Caerulein	CCK1/B agonist	Elevated plus-maze	Wistar rats (250-300g)	1-5 µg	sc, 15	-		Koks et al., 1998	Neuropeptides 32:235-240
Caerulein+Buspirone (0.12-2.37 µmol/kg)	CCK1/B agonist	Elevated plus-maze	Wistar rats	0.05	sc, 15	-	No antagonism of the anxiogenic effects of caerulein	Gacsalyi et al., 1997	Drug Dev. Res. 40:333-348
Caerulein+Diazepam	CCK1/B agonist	Elevated plus-maze	Albino mice (22-25g)	500 ng	ip, 15	-	No antagonism of the anxiogenic-like effects	Harro et al., 1992	Naunyn Schmiedeberg's Arch. Pharmacol. 341:62-67
Caerulein+L-365,260	CCK1/B agonist	Elevated plus-maze	Rats	5 µg		(+)		Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
Caerulein+Naloxone (0.5 mg/kg)	CCK1/B agonist	Elevated plus-maze	Rats	1 µg		-		Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
Caerulein+Naloxone (0.5 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar rats (250-300g)	1 µg	sc, 15	-	Potentiation of the anxiolgenic-like effects	Koks et al., 1998	Neuropeptides 32:235-240
Caerulein+Proglumide	CCK1/B agonist	Elevated plus-maze	Albino mice (22-25g)	500 ng	ip, 15	(+)		Harro et al., 1992	Naunyn Schmiedeberg's Arch. Pharmacol. 341:62-67
Caerulein+Ritanserin (0.1-2.1 µmol/kg)	CCK1/B agonist	Elevated plus-maze	Wistar rats	0.05	sc, 15	(+)		Gacsalyi et al., 1997	Drug Dev. Res. 40:333-348
Caerulein+Vagotomy	CCK1/B agonist	Elevated plus-maze	Mice			-	Potentiation of the anxiogenic effects of caerulein	Vasar et al., 1994	Behav. Pharmacol. 5:31
CAM-1028	CCK2	Elevated plus-maze	Wistar rats	0.3-10	po, 30	o		Revel et al.,	Behav. Pharmacol. 9:183-194

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist		(175-200g)					1998	
CAM-1028	CCK2 antagonist	Light/dark test	CD1 mice (24-30g)	0.01-1	ip, 20	o		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CAM-1028	CCK2 antagonist	Elevated zero-maze	Wistar rats (175-200g)	0.01-1	po, 30	o		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CAM-1028	CCK2 antagonist	Elevated zero-maze	Wistar rats (175-200g)	0.1	sc, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CAM-1028+Ethanol withdrawal	CCK2 antagonist	Elevated plus-maze	TO mice (25-35g)	0.1-1	sc, 40	(+)		Wilson et al., 1998	Psychopharmacology 137:120-131
CAM-1028+Ethanol withdrawal	CCK2 antagonist	Elevated plus-maze	Wistar rats (75-100g)	1	sc, 40	(+)		Wilson et al., 1998	Psychopharmacology 137:120-131
CAM-1481+Ethanol withdrawal	CCK1 antagonist	Elevated plus-maze	TO mice (25-35g)	0.1-1	sc, 40	-		Wilson et al., 1998	Psychopharmacology 137:120-131
CCK-(1-21)	CCK1 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	o		Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK-(26-29)	CCK1 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	o		Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK-33	CCK1 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	o		Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK-33	CCK1 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	postero-medial nucleus accumbens, 15	o		Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK_4	CCK2 agonist	Acoustic startle reflex	Wistar rats	0.25-25 nM/0.5 µl	basolateral amygdala, 0	-	200 startle stimuli (500 ms; 83, 85, 90, 100 and 120 dB; VI-15 s) were presented	Vaccarino et al., 1997	Soc. Neurosci. Abstr. 23:1621
CCK_4	CCK2 agonist	Acoustic startle reflex	Wistar rats	2.5-250 nM/5 µl	icv, 0	-	200 startle stimuli (500 ms; 83, 85, 90, 100 and 120 dB; VI-15 s) were presented	Vaccarino et al., 1997	Soc. Neurosci. Abstr. 23:1621

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CCK_4	CCK2 agonist	Acoustic startle reflex	Wistar rats	0.25-25 nM/0.5 µl	PAG, 0	o	200 startle stimuli (500 ms; 83, 85, 90, 100 and 120 dB; VI-15 s) were presented	Vaccarino et al., 1997	Soc. Neurosci. Abstr. 23:1621
CCK_4	CCK2 agonist	Acoustic startle reflex	Wistar rats	0.25-25 nM/0.5 µl	hippocampus, 0	o	200 startle stimuli (500 ms; 83, 85, 90, 100 and 120 dB; VI-15 s) were presented	Vaccarino et al., 1997	Soc. Neurosci. Abstr. 23:1621
CCK_4	CCK2 agonist	Acoustic startle reflex	Wistar rats	0.25-25 nM/0.5 µl	prefrontal cortex, 0	o	200 startle stimuli (500 ms; 83, 85, 90, 100 and 120 dB; VI-15 s) were presented	Vaccarino et al., 1997	Soc. Neurosci. Abstr. 23:1621
CCK_4	CCK2 agonist	Acoustic startle reflex	Wistar rats	0.25-25 nM/0.5 µl	nucleus accumbens, 0	o	200 startle stimuli (500 ms; 83, 85, 90, 100 and 120 dB; VI-15 s) were presented	Vaccarino et al., 1997	Soc. Neurosci. Abstr. 23:1621
CCK_4	CCK2 agonist	Conflict test	Rats	2-100 µg		-		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK_4	CCK2 agonist	DPAG stimulation	Wistar rats (300g)	0.03-0.32	iv, 5	o		Jenck et al., 1996	Eur. Neuropsychopharmacol. 6:291-298
CCK_4	CCK2 agonist	DPAG stimulation	Wistar rats (300g)	0.01-3.2	ip, 30	o		Jenck et al., 1996	Eur. Neuropsychopharmacol. 6:291-298
CCK_4	CCK2 agonist	Elevated plus-maze	Female guinea-pigs BFA-outbred (395-445g)	0.01	ip, 40	-		Rex et al., 1997	Neurosci. Lett. 228:79-82
CCK_4	CCK2 agonist	Elevated plus-maze	Guinea-pigs	2-100 µg		-		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK_4	CCK2 agonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	12.5-100 µg	ip, 30	o		Johnson and Rodgers, 1996	Psychopharmacology 124:355-364
CCK_4	CCK2 agonist	Exploration	Female Wistar	0.075	sc, 15	-		Matto et al.,	J. Physiol. Pharmacol. 48:239-

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		behavior	rats (200-250g)					1997	251
CCK_4	CCK2 agonist	Exploration behavior	Swiss-Webster mice (20-25g)	10-200	ip, 5	o	Mice were confronted with a novel fringed cardboard object	Crawley et al., 1986	J. Pharmacol. Exp. Ther. 236:320-330
CCK_4	CCK2 agonist	Free observation	Ovariectomized female Wistar rats (2 months)	5-10 µg	ip, 10	-	Exposure to a clean cloth. Unlike controls rats, animals treated with the drug did not sniff, nor pull the cloth, but they displayed freezing	Pavlasevic et al., 1993	Neuroreport 5:225-228
CCK_4	CCK2 agonist	Flight induced by DLH injection into the DPAG	Lister Hooded rats (180-265g)	0.002/1 µl	PAG, 0	o		Mongeau and Marsden, 1997	Biol. Psychiatry 42:335-344
CCK_4	CCK2 agonist	Flight induced by DLH injection into the DPAG	Lister Hooded rats (180-265g)	0.4-40 µg/20 µl	icv, 0	o		Mongeau and Marsden, 1997	Biol. Psychiatry 42:335-344
CCK_4	CCK2 agonist	Free observation	African green monkeys	5-10 µg	iv, 0	-	The drug engendered frozen immobility	Palmour et al., 1991	Soc. Neurosci. Abstr. 17:1602
CCK_4	CCK2 agonist	Free observation	African green monkeys	0.5-4 µg	iv, 0	-	Animals displayed behaviors indicative of fear	Palmour et al., 1992	Eur. Neuropsychopharmacol. 2:193-195
CCK_4	CCK2 agonist	Light/dark test	Mice	2-100 µg		-		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK_4	CCK2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 nmol	sc	-		Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK_4	CCK2 agonist	Safety signal withdrawal conflict procedure	Wistar rats (300-400g)	0.01-1	sc, 30	o		Charrier et al., 1995	Psychopharmacology 121:127-134
CCK_4	CCK2 agonist	Social interaction	Rats	2-100 µg		o		Fink et al., 1994	Behav. Pharmacol. 5:30

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CCK_4	CCK2 agonist	Tawny owl calls-induced defensive behaviors	Mice			-		Hendrie and Weiss, 1994	Behav. Pharmacol. 5:30
CCK_4	CCK2 agonist	Ultrasonic distress vocalizations	Rats	2-100 µg		-		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK_4	CCK2 agonist	Acoustic startle reflex	Wistar rats	10 µg/ml/kg	iv for 5 days	+	Weak effects	Bush et al., 1998	Soc. Neurosci. Abstr. 24:1438
CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats	10 µg/ml/kg	iv for 5 days	+		Bush et al., 1998	Soc. Neurosci. Abstr. 24:1438
CCK_4	CCK2 agonist	Elevated plus-maze	BALB/c mice (22-27g)	50 µg	ip, 10	-	Transparent elevated plus-maze	Kuribara et al., 1998	J. Pharm. Pharmacol. 50:819-826
CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	-		Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK_4	CCK2 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio et al., 2006	Life Sci. 79:2238-2244
CCK_4	CCK2 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	-	The drug increased latency to escape	Bertoglio et al., 2006	Life Sci. 79:2238-2244
CCK_4	CCK2 agonist	Elevated plus-maze	Wistar rats (250-270g)	0.43-4.3 pmol/side/200 nl	rostrolateral amygdala, 0	-		Pérez de la Mora et al., 2007	Eur. J. Neurosci. 26:3614-3630
CCK_4	CCK2 agonist	Shock-probe burying test	Wistar rats (250-270g)	0.043-4.3 pmol/side/200 nl	rostrolateral amygdala, 0	o		Pérez de la Mora et al., 2007	Eur. J. Neurosci. 26:3614-3630
CCK_4	CCK2 agonist	Conditioned fear	C57BL/6J mice (9-week-old)	25-100 ng/0,5 µl	icv, 30	-	Freezing was measured post-shock (0,7 mA/2 s)	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
CCK_4	CCK2 agonist	Conditioned fear	C57BL/6J mice (9-week-old)	25-100 ng/0,5 µl	icv, 24 h	o	(1) The drug did not affect fear conditioning to context; (2) Shocks of 0,7 mA/2 s were delivered at Day 1	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
CCK_4	CCK2 agonist	Elevated plus-maze	C57BL/6J mice	25-100 ng/0,5	icv, 30	-		Sherrin et al.,	Mol. Psychiatry 14:291-307

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			(9-week-old)	µl				2009	
CCK_4	CCK2 agonist	Elevated plus-maze	Outbred rats (190-220g)	4 µg	ip, 15	-		Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
CCK_4 analog	CCK2 antagonist	Elevated plus-maze	Rats	2 ng	ip	+	Animals had an 'anxious' phenotype	Proskuyakova et al., 2000	Eur. Neuropsychopharmacol. 10 (Suppl. 2):S69
CCK_4 analog	CCK2 antagonist	Elevated plus-maze	Rats	2 ng	ip	o	Animals had a 'non-anxious' phenotype	Proskuyakova et al., 2000	Eur. Neuropsychopharmacol. 10 (Suppl. 2):S69
CCK_4+8-OH-DPAT (0.3 mg/kg)	CCK2 agonist	Elevated plus-maze	Female guinea-pigs BFA-outbred (395-445g)	0.01	ip, 40	(+)		Rex et al., 1997	Neurosci. Lett. 228:79-82
CCK_4+CCK-8s (5 µg)	CCK2 agonist	Exploration behavior	Swiss-Webster mice (20-25g)	200	ip, 5	(+)	Mice were confronted with a novel fringed cardboard object	Crawley et al., 1986	J. Pharmacol. Exp. Ther. 236:320-330
CCK_4+Chlordiazepoxide (1.5 µmol/kg)	CCK2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 nmol	sc	(-)	CCK-4 blocked the inhibitory effect of chlordiazepoxide	Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK_4+Citalopram (10 mg/kg)	CCK2 agonist	Exploration behavior	Female Wistar rats (200-250g)	0.075	sc, 15	-	No antagonism of the anxiogenic effects of CCK_4	Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
CCK_4+Desipramine (10 mg/kg)	CCK2 agonist	Exploration behavior	Female Wistar rats (200-250g)	0.075	sc, 15	-	No antagonism of the anxiogenic effects of CCK_4	Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
CCK4+Devazepide (1 mg/kg)	CCK2 agonist	Exploration behavior	Female Wistar rats (200-250g)	0.075	sc, 15	-	No antagonism of the anxiogenic effects of CCK_4	Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
CCK_4+diazepam (1 mg/kg for 7 days)	CCK2 agonist	Elevated plus-maze	BALB/c mice (22-27g)	50 µg	ip, 10	(o)	Antagonism of the effects of CCK_4. Transparent elevated plus-maze	Kuribara et al., 1998	J. Pharm. Pharmacol. 50:819-826

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CCK_4+GB-115 (0.05 mg/kg)	CCK2 agonist	Elevated plus-maze	Outbred rats (190-220g)	4 µg	ip, 15	(o)	GB-115 is a retroanalogue of CCK_4	Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
CCK_4+honokiol (0,2 mg/kg for 7 days)	CCK2 agonist	Elevated plus-maze	BALB/c mice (22-27g)	50 µg	ip, 10	(o)	Antagonism of the effects of CCK_4. Transparent elevated plus-maze	Kuribara et al., 1998	J. Pharm. Pharmacol. 50:819-826
CCK_4+L-365,260 (1 mg/kg)	CCK2 agonist	Exploration behavior	Female Wistar rats (200-250g)	0.075	sc, 15	(+)		Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
CCK_4+LY225910 (495 pmol/0,5 µl)	CCK2 agonist	Elevated plus-maze	C57BL/6J mice (9-week-old)	100 ng/0,5 µl	icv, 30	(o)	Blockade of the anxiogenic-like effects of CCK4	Sherrin et al., 2009	Mol. Psychiatry 14:291-307
CCK_4+LY262691	CCK2 agonist	Free observation	African green monkeys	5-30 µg	iv, 0	(+)		Palmour et al., 1991	Soc. Neurosci. Abstr. 17:1602
CCK-8s	CCK1/2 agonist	Acoustic startle reflex	Wistar rats	5 ng/0.5 µl	caudal pontine reticular nucleus, 0	-	Rats received 40 startle stimuli (10 kHz, 100 dB SPL, 20 ms) just prior and after drug administration	Fendt et al., 1995	Neuroreport 6:2081-2084
CCK-8s	CCK1/2 agonist	Conflict test	Rats	2-100 µg		o		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK-8s	CCK1/2 agonist	Conflict test	Wistar and Lister rats (225-325g)	0.0002-0.025	ip, 30	o		Rex et al., 1994	Neurosci. Lett. 172:139-142
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-240g)	0.01-1 µg/1 µl	right amygdala, 30	-		Belcheva et al., 1994	Neuropharmacology 33:995-1002
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-240g)	0.01-1 µg/1 µl	left amygdala, 30	-		Belcheva et al., 1994	Neuropharmacology 33:995-1002
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-240g)	0.01-1 µg/1 µl	left and right amygdala, 30	-		Belcheva et al., 1994	Neuropharmacology 33:995-1002
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-250g)	1 µg/2 µl	icv, 30	-		Biro et al., 1993	Neuroendocrinology 57:340-345
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	-		Biro et al., 1997	Neuropeptides 31:281-285
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-220g)	3 fmol/0.2 µl	posterior nucleus	-		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					accumbens, 15				
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.003 pmol/0.2 µl	posterior nucleus accumbens, 15	-		Daugé et al., 1990	Synapse 6:73-80
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (250-300g)	500 ng/0.5 µl	dorsal PAG, 5	-		Guimaraes et al., 1992	In: Multiple Cholecystokinin Receptors in the CNS, pp.149-154
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Outbred female mice (20-25g)	0.0025-0.01	sc, 15	-		Vasar et al., 1994	Neuropharmacology 33:729-735
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-220g)	1-1000 fmol/0.2 µl	anterior nucleus accumbens, 15	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.03 pmol/0.2 µl	anterior nucleus accumbens, 15	o		Daugé et al., 1990	Synapse 6:73-80
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Guinea-pigs	2-100 µg		o		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK-8s	CCK1/2 agonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	12.5-100 µg	ip, 30	o		Johnson and Rodgers, 1996	Psychopharmacology 124:355-364
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar and Lister rats (225-325g)	0.02	ip, 30	o		Rex et al., 1994	Neurosci. Lett. 172:139-142
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (250-300g)	1 ng/0.5 µl	amygdala, 0	o		Huston et al., 1998	Peptides 19:27-37
CCK-8s	CCK1/2 agonist	Elevated zero-maze	Sprague-Dawley rats (200-250g)	0.01-0.1	ip, 30	o		Chopin and Briley, 1993	Psychopharmacology 110:409-414
CCK-8s	CCK1/2 agonist	Exploration behavior	Swiss-Webster mice (20-25g)	5 µg	ip, 5	-	Mice were confronted with a novel fringed cardboard object	Crawley et al., 1986	J. Pharmacol. Exp. Ther. 236:320-330
CCK-8s	CCK1/2 agonist	Four-hole box	Sprague-Dawley rats (200-220g)	1 fmol-100 pmol/1 µl	median nucleus accumbens, 0	-		Daugé et al., 1989	Eur. J. Pharmacol. 163:25-32
CCK-8s	CCK1/2	Four-hole box	Wistar rats	0.1-3	posterior	-		Daugé et al.,	Pharmacol. Biochem. Behav.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	agonist		(200-220g)	fmol/0.2 µl	nucleus accumbens, 15			1989	34:157-163
CCK-8s	CCK1/2 agonist	Four-hole box	Wistar rats (200-220g)	0.003 pmol/0.2 µl	posterior nucleus accumbens, 15	-		Daugé et al., 1990	Synapse 6:73-80
CCK-8s	CCK1/2 agonist	Four-hole box	Wistar rats (200-220g)	1-1000 fmol/0.2 µl	anterior nucleus accumbens, 15	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
CCK-8s	CCK1/2 agonist	Four-hole box	Wistar rats (200-220g)	0.03 pmol/0.2 µl	anterior nucleus accumbens, 15	o		Daugé et al., 1990	Synapse 6:73-80
CCK-8s	CCK1/2 agonist	Light/dark test	CD1 mice (5-week-old)	25-50 ng/1 µl	icv, 15	-		MacNeil et al., 1997	Pharmacol. Biochem. Behav. 58:737-746
CCK-8s	CCK1/2 agonist	Light/dark test	Wistar and Lister rats (225-325g)	0.001-0.005	ip, 30	+		Rex et al., 1994	Neurosci. Lett. 172:139-142
CCK-8s	CCK1/2 agonist	Light/dark test	Mice	2-100 µg		o		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK-8s	CCK1/2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 nmol	sc	-		Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8s	CCK1/2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 pmol	icv	-		Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8s	CCK1/2 agonist	Open-field	Sprague-Dawley rats (200-220g)	100 pmol/1 µl	median nucleus accumbens, 0	-		Daugé et al., 1989	Eur. J. Pharmacol. 163:25-32
CCK-8s	CCK1/2 agonist	Open-field	Sprague-Dawley rats (200-220g)	1 fmol-100 pmol/1 µl	median nucleus accumbens, 0	o	Rats were habituated to the environment	Daugé et al., 1989	Eur. J. Pharmacol. 163:25-32
CCK-8s	CCK1/2 agonist	Social interaction	Rats	2-100 µg		o		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK-8s	CCK1/2 agonist	Ultrasonic distress vocalizations	Rats	2-100 µg		o		Fink et al., 1994	Behav. Pharmacol. 5:30
CCK-8s	CCK1/2 agonist	Ultrasonic distress vocalizations	Wistar and Lister rats	0.005	ip, 30	o		Rex et al., 1994	Neurosci. Lett. 172:139-142

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			(225-325g)						
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Guinea pigs (360-440g)	20 µg	ip	o		Rex and Fink, 1998	Peptides 19:519-526
CCK-8s	CCK1/2 agonist	Ultrasonic distress vocalizations	Long Evans hooded rat pups (12-day-old)	0.5-4 µg	ip, 15	o		Mendella et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S62
CCK-8s	CCK1/2 agonist	Light/dark test	Wistar rats (180-200g)	10 nmol/kg	ip, 30	o		Acosta, 1998	Gen. Pharmacol. 31:637-641
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	-		Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-250g)	0.5-1 µg/0.5 µl	dorsal PAG, 10	-		Netto and Guimarães, 2004	Neuropsychopharmacology 29:101-107
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-250g)	1 µg/0.5 µl	superior colliculus, 10	o		Netto and Guimarães, 2004	Neuropsychopharmacology 29:101-107
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (180-230g)	0.01-0.1 µg/rat	hippocampus CA1, 5	-		Rezayat et al., 2005	Physiol. Behav. 84:775-782
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (250-270g)	4.3 pmol/side/200 nl	rostrolateral amygdala, 0	-		Pérez de la Mora et al., 2007	Eur. J. Neurosci. 26:3614-3630
CCK-8s	CCK1/2 agonist	Shock-probe burying test	Wistar rats (250-270g)	0.043-4.3 pmol/side/200 nl	rostrolateral amygdala, 0	o		Pérez de la Mora et al., 2007	Eur. J. Neurosci. 26:3614-3630
CCK-8s	CCK1/2 agonist	Elevated plus-maze	Wistar rats (220-270g)	0.1 µg/1 µl	ventral hippocampus, 5	-		Moghaddam et al., 2012	Pharmacol. Rep. 64:45-53
CCK-8s+Atropine (2 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	(+)		Biro et al., 1997	Neuropeptides 31:281-285
CCK-8s+bicuculline (0.2 µg/1 µl)	CCK1/2 agonist	Elevated plus-maze	Wistar rats (220-270g)	0.01-0.1 µg/1 µl	ventral hippocampus, 5	(o)		Moghaddam et al., 2012	Pharmacol. Rep. 64:45-53
CCK-8s+bicuculline (1-4 µg/rat intra-CA1)	CCK1/2 agonist	Elevated plus-maze	Wistar rats (180-230g)	0.05 µg/rat	hippocampus CA1, 5	o	No interaction	Rezayat et al., 2005	Physiol. Behav. 84:775-782
CCK-8s+Bicuculline (5 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	-	No antagonism of the anxiogenic effects of CCK-8	Biro et al., 1997	Neuropeptides 31:281-285

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CCK-8s+Chlordiazepoxide (1.5 µmol/kg)	CCK1/B agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 nmol	sc	(-)	CCK-8s blocked the inhibitory effect of chlordiazepoxide	Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8s+Chlordiazepoxide (1.5 µmol/kg)	CCK1/B agonist	Marble burying	Sprague-Dawley rats (160-200g)	12-40 fmol	amygdala	(-)	CCK-8s blocked the inhibitory effect of chlordiazepoxide	Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8s+Chlordiazepoxide (1.5 µmol/kg)	CCK1/B agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 fmol	nucleus accumbens	(o)	CCK-8s did not block the inhibitory effect of chlordiazepoxide	Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8s+CRF antiserum	CCK1/B agonist	Elevated plus-maze	Wistar rats (200-250g)		icv, 30	(+)		Biro et al., 1993	Neuroendocrinology 57:340-345
CCK-8s+Devazepide	CCK1/B agonist	Elevated plus-maze	Wistar rats (200-220g)	3 fmol/0.2 µl	posterior nucleus accumbens, 15	(+)		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
CCK-8s+Devazepide	CCK1/B agonist	Four-hole box	Wistar rats (200-220g)	0.1-3 fmol/0.2 µl	posterior nucleus accumbens, 15	(+)		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
CCK-8s+Haloperidol (0.01 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	(+)		Biro et al., 1997	Neuropeptides 31:281-285
CCK-8s+L-364,718 (CCK1 antagonist)	CCK1/2 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	-	No blockade of the anxiogenic-like effects of CCK-8s	Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK-8s+L-365,260 (CCK2 antagonist)	CCK1/2 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	(o)	Blockade of the anxiogenic-like effects of CCK-8s	Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK-8s+lorglumide (0.1-0.3 µg)	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-250g)	1 µg/0.5 µl	dorsal PAG, 10	+	No antagonism of the anxiogenic-like effects of CCK-8s	Netto and Guimarães, 2004	Neuropsychopharmacology 29:101-107
CCK-8s+Methysergide (5 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	-	No antagonism of the	Biro et al., 1997	Neuropeptides 31:281-285

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							anxiogenic effects of CCK-8		
CCK-8s+muscimol (0,5-1 µg/rat intra-CA1)	CCK1/2 agonist	Elevated plus-maze	Wistar rats (180-230g)	0.05 µg/rat	hippocampus CA1, 5	(o)	Blockade of the anxiolytic-like effects of muscimol	Rezayat et al., 2005	Physiol. Behav. 84:775-782
CCK-8s+Naloxone (0.1 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	(+)		Biro et al., 1997	Neuropeptides 31:281-285
CCK-8s+PD135158 (0.1 µg)	CCK1/2 agonist	Elevated plus-maze	Wistar rats (200-250g)	1 µg/0.5 µl	dorsal PAG, 10	(o)	Antagonism of the anxiogenic-like effects of CCK-8s	Netto and Guimarães, 2004	Neuropsychopharmacology 29:101-107
CCK-8s+Phenoxybenzamine (2 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	-	No antagonism of the anxiogenic effects of CCK-8	Biro et al., 1997	Neuropeptides 31:281-285
CCK-8s+Propranolol (10 mg/kg)	CCK1/B agonist	Elevated plus-maze	Wistar (200-250g)	0.001/2 µl	icv, 30	-	No antagonism of the anxiogenic effects of CCK-8	Biro et al., 1997	Neuropeptides 31:281-285
CCK-8s+α-hel CRF_{9-41}	CCK1/B agonist	Elevated plus-maze	Wistar rats (200-250g)	0.001-1 µg/2 µl	icv, 30	(+)		Biro et al., 1993	Neuroendocrinology 57:340-345
CCK-8us	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	0.1-1000 fmol/0.2 µl	posterior nucleus accumbens, 15	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
CCK-8us	CCK2 agonist	Elevated plus-maze	Wistar rats (200-220g)	10-10000 fmol/0.2 µl	anterior nucleus accumbens, 15	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
CCK-8us	CCK2 agonist	Elevated zero-maze	Sprague-Dawley rats (200-250g)	0.001, 0.01-0.03	ip, 30	-		Chopin and Briley, 1993	Psychopharmacology 110:409-414
CCK-8us	CCK2 agonist	Four-hole box	Wistar rats (200-220g)	0.1-1000 fmol/0.2 µl	posterior nucleus accumbens, 15	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
CCK-8us	CCK2 agonist	Four-hole box	Wistar rats (200-220g)	10-10000 fmol/0.2 µl	anterior nucleus accumbens,	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					15				
CCK-8us	CCK2 agonist	Light/dark test	Swiss mice (25-30g)	0.003-0.3	ip, 30	-		Chopin and Briley, 1993	Psychopharmacology 110:409-414
CCK-8us	CCK2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 nmol	sc	-		Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8us	CCK2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 pmol	icv	-		Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8us	CCK2 agonist	Social interaction	Sprague-Dawley rats (300-340g)	1 nmol/rat	icv, 20	-	LLF	To and Bagdy, 1999	Neuropharmacology 38:279-282
CCK-8us	CCK2 agonist	Social interaction	Sprague-Dawley rats (300-340g)	1 nmol/rat	icv, 20	o	HLU	To and Bagdy, 1999	Neuropharmacology 38:279-282
CCK-8us	CCK2 agonist	Elevated plus-maze	Wistar rats (180-200g)	9 fmol/3 µl	icv, 15	-		Hernandez-Gómez et al., 2002	Amino Acids, 23:283-290
CCK-8us+Chlordiazepoxide (1.5 µmol/kg)	CCK2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 nmol	sc	(-)	CCK-8us blocked the inhibitory effect of chlordiazepoxide	Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8us+Chlordiazepoxide (1.5 µmol/kg)	CCK2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	12-40 fmol	amygdala	(-)	CCK-8us blocked the inhibitory effect of chlordiazepoxide	Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8us+Chlordiazepoxide (1.5 µmol/kg)	CCK2 agonist	Marble burying	Sprague-Dawley rats (160-200g)	1.2-4 fmol	nucleus accumbens	+	CCK-8us did not block the inhibitory effect of chlordiazepoxide	Csonka et al., 1988	In: Peptides, Chemistry, Biology, Interactions with Proteins, pp. 249-252
CCK-8us+Flumazenil (4 mg/kg)	CCK2 agonist	Elevated zero-maze	Sprague-Dawley rats (200-250g)	0.01	ip, 30	(+)		Chopin and Briley, 1993	Psychopharmacology 110:409-414
CCK-8us+fluoxetine (5 mg/kg for 21 days)	CCK2 agonist	Social interaction	Sprague-Dawley rats (300-340g)	1 nmol/rat	icv, 20	(o)	(1) Antagonism of the anxiogenic-like effects of CCK-	To and Bagdy, 1999	Neuropharmacology 38:279-282

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							8; (2) LLF		
CCK-8us+ipsapirone (5 mg/kg for 21 days)	CCK2 agonist	Social interaction	Sprague-Dawley rats (300-340g)	1 nmol/rat	icv, 20	(o)	(1) Antagonism of the anxiogenic-like effects of CCK-8; (2) LLF	To and Bagdy, 1999	Neuropharmacology 38:279-282
CI-1015	CCK2 antagonist	Elevated plus-maze	Rats	1-100 µg/kg	po, 30	+		Trivedi et al., 1998	J. Med. Chem. 41:38-45
CI-1015	CCK2 antagonist	Light/dark test	Mice	10-1000 µg/kg	sc, 30	+		Trivedi et al., 1998	J. Med. Chem. 41:38-45
CI-988	CCK2 antagonist	Conditioned emotional response	Rats	0.01-10		o		Dawson et al., 1995	Psychopharmacology 121:109-117
CI-988	CCK2 antagonist	Conditioned emotional response	Rats	0.001-10	sc, 30	o		Dourish et al., 1994	Behav. Pharmacol. 5:29
CI-988	CCK2 antagonist	Conflict test	Rats	0.01-10		o		Dawson et al., 1995	Psychopharmacology 121:109-117
CI-988	CCK2 antagonist	Conflict test	Squirrel monkeys	0.1-10		o		Dawson et al., 1995	Psychopharmacology 121:109-117
CI-988	CCK2 antagonist	Conflict test	Squirrel monkeys (600-800g)	0.03-3	im, 0	+	A FI 3-min schedule was used	Powell and Barrett, 1991	Neuropeptides 19 (Suppl.):75-78
CI-988	CCK2 antagonist	DPAG stimulation	Wistar rats (300g)	3.2-32	ip, 30	o		Jenck et al., 1996	Eur. Neuropsychopharmacol. 6:291-298
CI-988	CCK2 antagonist	Elevated plus-maze	Rats	0.01-1	sc, 45	+		Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (250-300g)	0.1-10	ip, 40	+		Field et al., 1991	Br. J. Pharmacol. 102:256P
CI-988	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (250-300g)	1	ip, 40	+		Hinks et al., 1996	Eur. J. Pharmacol. 312:153-161
CI-988	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (275-325g)	0.01-1	sc,40	+		Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
CI-988	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.01-10	po, 40	+		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
CI-988	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.1-10 µmol	ip, 40	+		Singh et al., 1991	Proc. Natl. Acad. Sci. U. S. A. 88:1130-1133
CI-988	CCK2 antagonist	Elevated plus-maze	Rats	0.01-1		o		Dawson et al., 1995	Psychopharmacology 121:109-117
CI-988	CCK2 antagonist	Elevated plus-maze	Wistar rats (200-220g)	0.002-0.2	ip, 45	o		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CI-988	CCK2 antagonist	Elevated zero-maze	Lister Hooded rats (250-320g)	0.2	sc, 30	+		Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
CI-988	CCK2 antagonist	Elevated zero-maze	Rats	0.001-10	sc, 30	o		Dourish et al., 1994	Behav. Pharmacol. 5:29
CI-988	CCK2 antagonist	Geller-Seifter conflict test	Hooded Lister rats (200-250g)	0.01	ip, 40	+	A VI30/FR5 schedule was used	Singh et al., 1991	Br. J. Pharmacol. 104:239-245
CI-988	CCK2 antagonist	Human threat	Marmoset	0.01-1	sc, 45	+		Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988	CCK2 antagonist	Human threat	Marmoset (290-390g)	1	sc,40	+		Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
CI-988	CCK2 antagonist	Light/dark test	BKW mice (30-35g)	0.001-0.1	ip, 40	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-1118
CI-988	CCK2 antagonist	Light/dark test	Mice	0.0001-30	sc, 40	+		Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988	CCK2 antagonist	Light/dark test	Mice	0.01	sc, 2-12 h	+		Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988	CCK2 antagonist	Light/dark test	TO mice (25-30g)	0.1-10	ip, 40	+		Field et al., 1991	Br. J. Pharmacol. 102:256P
CI-988	CCK2 antagonist	Light/dark test	Albino mice (Bradford strain, 20-30g)	0.0001-30	po, 40	+		Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
CI-988	CCK2 antagonist	Light/dark test	Albino mice (Bradford strain, 20-30g)	0.0001-10	sc, 40	+		Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
CI-988	CCK2 antagonist	Light/dark test	Albino mice (Bradford strain, 20-30g)		for 7 days (b.i.d.)	+		Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
CI-988	CCK2 antagonist	Light/dark test	TO mice (20-25g)	0.1-1	ip, 40	+		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
CI-988	CCK2 antagonist	Light/dark test	TO mice (20-25g)	0.01-10	po, 40	+		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
CI-988	CCK2 antagonist	Light/dark test	TO mice (20-25g)	1	ip, for 7 days (b.i.d.)	+	Effects was observed 8 hrs after the last injection	Singh et al., 1992	Br. J. Pharmacol. 105:8-10
CI-988	CCK2 antagonist	Safety signal withdrawal conflict procedure	Wistar rats (300-400g)	0.01-1	sc, 30	o		Charrier et al., 1995	Psychopharmacology 121:127-134
CI-988	CCK2 antagonist	Social interaction	Hooded Lister rats (250-300g)	0.01-1	ip, 40	+		Field et al., 1991	Br. J. Pharmacol. 102:256P

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CI-988	CCK2 antagonist	Social interaction	Rats	0.001-1	sc, 45	+	High light unfamiliar condition	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988	CCK2 antagonist	Social interaction	Hooded Lister rats (275-325g)	0.001-1	sc,40	+		Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
CI-988	CCK2 antagonist	Social interaction	Hooded Lister rats (200-250g)	0.01-3	ip, 40	+		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
CI-988	CCK2 antagonist	Elevated plus-maze	Rats	10-10000 µg/kg	po, 40	+		Trivedi et al., 1998	J. Med. Chem. 41:38-45
CI-988	CCK2 antagonist	Light/dark test	Mice	10-10000 µg/kg	sc, 40	+		Trivedi et al., 1998	J. Med. Chem. 41:38-45
CI-988	CCK2 antagonist	Distress vocalizations	Sprague-Dawley rats (250-300g)	2	ip, 30	+	Rats were defeated for 4 days, and reexposed to the resident on day 5	Becker et al., 2001	J. Neurosci.21:262-9
CI-988	CCK2 antagonist	Elevated plus-maze	Fawn-Hooded rats (12-week-old)	0.3	ip, 40	+	Rats were individually housed	Lodge et al., 2003	Life Sci. 74:1-12
CI-988	CCK2 antagonist	Elevated plus-maze	Fawn-Hooded rats (12-week-old)	0.3	ip, 40	+	Rats were group housed	Lodge et al., 2003	Life Sci. 74:1-12
CI-988	CCK2 antagonist	Elevated plus-maze	Wistar-Kyoto rats (12-week-old)	0.3	ip, 40	o	Rats were group housed	Lodge et al., 2003	Life Sci. 74:1-12
CI-988	CCK2 antagonist	Stress-induced hyperalgia	Sprague-Dawley rats (250-300g)	2	ip, 40	+	The drug reversed hyperalgia induced by social defeat	Andre et al., 2005	J. Neurosci. 25:7896-7004
CI-988+Alcohol withdrawal	CCK2 antagonist	Light/dark test	Mice	1	ip	(+)	Antagonism of the anxiogenic effects of alcohol withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988+Cocaine withdrawal	CCK2 antagonist	Light/dark test	Mice	1	ip	(+)	Antagonism of the anxiogenic effects of cocaine withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CI-988+Diazepam withdrawal	CCK2 antagonist	Light/dark test	Mice	1	ip	(+)	Antagonism of the anxiogenic effects of diazepam withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988+Diazepam withdrawal	CCK2 antagonist	Light/dark test	Albino mice (Bradford strain, 20-30g)			(+)	Antagonism of the anxiogenic-like effects of diazepam withdrawal	Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
CI-988+Diazepam withdrawal	CCK2 antagonist	Light/dark test	TO mice (20-25g)	1	ip, for 7 days (b.i.d.)	(+)		Singh et al., 1992	Br. J. Pharmacol. 105:8-10
CI-988+Ethanol withdrawal	CCK2 antagonist	Elevated plus-maze	TO mice (25-35g)	0.1-1	sc, 40	(+)		Wilson et al., 1998	Psychopharmacology 137:120-131
CI-988+morphine (4 mg/kg)	CCK2 antagonist	Stress-induced hyperalgia	Sprague-Dawley rats (250-300g)	2	ip, 40	+	The combination completely suppressed pain-related behavior	Andre et al., 2005	J. Neurosci. 25:7896-7004
CI-988+Nicotine withdrawal	CCK2 antagonist	Light/dark test	Mice	1	ip	(+)	Antagonism of the anxiogenic effects nicotine withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
CI-988+Pentagastrin	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.5-5 µmol	ip, 15	(+)		Singh et al., 1991	Proc. Natl. Acad. Sci. U. S. A. 88:1130-1133
CI-988+PTZ	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.5-5 µmol	ip, 15	-	No antagonism of the anxiogenic-like effects of PTZ	Singh et al., 1991	Proc. Natl. Acad. Sci. U. S. A. 88:1130-1133
CI-988+Ritanserin (1 mg/kg)	CCK2 antagonist	Light/dark test	BKW mice (30-35g)	0.001-0.1	ip, 40	+	No interaction	Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-1118
CI-988+Zimelidine (3-6 mg/kg)	CCK2 antagonist	Elevated zero-maze	Lister Hooded rats (250-320g)	0.1-0.2	sc, 30	o	No interaction	Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
Compound **10**	CCK2 antagonist	Elevated plus-maze	Mice	0.001-1	ip, 30	o	The drug is an amino acid-derived piperidide	Holladay et al., 1995	Bioorg. Med. Chem. Lett. 5:3057-3062
Compound **24**	CCK2 antagonist	Elevated plus-maze	Mice	0.1	ip, 30	+	The drug is an amino acid-derived piperidide	Holladay et al., 1995	Bioorg. Med. Chem. Lett. 5:3057-3062

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound **24**	CCK1 antagonist	Elevated plus-maze	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **24**	CCK1 antagonist	Light/dark test	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **28**	CCK1 antagonist	Elevated plus-maze	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **28**	CCK1 antagonist	Light/dark test	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **31**	CCK1 antagonist	Elevated plus-maze	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **31**	CCK1 antagonist	Light/dark test	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **33**	CCK1 antagonist	Elevated plus-maze	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **33**	CCK1 antagonist	Light/dark test	IRC mice	0.05-20	ip, 30	o		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **36**	CCK2 antagonist	Elevated plus-maze	Mice	0.001	ip, 30	+	The drug is an amino acid-derived piperidide	Holladay et al., 1995	Bioorg. Med. Chem. Lett. 5:3057-3062
Compound **37**	CCK1 antagonist	Elevated plus-maze	IRC mice	0.1	ip, 30	+		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **37**	CCK1 antagonist	Light/dark test	IRC mice	0.1	ip, 30	+		Offel et al., 2006	Arch. Pharm. (Weinheim) 339:163-173
Compound **3a**	CCK2 antagonist	Elevated plus-maze	Rats	0.1-1	po, 40	+		Padia et al., 1998	J. Med. Chem. 41:1042-1049
Compound **3a**	CCK1 antagonist	Elevated plus-maze	IRC mice	0.1-10	ip, 30	o		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401
Compound **3a**	CCK1 antagonist	Light/dark test	IRC mice	0.1-10	ip, 30	o		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401
Compound **4c**	CCK1 antagonist	Elevated plus-maze	IRC mice	5-10	ip, 30	+		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401
Compound **4c**	CCK1 antagonist	Light/dark test	IRC mice	5-10	ip, 30	+		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401
Compound **4d**	CCK1 antagonist	Elevated plus-maze	IRC mice	5-10	ip, 30	+		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401
Compound **4d**	CCK1 antagonist	Light/dark test	IRC mice	5-10	ip, 30	+		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401
Compound **4e**	CCK1 antagonist	Elevated plus-maze	IRC mice	0.1-10	ip, 30	o		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound **4e**	CCK1 antagonist	Light/dark test	IRC mice	0.1-10	ip, 30	o		Lattman et al., 2006	J. Pharm. Pharmacol. 58:393-401
Compound **51**	CCK2 antagonist	Elevated plus-maze	Rats	1	po, 40	+		Padia et al., 1998	J. Med. Chem. 41:1042-1049
Compound **61**	CCK2 antagonist	Elevated plus-maze	Rats	1	po, 40	+		Padia et al., 1998	J. Med. Chem. 41:1042-1049
Compound **7**	CCK2 antagonist	Elevated plus-maze	Rats	0.1-10 μg/kg	po, 40	+		Trivedi et al., 1998	J. Med. Chem. 41:38-45
Compound **7**	CCK2 antagonist	Light/dark test	Mice	1-1000 μg/kg	sc, 40	+		Trivedi et al., 1998	J. Med. Chem. 41:38-45
CR 1795	CCK1 antagonist	Elevated plus-maze	Wistar rats (175-200g)	1	po, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 1795	CCK1 antagonist	Light/dark test	CD1 mice (24-30g)	0.1-10	ip, 20	o		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 1795	CCK1 antagonist	Elevated zero-maze	Wistar rats (175-200g)	1-10	po, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 1795	CCK1 antagonist	Elevated zero-maze	Wistar rats (175-200g)	1-10	sc, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 1795	CCK1 antagonist	Elevated zero-maze	Wistar rats (175-200g)	1	sc, for 7 days (b.i.d.)	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 2945	CCK2 antagonist	Elevated plus-maze	Wistar rats (175-200g)	0.1-10	po, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 2945	CCK2 antagonist	Light/dark test	CD1 mice (24-30g)	1	ip, 20	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 2945	CCK2 antagonist	Elevated zero-maze	Wistar rats (175-200g)	1-10	po, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 2945	CCK2 antagonist	Elevated zero-maze	Wistar rats (175-200g)	1-10	sc, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 2945	CCK2 antagonist	Conflict test	Wistar rats (175-200g)	10	po, 30	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 2945	CCK2 antagonist	Elevated zero-maze	Wistar rats (175-200g)	10	sc, for 7 days (b.i.d.)	+		Revel et al., 1998	Behav. Pharmacol. 9:183-194
CR 2945	CCK2 antagonist	Elevated plus-maze	C57BL/6J mice (8-week-old)		ip, 15	o	Animals were exposed to immobilization stress prior to testing	Wang et al., 2011	Pharmacol. Biochem. Behav. 98:362-368
CR 2945+Antalarmin	CCK2 antagonist	Elevated plus-maze	C57BL/6J mice (8-week-old)		ip, 15	(+)	(1) Synergistic effect, (2) Animals were	Wang et al., 2011	Pharmacol. Biochem. Behav. 98:362-368

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							exposed to immobilization stress prior to testing		
Devazepide	CCK1 antagonist	Conditioned emotional response	Rats	0.001-10	sc, 30	o		Dourish et al., 1994	Behav. Pharmacol. 5:29
Devazepide	CCK1 antagonist	Elevated plus-maze	Lister Hooded rats (7 days)	0.015	sc, 30	+	Rats were reared from weaning (21 days) in social groups (5/cage)	Bickerdike and Marsden, 1994	J. Psychopharmacol. 8:A47
Devazepide	CCK1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	1-10 µg	sc, 30	+		Ravard et al., 1990	Br. J. Pharmacol. 101:576P
Devazepide	CCK1 antagonist	Elevated plus-maze	Lister Hooded rats (7 days)	0.015	sc, 30	o	Rats were reared from weaning (21 days) individually	Bickerdike and Marsden, 1994	J. Psychopharmacol. 8:A47
Devazepide	CCK1 antagonist	Elevated plus-maze	Wistar rats (200-220g)	0.1-0.2	ip, 45	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
Devazepide	CCK1 antagonist	Elevated plus-maze	Wistar rats (200-220g)	0.002-0.2	ip, 45	o		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
Devazepide	CCK1 antagonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	0.001-1	ip, 30	o		Johnson and Rodgers, 1996	Psychopharmacology 124:355-364
Devazepide	CCK1 antagonist	Elevated plus-maze	Female and male Wistar rats (220-280g)	1-100 µg	ip, 30	o		Männistö et al., 1994	Naunyn-Schmiedeberg's Arch. Pharmacol. 349:478-484
Devazepide	CCK1 antagonist	Elevated plus-maze	CD1 mice	0.1-10	ip, 30	o		Rataud et al., 1991	Brain Res. 548:315-317
Devazepide	CCK1 antagonist	Elevated plus-maze	Outbred female mice (20-25g)	0.0001-0.1	ip, 30	o		Vasar et al., 1994	Neuropharmacology 33:729-735
Devazepide	CCK1 antagonist	Elevated zero-maze	Lister Hooded rats (7 days)	0.015	sc, 30	+	Rats were reared from weaning (21 days) in social groups (5/cage)	Bickerdike and Marsden, 1994	J. Psychopharmacol. 8:A47
Devazepide	CCK1 antagonist	Elevated zero-maze	Lister Hooded rats (250-320g)	0.015	sc, 30	+		Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
Devazepide	CCK1	Elevated zero-maze	Sprague-	0.01-0.3	ip, 30	+		Chopin and	Psychopharmacology

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist		Dawley rats (200-250g)					Briley, 1993	110:409-414
Devazepide	CCK1 antagonist	Elevated zero-maze	Rats	0.001-10	sc, 30	+		Dourish et al., 1994	Behav. Pharmacol. 5:29
Devazepide	CCK1/B antagonist	Elevated zero-maze	Lister Hooded rats (7 days)	0.015	sc, 30	o	Rats were reared from weaning (21 days) individually	Bickerdike and Marsden, 1994	J. Psychopharmacol. 8:A47
Devazepide	CCK1 antagonist	Elevated zero-maze	Female Wistar rats (200-250g)	0.01-1	ip, 30	o		Matto et al., 1997	Neuropharmacology 36:389-396
Devazepide	CCK1 antagonist	Exploration behavior	Female Wistar rats (200-250g)	1	ip, 30	o		Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
Devazepide	CCK1 antagonist	Four-hole box	Wistar rats (200-220g)	0.1-0.2	ip, 45	o		Daugé et al., 1989	Pharmacol. Biochem. Behav. 34:157-163
Devazepide	CCK1 antagonist	Light/dark test	Swiss mice (20-25g)	0.1	ip, 30	+		Ballaz et al., 1997	Br. J. Pharmacol. 121:759-767
Devazepide	CCK1 antagonist	Light/dark test	Swiss mice (25-30g)	0.001-0.3	ip, 30	+		Chopin and Briley, 1993	Psychopharmacology 110:409-414
Devazepide	CCK1 antagonist	Light/dark test	BKW mice (30-35g)	0.1-1	ip, 40	+		Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-1118
Devazepide	CCK1 antagonist	Light/dark test	DBA/2 mice (20-25g)	0.0005-0.005	ip, 30	+		Hendrie and Dourish, 1990	Br. J. Pharmacol. 99:138P
Devazepide	CCK1 antagonist	Light/dark test	DBA/2 mice (20-30g)	0.05-5000 µg	30	+		Hendrie et al., 1993	Physiol. Behav. 54:689-693
Devazepide	CCK1 antagonist	Light/dark test	TO mice (20-25g)	0.5-20	ip, 40	o		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
Devazepide	CCK1 antagonist	Safety signal withdrawal conflict procedure	Wistar rats (300-400g)	0.001-1	sc, 30	o		Charrier et al., 1995	Psychopharmacology 121:127-134
Devazepide	CCK1 antagonist	Social interaction	Hooded Lister rats (200-250g)	5-40	ip, 40	o		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
Devazepide	CCK1 antagonist	Vogel conflict test	Wistar rats (190-210g)	0.2	ip, 30	+	Animals received an electric shock of 0.1 mA, 2 s every 20 licks	Ballaz et al., 1997	Br. J. Pharmacol. 121:759-767
Devazepide+Caerulein	CCK1/B antagonist	Elevated plus-maze	Mice			-	Potentiation of the anxiogenic effects of caerulein	Vasar et al., 1994	Behav. Pharmacol. 5:31

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Devazepide+Caerulein (5 µg)	CCK1/B antagonist	Elevated plus-maze	Female and male Wistar rats (220-280g)	1-100 µg	ip, 30	-	The anxiogenic-like effects were potentiated	Männistö et al., 1994	Naunyn-Schmiedeberg's Arch. Pharmacol. 349:478-484
Devazepide+CCK-8 (0.0025 mg/kg)	CCK1/B antagonist	Elevated plus-maze	Outbred female mice (20-25g)	0.0001-0.1	ip, 30	-	Potentiation of the anti-exploratory effects of CCK-8. Probably non-specific effects.	Vasar et al., 1994	Neuropharmacology 33:729-735
Devazepide+Citalopram (10 mg/kg)	CCK1/B antagonist	Exploration behavior	Female Wistar rats (200-250g)	1	ip, 30	o	No interaction	Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
Devazepide+Desipramine (10 mg/kg)	CCK1/B antagonist	Exploration behavior	Female Wistar rats (200-250g)	1	ip, 30	o	No interaction	Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
Devazepide+Flumazenil (4 mg/kg)	CCK1/B antagonist	Elevated zero-maze	Sprague-Dawley rats (200-250g)	0.01	ip, 30	(o)	Antagonism of the anxiolytic-like effects	Chopin and Briley, 1993	Psychopharmacology 110:409-414
Devazepide+Ritanserin (1 mg/kg)	CCK1/B antagonist	Light/dark test	BKW mice (30-35g)	0.001-1	ip, 40	+	Potentiation of the anxiolytic-like effects of Devazepide	Costall and Naylor, 1997	Br. J. Pharmacol. 122:1105-1118
Devazepide+Wy 27587 (6 mg/kg, SSRI)	CCK1/B antagonist	Elevated zero-maze	Rats	0.001-10	sc, 30	(-)	Antagonism of the anxiolytic-like effects	Dourish et al., 1994	Behav. Pharmacol. 5:29
Devazepide+Wy27587 (3-6 mg/kg)	CCK1/B antagonist	Elevated zero-maze	Lister Hooded rats (250-320g)	0.015	sc, 30	(o)	Antagonism of the anxiolytic effects of Devazepide	Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
Devazepide+Zimelidine (3 mg/kg)	CCK1/B antagonist	Elevated zero-maze	Rats	0.001-10	sc, 30	(o)	Antagonism of the anxiolytic-like effects	Dourish et al., 1994	Behav. Pharmacol. 5:29
Devazepide+Zimelidine (3-6 mg/kg)	CCK1/B antagonist	Elevated zero-maze	Lister Hooded rats (250-320g)	0.015	sc, 30	(o)	Antagonism of the anxiolytic effects of Devazepide	Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
GB-104	CCK2 agonist	Elevated plus-maze	Outbred rats (190-220g)	0.2	ip, 15	-		Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
GB-104+GB-115 (0.05 mg/kg)	CCK2 agonist	Elevated plus-maze	Outbred rats (190-220g)	0.2	ip, 15	(o)		Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
GB-115	CCK2 antagonist	Elevated plus-maze	Outbred rats (190-220g)	0.05	ip, 15	+		Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GB-115	CCK2 antagonist	Elevated plus-maze	BALB/c mice (20-22g)	0.025	ip, 15	+		Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
GB-115	CCK2 antagonist	Elevated plus-maze	C57BL/6 mice (20-22g)	0.025	ip, 15	o		Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
GB-115+yohimbine (5 mg/kg)	CCK2 antagonist	Elevated plus-maze	BALB/c mice (20-22g)	0.025	ip, 15	(+)		Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
GB-115+yohimbine (5 mg/kg)	CCK2 antagonist	Elevated plus-maze	C57BL/6 mice (20-22g)	0.025	ip, 15	-	No interaction	Kolik et al., 2012	Bull. Exp. Biol. Med. 153:851-854
GV191869X	CCK2 antagonist	Light/dark test	Mice	MED=0.01 µg		+		Corsi et al., 1998	Br. J. Pharmacol. 123 (Suppl.):249P
GV191869X	CCK2 antagonist	Human threat	Marmoset	MED=0.01 µg		+		Corsi et al., 1998	Br. J. Pharmacol. 123 (Suppl.):249P
IQM-95,333	CCK1 antagonist	Light/dark test	Swiss mice (20-25g)	0.01-5	ip, 30	+		Ballaz et al., 1997	Br. J. Pharmacol. 121:759-767
IQM-95,333	CCK1 antagonist	Vogel conflict test	Wistar rats (190-210g)	0.5-1	ip, 30	+	Animals received an electric shock of 0.1 mA, 2s every 20 licks	Ballaz et al., 1997	Br. J. Pharmacol. 121:759-767
L-365,031	CCK1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.01-100 µg	sc, 30	o		Ravard et al., 1990	Br. J. Pharmacol. 101:576P
L-365,031	CCK1 antagonist	Light/dark test	DBA/2 mice (20-30g)	5 µg	30	+		Hendrie et al., 1993	Physiol. Behav. 54:689-693
L-365,260	CCK2 antagonist	Acoustic startle reflex	Rats	2	ip, 2 h	+	Animals underwent amphetamine withdrawals	Bush et al., 1997	J. Psychopharmacol. 11:A9
L-365,260	CCK2 antagonist	Acoustic startle reflex	Rats	2	ip, 2 h	o		Bush et al., 1997	J. Psychopharmacol. 11:A9
L-365,260	CCK2 antagonist	Conditioned emotional response	Rats	0.0001-0.1		o		Dawson et al., 1995	Psychopharmacology 121:109-117
L-365,260	CCK2 antagonist	Conditioned emotional response	Rats	0.001-10	sc, 30	o		Dourish et al., 1994	Behav. Pharmacol. 5:29
L-365,260	CCK2 antagonist	Conflict test	Rats	0.0001-0.1		o		Dawson et al., 1995	Psychopharmacology 121:109-117
L-365,260	CCK2 antagonist	Conflict test	Squirrel monkeys	1-50		o		Dawson et al., 1995	Psychopharmacology 121:109-117
L-365,260	CCK2 antagonist	DPAG stimulation	Wistar rats (300g)	3.2-32	ip, 30	+		Jenck et al., 1996	Eur. Neuropsychopharmacol. 6:291-298

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
L-365,260	CCK2 antagonist	Elevated plus-maze	Rats	0.001	for 14 days (b.i.d.)	-		Vasar et al., 1997	Biol. Psychiatry 42:196S
L-365,260	CCK2 antagonist	Elevated plus-maze	CD1 mice	0.01-1	ip, 30	+		Rataud et al., 1991	Brain Res. 548:315-317
L-365,260	CCK2 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	1-10 µg	sc, 30	+		Ravard et al., 1990	Br. J. Pharmacol. 101:576P
L-365,260	CCK2 antagonist	Elevated plus-maze	Female coloured-BFA guinea-pigs (395-445g)	0.1	ip, 30	+		Rex et al., 1994	Neuropharmacology 33:559-565
L-365,260	CCK2 antagonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.25-25 µmol	ip, 40	+		Singh et al., 1991	Proc. Natl. Acad. Sci. U. S. A. 88:1130-1133
L-365,260	CCK2 antagonist	Elevated plus-maze	Rats	1-100 µg		+		Vasar, 1997	J. Psychopharmacol. 11 (Suppl.):A93
L-365,260	CCK2 antagonist	Elevated plus-maze	Rats	0.00001-10		o		Dawson et al., 1995	Psychopharmacology 121:109-117
L-365,260	CCK2 antagonist	Elevated plus-maze	Wistar rats (200-220g)	0.002-0.02	ip, 45	o		Derrien et al., 1994	Pharmacol. Biochem. Behav. 49:133-141
L-365,260	CCK2 antagonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	0.001-1	ip, 30	o		Johnson and Rodgers, 1996	Psychopharmacology 124:355-364
L-365,260	CCK2 antagonist	Elevated plus-maze	Female and male Wistar rats (220-280g)	1-100 µg	ip, 30	o		Männistö et al., 1994	Naunyn-Schmiedeberg's Arch. Pharmacol. 349:478-484
L-365,260	CCK2 antagonist	Elevated plus-maze	Outbred female mice (20-25g)	0.001-1	ip, 30	o		Vasar et al., 1994	Neuropharmacology 33:729-735
L-365,260	CCK2 antagonist	Elevated zero-maze	Lister Hooded rats (250-320g)	0.001-1	sc, 30	+		Bickerdike et al., 1994	Eur. J. Pharmacol. 271:403-411
L-365,260	CCK2 antagonist	Elevated zero-maze	Sprague-Dawley rats (200-250g)	0.001-0.03	ip, 30	+		Chopin and Briley, 1993	Psychopharmacology 110:409-414
L-365,260	CCK2 antagonist	Elevated zero-maze	Female Wistar rats (200-250g)	1-5	ip, 30	+		Matto et al., 1997	Neuropharmacology 36:389-396
L-365,260	CCK2 antagonist	Elevated zero-maze	Rats	0.001-10	sc, 30	o		Dourish et al., 1994	Behav. Pharmacol. 5:29
L-365,260	CCK2 antagonist	Exploration behavior	Female Wistar rats (200-250g)	1	ip, 30	o		Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
L-365,260	CCK2 antagonist	Stress-induced freezing	Ovariectomized female Wistar rats (2 months)	50-200 µg	ip, 10	+	Exposure to a cloth on which a cat had been sleeping. The drug prevented freezing	Pavlasevic et al., 1993	Neuroreport 5:225-228
L-365,260	CCK2 antagonist	Fear-potentiated startle reflex	Wistar rats (275-325g)	1-10	ip, 30	+		Josselyn et al., 1995	Peptides 16:1313-1315
L-365,260	CCK2 antagonist	Light/dark test	Swiss mice (20-25g)	0.01-0.1	ip, 30	+		Ballaz et al., 1997	Br. J. Pharmacol. 121:759-767
L-365,260	CCK2 antagonist	Light/dark test	Swiss mice (25-30g)	0.001-0.1	ip, 30	+		Chopin and Briley, 1993	Psychopharmacology 110:409-414
L-365,260	CCK2 antagonist	Light/dark test	TO mice (20-25g)	1	ip, 40	+		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
L-365,260	CCK2 antagonist	Light/dark test	DBA/2 mice (20-30g)	0.005-500 µg	30	o		Hendrie et al., 1993	Physiol. Behav. 54:689-693
L-365,260	CCK2 antagonist	Safety signal withdrawal conflict procedure	Wistar rats (300-400g)	0.004-2	ip, 30	o		Charrier et al., 1995	Psychopharmacology 121:127-134
L-365,260	CCK2 antagonist	Social interaction	Hooded Lister rats (200-250g)	3	ip, 40	+		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
L-365,260	CCK2 antagonist	Vogel conflict test	Wistar rats (190-210g)	0.1	ip, 30	+	Animals received an electric shock of 0.1 mA, 2s every 20 licks	Ballaz et al., 1997	Br. J. Pharmacol. 121:759-767
L-365,260	CCK2 antagonist	Elevated plus-maze	Wistar rats (175-200g)	0.01-10	po, 30	o		Revel et al., 1998	Behav. Pharmacol. 9:183-194
L-365,260	CCK2 antagonist	Elevated plus-maze	Wistar rats (250-300g)	10 µg	ip, 30	+		Kõks et al., 1999	Neuropeptides 33:63-69
L-365,260	CCK2 antagonist	Ultrasound-induced defense response	Hooded Lister rats (350-400g)	1-100 µg/kg	ip, 20	o	95 dB ultrasound was given	Voits et al., 1999	Peptides 20:383-386
L-365,260	CCK2 antagonist	Open-field	Long Evans (2.5-3-month-old)	0.1	ip, 45	+	The drug reversed anxiety in adulthood in rats subjected to maternal separation	Vazquez et al., 2005	Psychopharmacology 181:706-713

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
L-365,260	CCK2 antagonist	Forced sucrose consumption	Long Evans (2.5-3-month-old)	0.1	ip, 45	+	The drug reversed anxiety in adulthood in rats subjected to maternal separation	Vazquez et al., 2005	Psychopharmacology 181:706-713
L-365,260+BOC-CCK4 (0.01 mg/kg)	CCK2 antagonist	Elevated plus-maze	Female coloured-BFA guinea-pigs (395-445g)	0.1	ip, 30	(+)	Antagonism of the anxiogenic effects of BOC-CCK_4	Rex et al., 1994	Neuropharmacology 33:559-565
L-365,260+BOC-CCK4 (0.01 mg/kg)	CCK2 antagonist	Ultrasonic distress vocalizations	Wistar and Lister rats (225-325 g)	0.1	ip, 30	(+)		Rex et al., 1994	Neurosci. Lett. 172:139-142
L-365,260+Caerulein	CCK2 antagonist	Elevated plus-maze	Mice			(+)		Vasar et al., 1994	Behav. Pharmacol. 5:31
L-365,260+Caerulein (0.05 mg/kg)	CCK2 antagonist	Elevated plus-maze	Wistar rats	0.05	sc, 15	(+)		Gacsalyi et al., 1997	Drug Dev. Res. 40:333-348
L-365,260+Caerulein (5µg)	CCK2 antagonist	Elevated plus-maze	Female and male Wistar rats (220-280g)	10 µg	ip, 30	(+)		Männistö et al., 1994	Naunyn-Schmiedeberg's Arch. Pharmacol. 349:478-484
L-365,260+CCK_4	CCK2 antagonist	Elevated plus-maze	Guinea-pigs	100 µg		(+)		Fink et al., 1994	Behav. Pharmacol. 5:30
L-365,260+CCK_4	CCK2 antagonist	Tawny owl calls-induced defensive behaviors	Mice			(+)		Hendrie and Weiss, 1994	Behav. Pharmacol. 5:30
L-365,260+CCK-8 (0.0025 mg/kg)	CCK2 antagonist	Elevated plus-maze	Outbred female mice (20-25g)	0.01-1	ip, 30	-	Potentiation of the anti-exploratory effects of CCK-8. Probably non-specific effects.	Vasar et al., 1994	Neuropharmacology 33:729-735
L-365,260+Citalopram (10 mg/kg)	CCK2 antagonist	Exploration behavior	Female Wistar rats (200-250g)	1	ip, 30	o	No interaction	Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
L-365,260+Desipramine (10 mg/kg)	CCK2 antagonist	Exploration behavior	Female Wistar rats (200-250g)	1	ip, 30	o	No interaction	Matto et al., 1997	J. Physiol. Pharmacol. 48:239-251
L-365,260+Flumazenil (4 mg/kg)	CCK2 antagonist	Elevated zero-maze	Sprague-Dawley rats (200-250g)	0.01	ip, 30	(-)	Antagonism of the anxiolytic-like effects	Chopin and Briley, 1993	Psychopharmacology 110:409-414

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
L-365,260+morphine (0,5 mg/kg)	CCK2 antagonist	Elevated plus-maze	Wistar rats (250-300g)	100 µg	ip, 20	(+)	Potentiation of the anxiolytic-like effects of morphine	Kõks et al., 1999	Neuropeptides 33:63-69
L-365,260+Pentagastrin (10 nM)	CCK2 antagonist	Acoustic startle reflex	Wistar rats (275-300g)	0.1	ip, 10	(+)	Rats received 60 startle stimuli (119 dB) prior drug administration	Frankland et al., 1997	J. Neurosci. 17:1838-1847
L-740,093	CCK2 antagonist	Conditioned emotional response	Rats	0.1-1		o		Dawson et al., 1995	Psychopharmacology 121:109-117
L-740,093	CCK2 antagonist	Conflict test	Rats	0.1-1		o		Dawson et al., 1995	Psychopharmacology 121:109-117
L-740,093	CCK2 antagonist	Elevated plus-maze	Rats	0.1-1		o		Dawson et al., 1995	Psychopharmacology 121:109-117
Lorglumide	CCK1 antagonist	Conditioned fear	Sprague-Dawley rats (250-300g)	1	sc, 30	+		Izumi et al., 1996	Eur. J. Pharmacol. 300:25-31
Lorglumide	CCK1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-230g)	0.3-3	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
Lorglumide	CCK1 antagonist	Light/dark test	BALB/c mice (7-week-old)	1-10	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
Lorglumide	CCK1 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3-10	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
Lorglumide	CCK1 antagonist	Conflict test	Sprague-Dawley rats (180-230g)	0.3-10	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
Lorglumide	CCK1 antagonist	Conflict test	Wistar rats (400-500g)	0.3-3	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
Lorglumide	CCK1 antagonist	Safety signal withdrawal conflict procedure	Wistar rats (300-400g)	0.01-1	sc, 20	o		Charrier et al., 1995	Psychopharmacology 121:127-134
Lorglumide	CCK1 antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.1-0.3 µg/0.5 µl	dorsal PAG, 15	o		Netto and Guimarães, 2004	Neuropsychopharmacology 29:101-107
Loxiglumide	CCK1/B antagonist	Conditioned fear	Sprague-Dawley rats (250-300g)	3-30	sc, 30	o		Izumi et al., 1996	Eur. J. Pharmacol. 300:25-31
LY225910	CCK2	Elevated plus-maze	Wistar rats	0.1-0.5 µg/rat	hippocampus	+		Rezayat et al.,	Physiol. Behav. 84:775-782

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	antagonist		(180-230g)		CA1, 5			2005	
LY225910	CCK2 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio et al., 2006	Life Sci. 79:2238-2244
LY225910	CCK2 antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio et al., 2006	Life Sci. 79:2238-2244
LY225910	CCK2 antagonist	Elevated plus-maze	C57BL/6J mice (9-week-old)	495 pmol/0,5 µl	icv, 60	o		Sherrin et al., 2009	Mol. Psychiatry 14:291-307
LY225910	CCK2 antagonist	Elevated plus-maze	Wistar rats (220-270g)	0.01-0.5 µg/1 µl	ventral hippocampus, 5	o		Moghaddam et al., 2012	Pharmacol. Rep. 64:45-53
LY225910+bicuculline (1 µg/rat intra-CA1)	CCK2 antagonist	Elevated plus-maze	Wistar rats (180-230g)	0.1-0.5 µg/rat	hippocampus CA1, 5	(o)	Blockade of the anxiolytic-like effects of LY225910	Rezayat et al., 2005	Physiol. Behav. 84:775-782
LY225910+muscimol (0.001 µg/1 µl)	CCK2 antagonist	Elevated plus-maze	Wistar rats (220-270g)	0.5 µg/1 µl	ventral hippocampus, 5	(+)		Moghaddam et al., 2012	Pharmacol. Rep. 64:45-53
LY225910+muscimol (0.1 µg/rat intra-CA1)	CCK2 antagonist	Elevated plus-maze	Wistar rats (180-230g)	0.1-0.5 µg/rat	hippocampus CA1, 5	(o)	Blockade of the anxiolytic-like effects of LY225910	Rezayat et al., 2005	Physiol. Behav. 84:775-782
LY247348	CCK2 antagonist	Conflict test	Squirrel monkeys	0.3-10	po	+	A FR30 schedule was used	Barrett et al., 1991	Soc. Neurosci. Abstr. 17:1063
LY262,684	CCK2 antagonist	Conflict test	Squirrel monkeys	0.3-10	po	+	A FR30 schedule was used	Barrett et al., 1991	Soc. Neurosci. Abstr. 17:1063
LY262,691	CCK2 antagonist	Free observation	African green monkeys	12	sc, 60	+	The drug reduced the frequency of restless behavior	Palmour et al., 1991	Soc. Neurosci. Abstr. 17:1602
LY262,691	CCK2 antagonist	Conflict test	Squirrel monkeys	0.3-10	po	+	A FR30 schedule was used	Barrett et al., 1991	Soc. Neurosci. Abstr. 17:1063
LY262,691	CCK2 antagonist	Safety signal withdrawal conflict procedure	Wistar rats (300-400g)	0.001-1	sc, 30	o		Charrier et al., 1995	Psychopharmacology 121:127-134
LY288513	CCK2 antagonist	Acoustic startle reflex	Long-Evans rats (150-350	30-100	ip, 60	o		Rasmussen et al., 1993	Neuroreport 5:154-156

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			g)						
LY288513	CCK2 antagonist	Acoustic startle reflex	Long-Evans rats (150-350g)	10-60	ip, 60	o		Rasmussen et al., 1996	Neuroreport 7:1050-1052
LY288513	CCK2 antagonist	Elevated plus-maze	Hooded rats (140g)	30-60	ip	(+)	Animals were injected 30' after cat exposure and tested 1 week later	Adamec et al., 1997	Behav. Neurosci. 111:435-449
LY288513	CCK2 antagonist	Conditioned fear	Sprague-Dawley rats (250-300g)	0.03-0.3	sc, 30	+		Izumi et al., 1996	Eur. J. Pharmacol. 300:25-31
LY288513	CCK2 antagonist	Elevated plus-maze	Sprague-Dawley rats (280-330g)	10	ip, 30	+		Helton et al., 1996	Pharmacol. Biochem. Behav. 53:493-502
LY288513	CCK2 antagonist	Elevated plus-maze	Sprague-Dawley rats (280-330g)	10-30	po, 60	+		Helton et al., 1996	Pharmacol. Biochem. Behav. 53:493-502
LY288513	CCK2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-230g)	0.3-10	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
LY288513	CCK2 antagonist	Exploration behavior	Female and male Wistar rats (230-260g)	0.01	ip, 30	+	Exploratory activity was increased on the third exposure to the test situation	Harro et al., 1995	Eur. Neuropsychopharmacol. 5:447-455
LY288513	CCK2 antagonist	Light/dark test	BALB/c mice (7-week-old)	0.1-10	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
LY288513	CCK2 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	1-3	ip, 30	+	Positive effects on flight behavior only	Griebel et al., 1997	Behav. Pharmacol. 8:549-560
LY288513	CCK2 antagonist	Conflict test	Sprague-Dawley rats (180-230g)	0.3-10	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
LY288513	CCK2 antagonist	Conflict test	Wistar rats (400-500g)	0.1-10	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
LY288513	CCK2 antagonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	4.2-17 nmol/0.25 µl	PAG, 5	+	Hissing responses were decreased	Luo et al., 1998	Brain Res. 796:27-37
LY288513	CCK2 antagonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	4.2-17 nmol/0.25 µl	PAG, 60	+	Hissing responses were	Luo et al., 1998	Brain Res. 796:27-37

Drug	Mechanism	Test	Animals	Doses	Route		Effect	Comments	Reference	
								decreased		
LY288513	CCK2 antagonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	1.05-17 nmol/0.25 µl	PAG, 240		o		Luo et al., 1998	Brain Res. 796:27-37
LY288513	CCK2 antagonist	Elevated plus-maze	Wistar rats (200-220g)	0.01-1		30	o		Vasar et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S89
LY288513	CCK2 antagonist	Hypothalamus stimulation	Cats	6.5 µg/kg	iv		+	Stimulation induced defensive rage	Sitthisomwong et al., 1998	Soc. Neurosci. Abstr. 24:203
LY288513	CCK2 antagonist	Free-exploration test	BALB/c mice (8-week-old)	1-10	ip, 30		o		Belzung et al., 2001	Behav. Pharmacol. 12:151-162
LY288513+Caerulein	CCK2 antagonist	Elevated plus-maze	Mice				(+)		Vasar et al., 1994	Behav. Pharmacol. 5:31
LY288513+CCK_4	CCK2 antagonist	Tawny owl calls-induced defensive behaviors	Mice				(+)		Hendrie and Weiss, 1994	Behav. Pharmacol. 5:30
LY288513+Diazepam withdrawal	CCK2 antagonist	Acoustic startle reflex	Long-Evans rats (150-350g)	60-100	ip, 60		(+)	Antagonism of the anxiogenic effects of diazepam withdrawal	Rasmussen et al., 1993	Neuroreport 5:154-156
LY288513+DSP-4	CCK2 antagonist	Exploration behavior	Female and male Wistar rats (230-260g)	0.01	ip, 30		o	The drug did not increase the exploratory activity in DSP-4 treated animals	Harro et al., 1995	Eur. Neuropsychopharmacol. 5:447-455
LY288513+fluoxetine (20 mg/kg)	CCK2 antagonist	Free-exploration test	BALB/c mice (8-week-old)	3-10	ip, 30		-	No antagonism of the anxiogenic-like effects of fluoxetine	Belzung et al., 2001	Behav. Pharmacol. 12:151-162
LY288513+Paroxetine (2 mg/kg)	CCK2 antagonist	Elevated plus-maze	Wistar rats (200-220g)	1		30	(o)	Antagonism of the effects of paroxetine	Vasar et al., 1998	Behav. Pharmacol. 9 (Suppl. 1):S89
MK-329	CCK1 antagonist	Free observation	Hooded rats (140g)	0.1-1	ip		o	Cat exposure	Adamec et al., 1997	Behav. Neurosci. 111:435-449

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MK-329	CCK1 antagonist	Elevated plus-maze	Hooded rats (140g)	0.1-1	ip	(o)	(1) no antagonism of the anxiogenic effects of cat exposure; (2) animals were injected 30' before cat exposure and tested 1 week later	Adamec et al., 1997	Behav. Neurosci. 111:435-449
MK-329	CCK1 antagonist	Elevated plus-maze	Hooded rats (140g)	0.1-1	ip	(o)	(1) no antagonism of the anxiogenic effects of cat exposure; (2) animals were injected 30' after cat exposure and tested 1 week later	Adamec et al., 1997	Behav. Neurosci. 111:435-449
MK-329	CCK1 antagonist	Elevated plus-maze	Hooded Lister rats (200-250g)	50 µmol	ip, 40	+		Singh et al., 1991	Proc. Natl. Acad. Sci. U. S. A. 88:1130-1133
Mutant mice	CCK2 knockout	Elevated plus-maze	Female 129sv/C57BL6 background mice			-	Homozygotes showed increased anxiety	Vasar et al., 2000	Eur. Neuropsychopharmacol. 10 (Suppl. 2):S69
Mutant mice	CCK2 knockout	Elevated plus-maze	Male 129sv/C57BL6 background mice			o	No difference in anxiety between genotypes	Vasar et al., 2000	Eur. Neuropsychopharmacol. 10 (Suppl. 2):S69
Mutant mice	CCK2 knockout	Elevated plus-maze	Female and male 129sv/C57BL/6 background mice			o	No difference in anxiety between genotypes	Daugé et al., 2001	Neuropsychopharmacology 25:690-698
Mutant mice	CCK2 knockout	Open-field	Female and male 129sv/C57BL/6 background mice			o	No difference in anxiety between genotypes	Daugé et al., 2001	Neuropsychopharmacology 25:690-698
Mutant mice	CCK2 knockout	Motility conditioned suppression test	Female and male 129sv/C57BL/6 background mice			o	No difference in anxiety between genotypes	Daugé et al., 2001	Neuropsychopharmacology 25:690-698
Mutant mice	CCK1	Elevated plus-maze	C57BL/6J background mice (7-month-old)			o	No difference in	Miyasaka et	Neurosci. Lett. 335:115-118

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	knockout						anxiety between WT and KO mice	al., 2002	
Mutant mice	CCK2 knockout	Elevated plus-maze	C57BL/6J background mice (7-month-old)			-	Anxious phenotype	Miyasaka et al., 2002	Neurosci. Lett. 335:115-118
Mutant mice	CCK1/2 knockout	Elevated plus-maze	C57BL/6J background mice (7-month-old)			o	No difference in anxiety between WT and KO mice	Miyasaka et al., 2002	Neurosci. Lett. 335:115-118
Mutant mice	CCK2 knockout	Elevated plus-maze	Male 129sv/C57BL6 background mice			+	Homozygotes showed decreased anxiety	Horinouchi et al., 2004	Eur. Neuropsychopharmacol. 14:157-161
Mutant mice	CCK2 knockout	Light/dark test	Male 129sv/C57BL6 background mice			+	Homozygotes showed decreased anxiety	Horinouchi et al., 2004	Eur. Neuropsychopharmacol. 14:157-161
Mutant mice	CCK2 knockout	Light/dark test	Female 129sv/C57BL6 background mice			+	Homozygotes showed decreased anxiety	Raud et al., 2005	Psychopharmacology 181:347-357
Mutant mice	CCK2 knockout	Conditioned fear	Female 129sv/C57BL6 background mice			o	No difference in phenotype	Raud et al., 2005	Psychopharmacology 181:347-357
Mutant mice	CCK2 overexpression in forebrain	Open-field	IF-CCKR-2 mice (2-4-month-old)			-	Transgenic mice showed increased anxiety-related behaviors	Chen et al., 2006	Proc. Natl. Acad. Sci. U. S. A. 103:3881-3886
Mutant mice	CCK2 overexpression in forebrain	Social interaction	IF-CCKR-2 mice (2-4-month-old)			-	Transgenic mice showed increased anxiety-related behaviors	Chen et al., 2006	Proc. Natl. Acad. Sci. U. S. A. 103:3881-3886
Mutant mice	CCK2 overexpression in forebrain	Conditioned fear	IF-CCKR-2 mice (2-4-month-old)			-	(1) Transgenic mice showed increased anxiety-related behaviors; (2) Electric shocks of 0.4 mA were	Chen et al., 2006	Proc. Natl. Acad. Sci. U. S. A. 103:3881-3886

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							applied		
Mutant mice	CCK2 overexpression in forebrain	Social interaction	IF-CCKR-2 mice (2-4-month-old)			(o)	The drug, which inhibits the transgene, abolished the anxious phenotype	Chen et al., 2006	Proc. Natl. Acad. Sci. U. S. A. 103:3881-3886
Mutant mice	CCK2 knockout	Elevated plus-maze	Female 129sv/C57BL6 background mice			+	Homozygotes showed decreased anxiety	Areda et al., 2006	Behav. Brain Res. 169:212-219
Mutant mice	CCK2 knockout	Elevated plus-maze	Female 129sv/C57BL6 background mice			o	(1) Mice were exposed to a cat odour prior to testing; (2) No phenotypic differences	Areda et al., 2006	Behav. Brain Res. 169:212-219
Mutant mice	CCK2 knockout	Free observation	Female 129sv/C57BL6 background mice			o	Following cat odour exposure. No phenotypic differences	Areda et al., 2006	Behav. Brain Res. 169:212-219
Mutant mice	CCK2 knockout	Elevated plus-maze	Female and male 129sv/C57BL6 background mice (10-week-old)			-	Knockout mice were more anxious than their wild-type counterparts	Abramov et al., 2008	Behav. Brain Res. 193:108-116
Mutant mice	CCK2 knockout	Elevated plus-maze	Female and male 129sv/C57BL6 background mice (10-week-old)			o	No phenotypic differences when animals are housed in enriched conditions	Abramov et al., 2008	Behav. Brain Res. 193:108-116
Mutant mice+diazepam (0.5 mg/kg)	CCK2 overexpression in forebrain	Open-field	IF-CCKR-2 mice (2-4-month-old)			(o)	The drug abolished the anxious phenotype	Chen et al., 2006	Proc. Natl. Acad. Sci. U. S. A. 103:3881-3886

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice+diazepam (0.5 mg/kg)	CCK2 overexpression in forebrain	Conditioned fear	IF-CCKR-2 mice (2-4-month-old)			(o)	(1) The drug abolished the anxious phenotype; (2) Electric shocks of 0.4 mA were applied	Chen et al., 2006	Proc. Natl. Acad. Sci. U. S. A. 103:3881-3886
Mutant mice+diazepam (0.5-2 mg/kg)	CCK2 knockout	Light/dark test	Female 129sv/C57BL6 background mice			o	No influence of mutation on the effects of diazepam	Raud et al., 2005	Psychopharmacology 181:347-357
Mutant mice+DMCM (0.25-1 mg/kg)	CCK2 knockout	Light/dark test	Female 129sv/C57BL6 background mice			(-)	DMCM produced anxiogenic-like effects in -/- but not in +/+ mice	Raud et al., 2005	Psychopharmacology 181:347-357
Mutant mice+doxycycline	CCK2 overexpression in forebrain	Open-field	IF-CCKR-2 mice (2-4-month-old)			(o)	The drug, which inhibits the transgene, abolished the anxious phenotype	Chen et al., 2006	Proc. Natl. Acad. Sci. U. S. A. 103:3881-3886
Mutant rats	CCK1 receptor gene knockout	Open-field	OLETF and LETO rats (4-week-old)			-	Rats lacking CCK1 receptors displayed reduced locomotor and rearing activities	Kobayashi et al., 1996	Neurosci. Lett. 214:61-64
Mutant rats (OLETF)	CCK1 knockout	Elevated plus-maze	OLETF and LETO rats (7-9-week-old)			-	OLETF rats were more anxious than LETO rats	Yamamoto et al., 2000	Brain Res. Bull. 53:789-792
Mutant rats (OLETF)	CCK1 knockout	Light/dark test	OLETF and LETO rats (7-9-week-old)			-	OLETF rats were more anxious than LETO rats	Yamamoto et al., 2000	Brain Res. Bull. 53:789-792
Mutant rats (OLETF)	CCK1 knockout	Elevated plus-maze	OLETF and LETO rats (4-week-old)			-	Motor activity was reduced	Li et al., 2002	Physiol. Behav. 75:15-23
pAAV-eGFP-shCCK	CCK knockdown	Elevated plus-maze	C57BL/6J mice (8-week-old)	1.5 µl	basolateral amygdala, 5	+	Knockdown of CCK was	Del Boca et al., 2012	Neuroscience 218:185-195

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					weeks		specific to the basolateral amygdala		
pAAV-eGFP-shCCK	CCK knockdown	Open-field	C57BL/6J mice (8-week-old)	1.5 µl	basolateral amygdala, 5 weeks	o	Knockdown of CCK was specific to the basolateral amygdala	Del Boca et al., 2012	Neuroscience 218:185-195
pAAV-eGFP-shCCK	CCK knockdown	Light/dark test	C57BL/6J mice (8-week-old)	1.5 µl	basolateral amygdala, 5 weeks	o	Knockdown of CCK was specific to the basolateral amygdala	Del Boca et al., 2012	Neuroscience 218:185-195
PD135158	CCK2 antagonist	Free observation	Hooded rats (140g)	1-2	ip	+	Cat exposure. The drug increased active defense	Adamec et al., 1997	Behav. Neurosci. 111:435-449
PD135158	CCK2 antagonist	Elevated plus-maze	Hooded rats (140g)	1-2	ip	+	(1) antagonism of the anxiogenic effects of cat exposure; (2) animals were injected 30' before cat exposure and tested 1 week later	Adamec et al., 1997	Behav. Neurosci. 111:435-449
PD135158	CCK2 antagonist	Elevated plus-maze	Hooded rats (140g)	1-2	ip	+	(1) antagonism of the anxiogenic effects of cat exposure; (2) animals were injected 30' after cat exposure and tested 1 week later	Adamec et al., 1997	Behav. Neurosci. 111:435-449
PD135158	CCK2 antagonist	Elevated plus-maze	Rats	0.01-1	sc, 45	+		Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PD135158	CCK2 antagonist	Elevated plus-maze	Mice	0.01	ip, 30	+		Holladay et al., 1995	Bioorg. Med. Chem. Lett. 5:3057-3062
PD135158	CCK2 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-230g)	0.01-1	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
PD135158	CCK2 antagonist	Elevated plus-maze	DBA/2 mice (12-15-week-old)	0.001-1	ip, 30	o		Johnson and Rodgers, 1996	Psychopharmacology 124:355-364
PD135158	CCK2 antagonist	Elevated zero-maze	Female Wistar rats (200-250g)	0.1	sc, 30	+		Matto et al., 1997	Neuropharmacology 36:389-396
PD135158	CCK2 antagonist	Free-exploration test	BALB/c mice (10-week-old)	0.01-1	sc, 40	o		Belzung et al., 1994	Pharmacol. Biochem. Behav. 49:433-436
PD135158	CCK2 antagonist	Light/dark test	BALB/c mice (10-week-old)	0.01-1	sc, 40	+		Belzung et al., 1994	Pharmacol. Biochem. Behav. 49:433-436
PD135158	CCK2 antagonist	Light/dark test	Mice	0.0001-30	sc, 40	+		Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
PD135158	CCK2 antagonist	Light/dark test	Mice	1	sc, 2-12 h	+		Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
PD135158	CCK2 antagonist	Light/dark test	Albino mice (Bradford strain, 20-30g)	0.0001-30	sc, 40	+		Hughes et al., 1990	Proc. Natl. Acad. Sci. U. S. A. 87:6728-6732
PD135158	CCK2 antagonist	Light/dark test	BALB/c mice (7-week-old)	0.01-3	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
PD135158	CCK2 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.001-0.01, 1	ip, 30	+	Positive effects on flight behavior only	Griebel et al., 1997	Behav. Pharmacol. 8:549-560
PD135158	CCK2 antagonist	Conflict test	Sprague-Dawley rats (180-230g)	0.001-1	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
PD135158	CCK2 antagonist	Conflict test	Wistar rats (400-500g)	0.01-1	ip, 30	o		Griebel et al., 1997	Behav. Pharmacol. 8:549-560
PD135158	CCK2 antagonist	Social interaction	Rats	0.01-1	sc, 45	+	High light unfamiliar condition	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
PD135158	CCK2 antagonist	Light/dark test	Wistar rats (180-200g)	1	ip, 30	+		Acosta, 1998	Gen. Pharmacol. 31:637-641
PD135158	CCK2 antagonist	Conditioned fear	Wistar rats (280-440g)	0.03-0.3	ip, 30	+	Scrambled footshocks of 2.5 mA/20 s the day before	Tsutsumi et al., 1999	Neuropeptides 33:483-6

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PD135158	CCK2 antagonist	Conditioned fear	Wistar rats (280-440g)	0.03-0.3	ip, 24 h	+	(1) Scrambled footshocks of 2.5 mA/20 s the day before; (2) injection 30 min before footshock	Tsutsumi et al., 1999	Neuropeptides 33:483-6
PD135158	CCK2 antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.1 µg/0.5 µl	dorsal PAG, 15	o		Netto and Guimarães, 2004	Neuropsychopharmacology 29:101-107
PD135158	CCK2 antagonist	Elevated plus-maze	Wistar rats (150-220g)	0.01	sc, for 6 days	o		Cohen et al., 2004	Depress. Anxiety 20:139-152
PD135158+Alcohol withdrawal	CCK2 antagonist	Light/dark test	Mice	10	ip	(+)	Antagonism of the anxiogenic effects alcohol withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
PD135158+Cocaine withdrawal	CCK2 antagonist	Light/dark test	Mice	10	ip	(+)	Antagonism of the anxiogenic effects cocaine withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
PD135158+Diazepam withdrawal	CCK2 antagonist	Light/dark test	Mice	10	ip	(+)	Antagonism of the anxiogenic effects diazepam withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
PD135158+Nicotine withdrawal	CCK2 antagonist	Light/dark test	Mice	10	ip	(+)	Antagonism of the anxiogenic effects nicotine withdrawal	Costall et al., 1991	Neuropeptides 19 (Suppl.):65-73
PD135158+Pentagastrin (100 nM)	CCK2 antagonist	Acoustic startle reflex	Wistar rats (275-300g)	0.01	amygdala, 5	(+)	Rats received 60 startle stimuli (119 dB) prior drug administration	Frankland et al., 1997	J. Neurosci. 17:1838-1847
PD136450	CCK2 antagonist	Light/dark test	Wistar rats (200-300g)	10-20	sc, 30	+		Bastaki et al., 2003	Mol. Cell. Biochem. 252:83-90
PD140548	CCK1 antagonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	34 nmol/0.25 µl	PAG, 5	o		Luo et al., 1998	Brain Res. 796:27-37
PD140548	CCK1 antagonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	34 nmol/0.25 µl	PAG, 60	o		Luo et al., 1998	Brain Res. 796:27-37

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PD140548	CCK1 antagonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	34 nmol/0.25 µl	PAG, 240	o		Luo et al., 1998	Brain Res. 796:27-37
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Wistar rats (275-300g)	0.01-10 nM/0.5 µl	amygdala, 5	-	Rats received 60 startle stimuli (119 dB) prior drug administration	Frankland et al., 1997	J. Neurosci. 17:1838-1847
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Wistar rats (275-300g)	0.01-10 nM/0.5 µl	striatum, 5	o	Rats received 60 startle stimuli (119 dB) prior drug administration	Frankland et al., 1997	J. Neurosci. 17:1838-1847
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Wistar rats (275-300g)	0.01-10 nM/0.5 µl	nucleus accumbens, 5	o	Rats received 60 startle stimuli (119 dB) prior drug administration	Frankland et al., 1997	J. Neurosci. 17:1838-1847
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Wistar rats (275-300g)	10-100 nmol/5 µl	icv, 5	-	Rats received 60 startle stimuli (119 dB) prior drug administration and 180 startle stimuli during test session	Frankland et al., 1996	Brain Res. 733:129-132
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Rats	0.01-10 nmol/5 µl	amygdala, 0	-		Josselyn et al., 1995	Soc. Neurosci. Abstr. 21:1697
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Rats	1-10 nmol/5 µl	icv, 0	o		Josselyn et al., 1995	Soc. Neurosci. Abstr. 21:1697
Pentagastrin	CCK2 agonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.08-8/rat	icv, 15	-		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
Pentagastrin	CCK2 agonist	Elevated plus-maze	Hooded Lister rats (200-250g)	0.3-10 nmol/5 µl	icv, 15	-		Singh et al., 1991	Proc. Natl. Acad. Sci. U. S. A. 88:1130-1133
Pentagastrin	CCK2 agonist	Elevated plus-maze	TO mice (25-30g)	0.8-8/5 µl	icv, 15	-		Singh et al., 1991	Br. J. Pharmacol. 102:45P
Pentagastrin	CCK2 agonist	Food intake in hungry sheep	Castrated male sheeps (whethers)	64-1020 pmol/min/3 h	icv	-	Food intake was reduced and injections produced foot-stamping and	Della-Fera and Baile, 1979	Science 206:471-473

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							vocalizations		
Pentagastrin	CCK2 agonist	Food intake in hungry sheep	Adult female and male Clung forest sheeps	4-10 µg	icv, 2	o		Ebenezer and Parrott, 1996	Meth. Find. Exp. Clin. Pharmacol. 18:235-238
Pentagastrin	CCK2 agonist	Geller-Seifter conflict test	Hooded Lister rats (200-250g)	16 µg/rat	icv, 15	-	A VI30/FR5 schedule was used	Singh et al., 1991	Br. J. Pharmacol. 104:239-245
Pentagastrin	CCK2 agonist	Light/dark test	TO mice (20-25g)	0.8-8/mouse	icv, 15	-		Singh et al., 1991	Br. J. Pharmacol. 104:239-245
Pentagastrin	CCK2 agonist	Light/dark test	TO mice (25-30g)	0.8-8/5 µl	icv, 15	-		Singh et al., 1991	Br. J. Pharmacol. 102:45P
Pentagastrin	CCK2 agonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	1 nmol/0.25 µl	PAG, 5	-	Hissing responses were increased	Luo et al., 1998	Brain Res. 796:27-37
Pentagastrin	CCK2 agonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	1 nmol/0.25 µl	PAG, 60	-	Hissing responses were increased	Luo et al., 1998	Brain Res. 796:27-37
Pentagastrin	CCK2 agonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	1 nmol/0.25 µl	PAG, 240	o		Luo et al., 1998	Brain Res. 796:27-37
Pentagastrin	CCK2 agonist	Hypothalamus stimulation	Cats	0.8-1.9 µg/kg	iv	-	Stimulation induced defensive rage	Sitthisomwong et al., 1998	Soc. Neurosci. Abstr. 24:203
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Wistar rats	10 nmol/0,5 µl	amygdala, 0	-		De Sousa et al., 1999	Soc. Neurosci. Abstr. 25:66
Pentagastrin	CCK2 agonist	Elevated plus-maze	Wistar rats	10 nmol/0,5 µl	amygdala, 0	-		De Sousa et al., 1999	Soc. Neurosci. Abstr. 25:66
Pentagastrin	CCK2 agonist	Acoustic startle reflex	Wistar rats	4 pg	ventral tegmental area, 0	+		Bush et al., 1999	Soc. Neurosci. Abstr. 25:66
Pentagastrin+amphétamine (0,5 mg/kg)	CCK2 agonist	Acoustic startle reflex	Wistar rats	10 nmol/0,5 µl	amygdala, 0	(o)	Antagonism of the anxiogenic-like effects of pentagastrin	De Sousa et al., 1999	Soc. Neurosci. Abstr. 25:66
Pentagastrin+amphétamine (0,5 mg/kg)	CCK2 agonist	Elevated plus-maze	Wistar rats	10 nmol/0,5 µl	amygdala, 0	(o)	Antagonism of the anxiogenic-like effects of pentagastrin	De Sousa et al., 1999	Soc. Neurosci. Abstr. 25:66

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Pentagastrin+CI-988 (1 mg/kg)	CCK2 agonist	Elevated plus-maze	TO mice (25-30g)	0.8/5 µl	icv, 15	(+)		Singh et al., 1991	Br. J. Pharmacol. 102:45P
Pentagastrin+CI-988 (1 mg/kg)	CCK2 agonist	Light/dark test	TO mice (25-30g)	0.8/5 µl	icv, 15	(+)		Singh et al., 1991	Br. J. Pharmacol. 102:45P
Pentagastrin+LY288513 (17 nmol)	CCK2 agonist	Defensive rage behavior	Adult cats (2.5-3.5kg)	1 nmol/0.25 µl	PAG, 60	(+)		Luo et al., 1998	Brain Res. 796:27-37
Proglumide	CCK1 antagonist	Elevated plus-maze	Outbred female mice (20-25g)	0.1-10	ip, 25	o		Vasar et al., 1994	Neuropharmacology 33:729-735
Proglumide	CCK1 antagonist	Exploration behavior	Swiss-Webster mice (20-25g)	0.1-100	ip, 5	o	Mice were confronted with a novel fringed cardboard object	Crawley et al., 1986	J. Pharmacol. Exp. Ther. 236:320-330
Proglumide+CCK-8 (0.0025 mg/kg)	CCK1 antagonist	Elevated plus-maze	Outbred female mice (20-25g)	0.1-10	ip, 25	-	Potentiation of the anti-exploratory effects of CCK-8. Probably non-specific effects.	Vasar et al., 1994	Neuropharmacology 33:729-735
Proglumide+CCK-8s (1 fmol)	CCK1 antagonist	Four-hole box	Sprague-Dawley rats (200-220g)	20/ µg/1 µl	median nucleus accumbens, 0	(+)		Daugé et al., 1989	Eur. J. Pharmacol. 163:25-32
Proglumide+CCK-8s (5 µg)	CCK1 antagonist	Exploration behavior	Swiss-Webster mice (20-25g)	0.1-100	ip, 5	(+)	Mice were confronted with a novel fringed cardboard object	Crawley et al., 1986	J. Pharmacol. Exp. Ther. 236:320-330
SR 27897B	CCK1/B antagonist	Elevated zero-maze	Female Wistar rats (200-250g)	0.01-2	ip, 30	o		Matto et al., 1997	Neuropharmacology 36:389-396
α-methyltryptophan derivative	CCK2 antagonist	Light/dark test	Mice	0.0001-30	sc, 40	+		Horwell et al., 1991	J. Med. Chem. 34:2304-2314
α-methyltryptophan derivative	CCK2 antagonist	Light/dark test	Mice	0.0001-10	po, 40	+		Horwell et al., 1991	J. Med. Chem. 34:2304-2314

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
[cPP]hPP	Y_5 agonist	Elevated plus-maze	Wistar rats (280-315g)	0.8-3 nmol/10 µl	icv, 60	+		Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
[cPP]hPP	Y_5 agonist	Open-field	Wistar rats (280-315g)	0.1-3 nmol/10 µl	icv, 60	+	The drug produced sedation from 0.2 nmol	Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
[cPP$^{1-7}$,NPY$^{19-23}$,Ala^{31},Aib^{32},Gln^{34}] hPP	Y_5 agonist	Open-field	Sprague-Dawley rats (150-170g)	1 nmol	minipump for 10 days	o		Morales-Medina et al., 2012	Behav. Brain Res. 233:298-304
[cPP$^{1-7}$,NPY$^{19-23}$,Ala^{31},Aib^{32},Gln^{34}] hPP	Y_5 agonist	Open-field	Bulbectomized Sprague-Dawley rats (150-170g)	1 nmol	minipump for 10 days	+		Morales-Medina et al., 2012	Behav. Brain Res. 233:298-304
[cPP$^{1-7}$,NPY$^{19-23}$,Ala^{31},Aib^{32},Gln^{34}] hPP	Y_5 agonist	Open-field	Sprague-Dawley rats (150-170g)	1 nmol	minipump for 10 days	+		Morales-Medina et al., 2012	Behav. Brain Res. 233:298-304
[cPP$^{1-7}$,NPY$^{19-23}$,Ala^{31},Aib^{32},Gln^{34}] hPP	Y_5 agonist	Open-field	Bulbectomized Sprague-Dawley rats (150-170g)	1 nmol	minipump for 10 days	+		Morales-Medina et al., 2012	Behav. Brain Res. 233:298-304
[cPP$^{1-7}$,NPY$^{19-23}$,Ala^{31},Aib^{32},Gln^{34}] hPP	Y_5 agonist	Elevated plus-maze	Wistar rats (150-170g)	1 nmol	minipump for 10 days	+		Morales-Medina et al., 2012	Behav. Brain Res. 233:298-304
[cPP$^{1-7}$,NPY$^{19-23}$,Ala^{31},Aib^{32},Gln^{34}] hPP+corticosterone (10 mg/kg)	Y_5 agonist	Elevated plus-maze	Wistar rats (150-170g)	1 nmol	minipump for 10 days	(o)		Morales-Medina et al., 2012	Behav. Brain Res. 233:298-304
[Cys^{7,21}, Pro^{34}]-NPY	Y_1 agonist	Elevated plus-maze	Rats	3 nmol/5 µl	icv, 60	o		Kirby et al., 1995	J. Med. Chem. 38:4579-4586
[Cys^{7,21}, Pro^{34}]-NPY	Y_1 agonist	Geller-Seifter conflict test	Wistar rats (200-250g)	2.5-15 µg/rat	icv, 15	o		Britton et al., 1997	Psychopharmacology 132:6-13
[D-His^{26}]NPY	Y_1 agonist	Elevated plus-maze	Wistar rats (280-315g)	0.8-3 nmol/10 µl	icv, 60	+		Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
[D-His^{26}]NPY	Y_1 agonist	Open-field	Wistar rats (280-315g)	3 nmol/10 µl	icv, 60	+		Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
[Glu^{2,32}, d-Ala^{6}, d-Dpr^{27}, Lys^{28}]-NPY	Y_2 agonist	Geller-Seifter conflict test	Wistar rats (200-250g)	2.5-15 µg/rat	icv, 15	o		Britton et al., 1997	Psychopharmacology 132:6-13
[Gly^{6}, Glu^{26}, Lys^{29}, Pro^{34}]-NPY	Y_1 agonist	Geller-Seifter conflict test	Wistar rats (200-250g)	10-15 µg/rat	icv, 15	+		Britton et al., 1997	Psychopharmacology 132:6-13

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Elevated plus-maze	Sprague-Dawley rats (220-240g)	0.7-7 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Elevated plus-maze	Rats	0.7-7 nmol	icv, 60	+		Broqua et al., 1994	Neuropeptides 26:16
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Elevated plus-maze	ddY Mice (7-week-old)	70 pmol/4 µl	icv, 10	+		Nakajima et al., 1998	Peptides 19:359-363
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Fear-potentiated startle reflex	Long-Evans rats (220-240g)	2.3-13.2 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Fear-potentiated startle reflex	Rats	2.3-13.2 nmol	icv, 60	+		Wettstein et al., 1994	Neuropeptides 26:16-17
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Geller-Seifter conflict test	Wistar rats (200-275g)	50-100 pmol/0.5 µl	amygdala, 15	+		Heilig et al., 1993	Neuropsychopharmacology 8:357-363
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Geller-Seifter conflict test	Wistar rats (200-250g)	5-15 µg/rat	icv, 15	+		Britton et al., 1997	Psychopharmacology 132:6-13
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Elevated plus-maze	Wistar rats (280-350g)	10 pmol/0.5 µl	vicinity of locus coeruleus, 20	o		Kask et al., 1998	Brain Res. 788:345-348
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	5-10 nM/1 µl	amygdala, 15	+		Kokare et al., 2005	Brain Res. 1043:107-114
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Open-field	Sprague-Dawley rats (150-170g)	1 nmol/day	icv, for 14 days	+		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Open-field	OBX Sprague-Dawley rats (150-170g)	0.1-1 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Social interaction	Sprague-Dawley rats (150-170g)	1 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
[Leu^{31}, Pro^{34}]-NPY	Y_1 agonist	Social interaction	OBX Sprague-Dawley rats (150-170g)	0.3-1 nmol/day	icv, for 14 days	+		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
[Leu^{31}, Pro^{34}]-NPY+HS014(1 nM)	Y_1 agonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1 nM/1 µl	amygdala, 15	(+)	The combination produced anxiolytic-like effects	Kokare et al., 2005	Brain Res. 1043:107-114
[Leu^{31}, Pro^{34}]-NPY+α-MSH (250 ng)	Y_1 agonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	5 nM/1 µl	amygdala, 15	(o)	Blockade of the anxiolytic-like effects of NPY	Kokare et al., 2005	Brain Res. 1043:107-114
1229U91	Y_1 antagonist	Social interaction	Wist/Kuo rats	100 pmol/0.5	dorsal PAG,	-		Kask et al., 1998	Neuroreport. 9:2713-

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
			(280-350g)	µl	30				2716
Antisense ODN	Y_1 inhibition	Elevated plus-maze	Wistar rats (250g)	50 µg	icv, 3 days (b.i.d.)	-		Heilig, 1995	Regul. Pept. 59:201-205
Antisense ODN	Y_1 inhibition	Elevated plus-maze	Rats	50 µg	icv, 2 days (b.i.d.)	-		Wahlestedt et al., 1993	Science 259:528-531
BIBO 3304	Y_1 antagonist	Social interaction	Wistar rats (300-350g)	200 pmol/100 nl/side	basolateral amygdala, 30	o		Sajdyk et al., 1999	Eur. J. Pharmacol. 368:143-147
BIBO 3304	Y_1 antagonist	Social interaction	WistarF/Han rats (350-390g)	2.5-250 ng/0.25 µl/side	lateral septum, 35	o	Familiar lit area	Kask et al., 2001	Neuroscience 104:799-806
BIBO 3304	Y_1 antagonist	Elevated plus-maze	Wistar rats (200-230g)	200 pmol/0.5 µl/side	amygdala, 10	o		Wierońska et al., 2004	Neuropsychopharmacology 29:514-521
BIBO 3304	Y_1 antagonist	Vogel conflict test	Wistar rats (200-250g)	25-200 pmol/0.5 µl/site	basolateral nucleus of amygdala, 40	+	Shocks of 0.5 mA were applied	Wierońska et al., 2004	Pol. J. Pharmacol. 56:867-870
BIBO 3304	Y_1 antagonist	Elevated plus-maze	Wistar rats (200-230g)	128 ng/0.5 µl/site	amygdala, 30	o		Wierońska et al., 2005	Pharmacol. Rep. 57:734-743
BIBO 3304	Y_1 antagonist	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	200 pmol/0.5 µl/side	basolateral amygdala, 0	o		Gutman et al., 2008	J. Neurosci. 28:12682-12690
BIBO 3304	Y_1 antagonist	Acoustic startle reflex	Sprague Dawley rats (350-500g)	200 pmol/0.5 µl/side	basolateral amygdala, 0	o		Gutman et al., 2008	J. Neurosci. 28:12682-12690
BIBO 3304	Y_1 antagonist	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	200 pmol/0.5 µl/side	medial amygdala, 0	o		Gutman et al., 2008	J. Neurosci. 28:12682-12690
BIBO 3304	Y_1 antagonist	Acoustic startle reflex	Sprague Dawley rats (350-500g)	200 pmol/0.5 µl/side	medial amygdala, 0	o		Gutman et al., 2008	J. Neurosci. 28:12682-12690
BIBO 3304	Y_1 antagonist	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	200 pmol/0.5 µl/side	basolateral amygdala, 0	-	The drug enhanced fear-potentiated startle during the extension retention test	Gutman et al., 2008	J. Neurosci. 28:12682-12690
BIBO 3304	Y_1 antagonist	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	200 pmol/0.5 µl/side	medial amygdala, 0	o	The drug did not modify fear-potentiated startle during the extension retention test	Gutman et al., 2008	J. Neurosci. 28:12682-12690
BIBO 3304	Y_1 antagonist	Conditioned fear	DBA/1J (2-3-month-old)	130 ng/0.3 µl	amygdala, 10	o		Fendt et al., 2009	Psychopharmacology 206:291-301
BIBO 3304	Y_1 antagonist	Elevated plus-maze	Long-Evans rats (300-400g)	0.15-0.3 µg/0.5 µl	lateral septum, 15	o		Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
BIBO 3304	Y_1 antagonist	Shock-probe burying test	Long-Evans rats (300-400g)	0.15-0.3 µg/0.5 µl	lateral septum, 15	o	Shocks of 2.5 mA were delivered	Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
BIBO 3304	Y_1 antagonist	Novelty-suppressed feeding	Long-Evans rats (300-400g)	0.15-0.3 µg/0.5 µl	lateral septum, 15	o		Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
BIBO 3304	Y_1 antagonist	Open-field	Sprague-Dawley rats (150-170g)	3 nmol/day	icv, for 14 days	+		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
BIBO 3304	Y_1 antagonist	Open-field	OBX Sprague-Dawley rats (150-170g)	3 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
BIBO 3304	Y_1 antagonist	Social interaction	Sprague-Dawley rats (150-170g)	3 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
BIBO 3304	Y_1 antagonist	Social interaction	OBX Sprague-Dawley rats (150-170g)	3 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
BIBO 3304	Y_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	20 µg/1 µl	dorsal hippocampus, 7 days	o		Cohen et al., 2012	Neuropsychopharmacology 37:350-363
BIBO 3304	Y_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	20 µg/1 µl	dorsal hippocampus, 7 days	-	Animals were exposed to predator-scent stress for 15 min 7 days prior to testing	Cohen et al., 2012	Neuropsychopharmacology 37:350-363
BIBO 3304	Y_1 antagonist	Acoustic startle reflex	Sprague-Dawley rats (200-250g)	20 µg/1 µl	dorsal hippocampus, 7 days	o		Cohen et al., 2012	Neuropsychopharmacology 37:350-363
BIBO 3304	Y_1 antagonist	Acoustic startle reflex	Sprague-Dawley rats (200-250g)	20 µg/1 µl	dorsal hippocampus, 7 days	o	Animals were exposed to predator-scent stress for 15 min 7 days prior to testing	Cohen et al., 2012	Neuropsychopharmacology 37:350-363
BIBO 3304	Y_1 antagonist	Stress-induced freezing	Sprague-Dawley rats (200-250g)	20 µg/1 µl	dorsal hippocampus, 7 days	o	Animals were exposed to predator-scent stress for 15 min 7 days prior to testing	Cohen et al., 2012	Neuropsychopharmacology 37:350-363
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (270-350g)	0.5-5 µg	icv, 20	-		Kask et al., 1996	Eur. J. Pharmacol. 317:R3-R4
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (330-380g)	5 µg/5 µl	icv, 60	-		Kask et al., 1997	Neuroreport 8:3645-3647

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (280-350g)	0.5 µg	dorsal PAG	-		Kask et al., 1998	Int. J. Neuropsychopharmacology 1 (Suppl. 1):S186
BIBP3226	Y_1 antagonist	Open-field	Wistar rats (280-350g)	0.5 µg	dorsal PAG	o		Kask et al., 1998	Int. J. Neuropsychopharmacology 1 (Suppl. 1):S186
BIBP3226	Y_1 antagonist	Open-field	Wistar rats (280-350g)		icv	o		Kask et al., 1998	Int. J. Neuropsychopharmacology 1 (Suppl. 1):S186
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (280-350g)	0.5-2.5 µg	amygdala	o		Kask et al., 1998	Int. J. Neuropsychopharmacology 1 (Suppl. 1):S186
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (280-350g)	0.5-2.5 µg	locus coeruleus	o		Kask et al., 1998	Int. J. Neuropsychopharmacology 1 (Suppl. 1):S186
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (280-350g)	0.5-2.5 µg	paraventricular nucleus of hypothalamus	o		Kask et al., 1998	Int. J. Neuropsychopharmacology 1 (Suppl. 1):S186
BIBP3226	Y_1 antagonist	Social interaction	Wist/Kuo rats (280-350g)	100 pmol/0.5 µl	dorsal PAG, 30	-		Kask et al., 1998	Neuroreport. 9:2713-2716
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (300-450g)	5 µg/6.5 µl	icv, 20	-		Kask et al., 1998	Regul. Pept. 75-6:255-262
BIBP3226	Y_1 antagonist	Open-field	Wistar rats (300-450g)	5 µg/6.5 µl	icv, 25	o		Kask et al., 1998	Regul. Pept. 75-6:255-262
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (300-450g)	0.5 µg/6.5 µl	dorsal PAG, 15	-		Kask et al., 1998	Regul. Pept. 75-6:255-262
BIBP3226	Y_1 antagonist	Open-field	Wistar rats (300-450g)	0.5 µg/6.5 µl	dorsal PAG, 20	o		Kask et al., 1998	Regul. Pept. 75-6:255-262
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (300-450g)	0.5-5 µg/6.5 µl	central amygdala, 15	o		Kask et al., 1998	Regul. Pept. 75-6:255-262
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (300-450g)	0.5 µg/6.5 µl	paraventricular nucleus, 15	o		Kask et al., 1998	Regul. Pept. 75-6:255-262
BIBP3226	Y_1 antagonist	Elevated plus-maze	Wistar rats (300-450g)	0.5 µg/6.5 µl	locus coeruleus, 15	o		Kask et al., 1998	Regul. Pept. 75-6:255-262
BIBP3226	Y_1 antagonist	Elevated plus-maze	Long-Evans rats (175-200g)	1.5 µg/µl	amygdala, 15	-		Primeaux et al., 2005	Neuropsychopharmacology 30:1589-1597
BIBP3226+Diazepam (0.5 mg/kg)	Y_1 antagonist	Elevated plus-maze	Wistar rats (270-350g)	5 µg	icv, 20	(+)		Kask et al., 1996	Eur. J. Pharmacol. 317:R3-R4
BIIE 0246	Y_2 antagonist	Social interaction	WistarF/Han rats (350-390g)	2.5-250 ng/0.25 µl/side	lateral septum, 35	o	Familiar lit area	Kask et al., 2001	Neuroscience 104:799-806

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
BIIE 0246	Y_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	1 nmol/5 µl/rat	icv, 10	+		Bacchi et al., 2006	Peptides 27:3202-3207
BIIE 0246	Y_2 antagonist	Open-field	Sprague-Dawley rats (150-170g)	10 nmol/day	icv, for 14 days	+		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
BIIE 0246	Y_2 antagonist	Open-field	OBX Sprague-Dawley rats (150-170g)	1-10 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
BIIE 0246	Y_2 antagonist	Social interaction	Sprague-Dawley rats (150-170g)	10 nmol/day	icv, for 14 days	+		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
BIIE 0246	Y_2 antagonist	Social interaction	OBX Sprague-Dawley rats (150-170g)	1-10 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
C2-NPY	Y_2 agonist	Social interaction	Wistar rats (250-275g)	80 pmol/100 nl/side	basolateral nucleus of amygdala, 30	-	Low light unfamiliar condition was used	Sajdyk et al., 2002	Pharmacol. Biochem. Behav. 71:419-423
C2-NPY	Y_2 agonist	Elevated plus-maze	Wistar rats (280-315g)	0.2-3 nmol/10 µl	icv, 60	o		Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
C2-NPY	Y_2 agonist	Open-field	Wistar rats (280-315g)	0.2-3 nmol/10 µl	icv, 60	o		Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
C2-NPY+alprazolam (1 mg/kg)	Y_2 agonist	Social interaction	Wistar rats (250-275g)	80 pmol/100 nl/side	basolateral nucleus of amygdala, 30	(o)	(1) Blockade of the effects of C2-NPY; (2) Low light unfamiliar condition was used	Sajdyk et al., 2002	Pharmacol. Biochem. Behav. 71:419-423
CGP71683A	Y_5 antagonist	Social interaction	Wistar rats (280-350g)	1-10	ip, 30	o		Kask et al., 2001	Eur. J. Pharmacol. 215-224
CGP71683A	Y_5 antagonist	Elevated plus-maze	Wistar rats (280-350g)	1-10	ip, 30	o		Kask et al., 2001	Eur. J. Pharmacol. 215-224
CGP71683A	Y_5 antagonist	Open-field	Wistar rats (280-350g)	10	ip, 30	-	Rats were exposed to the EPM before OF testing	Kask et al., 2001	Eur. J. Pharmacol. 215-224
H 409/22	Y_1 antagonist	Elevated plus-maze	Wistar rats (280-350g)	0.5-5 µg	icv, 20	-		Kask et al., 2001	Eur. J. Pharmacol. 215-224
JNJ-31020028	Y2 antagonist	Elevated plus-maze	Wistar rats (180-260g)	1-10	sc, 30	o		Shoblock et al., 2010	Psychopharmacology 208:265-277
JNJ-31020028	Y2 antagonist	Conflict test	Sprague-Dawley rats (300-350g)	3-10	sc, 30	o		Shoblock et al., 2010	Psychopharmacology 208:265-277
JNJ-31020028	Y2 antagonist	Light/dark test	NMRI mice	1-10	sc, 15	o		Shoblock et al.,	Psychopharmacology

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
			(20-30g)					2010	208:265-277
JNJ-31020028	Y2 antagonist	Stress-induced hyperthermia	NMRI mice (20-30g)	1-10	sc, 15	o		Shoblock et al., 2010	Psychopharmacology 208:265-277
JNJ-31020028	Y2 antagonist	Social interaction	Sprague-Dawley rats (22-28-day-old)	20	ip, for 10 days	o	Rats with low locomotor activity	Aydin et al., 2011	Behav. Brain Res. 222:332-341
JNJ-31020028	Y2 antagonist	Social interaction	Sprague-Dawley rats (22-28-day-old)	20	ip, for 10 days	o	Rats with high locomotor activity	Aydin et al., 2011	Behav. Brain Res. 222:332-341
JNJ-31020028	Y2 antagonist	Social interaction	Sprague-Dawley rats (22-28-day-old)	20	ip, for 10 days	o	Nicotine abstinence rats with low locomotor activity were used	Aydin et al., 2011	Behav. Brain Res. 222:332-341
JNJ-31020028	Y2 antagonist	Social interaction	Sprague-Dawley rats (22-28-day-old)	20	ip, for 10 days	+	Nicotine abstinence rats with hhigh locomotor activity were used	Aydin et al., 2011	Behav. Brain Res. 222:332-341
JNJ-31020028	Y2 antagonist	Footshock stress-induced reinstatement of alcohol seeking	Wistar rats (175-200g)	15-40	sc, 60	o	Shocks of 0.8 mA/10-70 s were applied	Cippitelli et al., 2011	Alcohol 45:567-576
JNJ-31020028	Y2 antagonist	Elevated plus-maze	Wistar rats (175-200g)	15	sc, 60	+	The drug reversed anxiogenic-like effects of alcohol withdrawal	Cippitelli et al., 2011	Alcohol 45:567-576
Lu AA33810	Y_5 selective antagonist	Social interaction	Sprague-Dawley rats (150-175g)	3-10	po, 60	+		Walker et al., 2009	J. Pharmacol. Exp. Ther. 328:900-911
Lu AA33810	Y_5 selective antagonist	Social interaction	Sprague-Dawley rats (150-175g)	10	po, for 21 days	+		Walker et al., 2009	J. Pharmacol. Exp. Ther. 328:900-911
Lu AA33810	Y_5 selective antagonist	Social interaction	Flingers sensitive line rats (80-day-old)	10	ip, for 14 days	+		Walker et al., 2009	J. Pharmacol. Exp. Ther. 328:900-911
Mutant mice	NPY knockout	Elevated plus-maze	129/sv-C57BL6 background mice			-	KO mice displayed increased anxiety-like behavior	Bannon et al., 2000	Brain Res. 868:79-87
Mutant mice	NPY knockout	Open-field	129/sv-C57BL6 background mice			-	KO mice displayed increased anxiety-like behavior	Bannon et al., 2000	Brain Res. 868:79-87
Mutant mice	NPY knockout	Acoustic startle reflex	129/sv-C57BL6 background mice			-	KO mice displayed increased anxiety-like	Bannon et al., 2000	Brain Res. 868:79-87

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
							behavior		
Mutant mice	Y_2 deletion	Elevated plus-maze	C57BL/6-129svJ background mice			+	$Y_2^{-/-}$ mice showed reduced anxiety-like behaviors	Tschenett et al., 2003	Eur. J. Neurosci. 18:143-148
Mutant mice	Y_2 deletion	Open-field	C57BL/6-129svJ background mice			+	$Y_2^{-/-}$ mice showed reduced anxiety-like behaviors	Tschenett et al., 2003	Eur. J. Neurosci. 18:143-148
Mutant mice	Y_2 deletion	Light/dark test	C57BL/6-129svJ background mice			+	$Y_2^{-/-}$ mice showed reduced anxiety-like behaviors	Tschenett et al., 2003	Eur. J. Neurosci. 18:143-148
Mutant mice	Y_2 deletion	Elevated plus-maze	C57BL/6-129svJ background mice (28-30g)			+	$Y_2^{-/-}$ mice showed reduced anxiety-like behaviors	Redrobe et al., 2003	Behav. Brain Res. 141:251-255
Mutant mice	Y_2 deletion	Open-field	C57BL/6-129svJ background mice (28-30g)			+	$Y_2^{-/-}$ mice showed reduced anxiety-like behaviors	Redrobe et al., 2003	Behav. Brain Res. 141:251-255
Mutant mice	Y_1 knockout	Open-field	C57BL/6-129svJ background mice			+	$Y_1^{-/-}$ mice showed reduced anxiety-like behaviors when tested during the light phase or after restraint stress	Karl et al., 2006	Behav. Brain Res. 167:87-93
Mutant mice	Y_1 knockout	Elevated plus-maze	C57BL/6-129svJ background mice			+	$Y_1^{-/-}$ mice showed reduced anxiety-like behaviors when tested after restraint stress	Karl et al., 2006	Behav. Brain Res. 167:87-93
Mutant mice	Y_1 knockout	Light/dark test	C57BL/6-129svJ background mice			-	$Y_1^{-/-}$ mice showed increased anxiety-like behaviors when tested during the light phase	Karl et al., 2006	Behav. Brain Res. 167:87-93
Mutant mice	Y_2 deletion	Elevated plus-maze	C57BL/6-129svJ background mice (24-month-old)			+	$Y_2^{-/-}$ mice showed decreased anxiety-like behaviors	Carvajal et al., 2006	J. Mol. Neurosci. 28:239-246
Mutant mice	Y_2 deletion	Open-field	C57BL/6-129svJ background mice (24-month-old)			+	$Y_2^{-/-}$ mice showed decreased anxiety-like behaviors	Carvajal et al., 2006	J. Mol. Neurosci. 28:239-246
Mutant mice	NPY knockout	Elevated plus-maze	Female and male 129/SvEv background mice (16-week-old)			-	Mice were withdrawn from repeated (i.e. 6-day) ethanol exposure	Sparta et al., 2007	Drug Alcohol Depend. 90:297-300

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Mutant mice	NPY knockout	Elevated plus-maze	Female and male 129/SvEv background mice (16-week-old)			o		Sparta et al., 2007	Drug Alcohol Depend. 90:297-300
Mutant mice	Y1 knockout	Elevated plus-maze	Female and male BALB/cxC57BL/6 background mice (at least 8-week-old)			o	No phenotype	Karlsson et al., 2008	Psychopharmacology 195:547-557
Mutant mice	Y1 knockout	Open-field	Female and male BALB/cxC57BL/6 background mice (at least 8-week-old)			o	No phenotype	Karlsson et al., 2008	Psychopharmacology 195:547-557
Mutant mice	Y1 knockout	Light/dark test	Female and male BALB/cxC57BL/6 background mice (at least 8-week-old)			o	No phenotype	Karlsson et al., 2008	Psychopharmacology 195:547-557
Mutant mice	Y1 knockout	Conditioned fear	Female and male BALB/cxC57BL/6 background mice (at least 8-week-old)			o	No phenotype	Karlsson et al., 2008	Psychopharmacology 195:547-557
Mutant mice	Y2 knockout	Elevated plus-maze	Female C57BL/6x129/SvJ background mice			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice	Y4 knockout	Elevated plus-maze	Female C57BL/6x129/SvJ background mice			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice	Y2 knockout	Stress-induced hyperthermia	Female C57BL/6x129/SvJ background mice			o	No phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice	Y4 knockout	Stress-induced hyperthermia	Female C57BL/6x129/SvJ background mice			o	No phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice	Y2 knockout	Open-field	Female C57BL/6x129/SvJ background mice			o	No phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice	Y4 knockout	Open-field	Female C57BL/6x129/SvJ background mice			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice	Y2 knockout	Social interaction	Female C57BL/6x129/SvJ background mice			o	No phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice	Y4 knockout	Social interaction	Female C57BL/6x129/SvJ background mice			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Neuropharmacology 55:117-126

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Mutant mice	Y4 knockout	Open-field	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2 knockout	Open-field	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2/Y4 knockout	Open-field	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2/Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y4 knockout	Light/dark test	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2 knockout	Light/dark test	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2/Y4 knockout	Light/dark test	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2/Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y4 knockout	Elevated plus-maze	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			o	No phenotype	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2 knockout	Elevated plus-maze	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2/Y4 knockout	Elevated plus-maze	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2/Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y4 knockout	Stress-induced hyperthermia	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2 knockout	Stress-induced hyperthermia	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2/Y4 knockout	Stress-induced hyperthermia	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			o	No phenotype	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y4 knockout	Marble burying	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Mutant mice	Y2 knockout	Marble burying	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y2/Y4 knockout	Marble burying	C57BL/6x129/SvJ background mice (10-16-week-old, 25-30g)			+	$Y2/Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Tasan et al., 2009	Neuroscience 158:1717-1730
Mutant mice	Y4 knockout	Open-field	C57BL/6:129/SvJ Female mice (21-33g)			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Genes Brain Behav. 7: 532–542
Mutant mice	Y4 knockout	Elevated plus-maze	C57BL/6:129/SvJ Female mice (21-33g)			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Genes Brain Behav. 7: 532–542
Mutant mice	Y4 knockout	Stress-induced hyperthermia	C57BL/6:129/SvJ Female mice (21-33g)			+	$Y4^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Genes Brain Behav. 7: 532–542
Mutant mice	Y2 knockout	Open-field	C57BL/6:129/SvJ Female mice (21-33g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Genes Brain Behav. 7: 532–542
Mutant mice	Y2 knockout	Elevated plus-maze	C57BL/6:129/SvJ Female mice (21-33g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Genes Brain Behav. 7: 532–542
Mutant mice	Y2 knockout	Stress-induced hyperthermia	C57BL/6:129/SvJ Female mice (21-33g)			+	$Y2^{-/-}$ mice showed decreased anxiety-like behaviors	Painsipp et al., 2008	Genes Brain Behav. 7: 532–542
Mutant mice	Y1 knockout	Elevated plus-maze	C57BL/6-129/SvJ mice			+		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
Mutant mice	Y1 knockout	Open-field	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
Mutant mice	Y1 knockout	Light/dark test	C57BL/6-129/SvJ mice			+		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
Mutant mice	Y1 knockout	Holeboard	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
Mutant mice	Y2 knockout	Elevated plus-maze	Female and Male C57BL/6-129SvJ mice (9-12-week-old)			o		Zambello et al., 2011	Neuroscience 176:420-430

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Mutant mice	NPY overexpression	Elevated plus-maze	OE-NPY^{DBH}xC57BL/6 mice (12-week-old)			+		Ruohonen et al., 2009	Neuroendocrinology 89:351-360
Mutant mice	NPY overexpression	Light/dark test	OE-NPY^{DBH}xC57BL/6 mice (12-week-old)			+		Ruohonen et al., 2009	Neuroendocrinology 89:351-360
Mutant mice	NPY overexpression	Open-field	OE-NPY^{DBH}xC57BL/6 mice (12-week-old)			+		Ruohonen et al., 2009	Neuroendocrinology 89:351-360
Mutant mice	NPY knockout	Elevated plus-maze	C57BL/6x129/SvJ mice			-		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY knockout	Open-field	C57BL/6x129/SvJ mice			o		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY knockout	Elevated plus-maze	Female C57BL/6x129/SvJ mice			o		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY knockout	Open-field	Female C57BL/6x129/SvJ mice			-		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY knockout	Elevated plus-maze	C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY knockout	Open-field	C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY knockout	Elevated plus-maze	Female C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY knockout	Open-field	Female C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	PYY knockout	Elevated plus-maze	C57BL/6x129/SvJ mice			-		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	PYY knockout	Open-field	C57BL/6x129/SvJ mice			o		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	PYY knockout	Elevated plus-maze	Female C57BL/6x129/SvJ mice			o		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	PYY knockout	Open-field	Female C57BL/6x129/SvJ mice			o		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Mutant mice	PYY knockout	Elevated plus-maze	C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	PYY knockout	Open-field	C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	PYY knockout	Elevated plus-maze	Female C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	PYY knockout	Open-field	Female C57BL/6x129/SvJ mice			+	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Elevated plus-maze	C57BL/6x129/SvJ mice			-		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Open-field	C57BL/6x129/SvJ mice			o		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Elevated plus-maze	Female C57BL/6x129/SvJ mice			o		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Open-field	Female C57BL/6x129/SvJ mice			-		Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Elevated plus-maze	C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Open-field	C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Elevated plus-maze	Female C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	NPY+PYY knockout	Open-field	Female C57BL/6x129/SvJ mice			o	Animals had colitis	Painsipp et al., 2010	Br. J. Pharmacol. 163:1302-1314
Mutant mice	Y1 knockout	Elevated plus-maze	Female C57BL/6x129/SvJ mice			o		Painsipp et al., 2009	J. Psychopharmacol. 24:1541-1549
Mutant mice	Y_1 knockout	Fear-potentiated startle reflex	B6-TgH(npyy1KO)xC57BL/6JNpa mice (2-3-month-old)			o		Fendt et al., 2010	Psychopharmacology 206:291-301
Mutant mice+LPS (0.1 mg/kg)	Y2 knockout	Elevated plus-maze	Female C57BL/6x129/SvJ background mice			(o)	Antagonism of the anxiolytic-like phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice+LPS (0.1 mg/kg)	Y4 knockout	Elevated plus-maze	Female C57BL/6x129/SvJ background mice			+	No antagonism of the anxiolytic-like phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice+LPS (0.1 mg/kg)	Y2 knockout	Stress-induced hyperthermia	Female C57BL/6x129/SvJ background mice			(o)	Antagonism of the anxiolytic-like effects of	Painsipp et al., 2008	Neuropharmacology 55:117-126

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
							LPS		
Mutant mice+LPS (0.1 mg/kg)	Y4 knockout	Stress-induced hyperthermia	Female C57BL/6x129/SvJ background mice			+	No antagonism of the anxiolytic-like effects of LPS	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice+LPS (0.1 mg/kg)	Y2 knockout	Open-field	Female C57BL/6x129/SvJ background mice			o	No interaction	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice+LPS (0.1 mg/kg)	Y4 knockout	Open-field	Female C57BL/6x129/SvJ background mice			+	No antagonism of the anxiolytic-like phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice+LPS (0.1 mg/kg)	Y2 knockout	Social interaction	Female C57BL/6x129/SvJ background mice			-	No antagonism of the anxiogenic-like effects of LPS	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice+LPS (0.1 mg/kg)	Y4 knockout	Social interaction	Female C57BL/6x129/SvJ background mice			+	No antagonism of the anxiolytic-like phenotype	Painsipp et al., 2008	Neuropharmacology 55:117-126
Mutant mice+rAAV	Y5 receptor overexpression	Open-field	NMRI mice (30-40g)	1 µl	amygdala, 3 weeks	o		Olesen et al., 2012	Neuropeptides 46:71-79
Mutant mice+rAAV	Y5 receptor overexpression	Elevated plus-maze	NMRI mice (30-40g)	1 µl	amygdala, 3 weeks	o		Olesen et al., 2012	Neuropeptides 46:71-79
Mutant mice+rAAV	Y5 receptor overexpression	Light/dark test	NMRI mice (30-40g)	1 µl	amygdala, 3 weeks	o		Olesen et al., 2012	Neuropeptides 46:71-79
Mutant mice+rAAV	Y1 receptor overexpression	Open-field	NMRI mice (30-40g)	1 µl	amygdala, 3 weeks	+		Olesen et al., 2012	J. Neurosci. Res. 90:498-507
Mutant mice+rAAV	Y1 receptor overexpression	Elevated plus-maze	NMRI mice (30-40g)	1 µl	amygdala, 3 weeks	+		Olesen et al., 2012	J. Neurosci. Res. 90:498-507
Mutant mice+rAAV-Cre	Y2 knockout	Elevated plus-maze	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	basolateral amygdala, 4 weeks	+		Tasan et al., 2010	J. Neurosci. 30:6282-6290
Mutant mice+rAAV-Cre	Y2 knockout	Light/dark test	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	basolateral amygdala, 4 weeks	+		Tasan et al., 2010	J. Neurosci. 30:6282-6290
Mutant mice+rAAV-Cre	Y2 knockout	Elevated plus-maze	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	central amygdala, 4 weeks	+		Tasan et al., 2010	J. Neurosci. 30:6282-6290

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Mutant mice+rAAV-Cre	Y2 knockout	Light/dark test	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	central amygdala, 4 weeks	+		Tasan et al., 2010	J. Neurosci. 30:6282-6290
Mutant mice+rAAV-Cre	Y2 knockout	Elevated plus-maze	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	medial amygdala, 4 weeks	o		Tasan et al., 2010	J. Neurosci. 30:6282-6290
Mutant mice+rAAV-Cre	Y2 knockout	Light/dark test	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	medial amygdala, 4 weeks	o		Tasan et al., 2010	J. Neurosci. 30:6282-6290
Mutant mice+rAAV-Cre	Y2 knockout	Elevated plus-maze	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	bed nucleus of the stria terminalis, 4 weeks	o		Tasan et al., 2010	J. Neurosci. 30:6282-6290
Mutant mice+rAAV-Cre	Y2 knockout	Light/dark test	$Y2^{lox/lox}$xC57BL/6x129Sv mice (10-16-week-old, 25-30g)	$6x10^7$ GP/µL	bed nucleus of the stria terminalis, 4 weeks	o		Tasan et al., 2010	J. Neurosci. 30:6282-6290
Mutant rats	NPY overexpression	Elevated plus-maze	Sprague-Dawley background rats (5-month-old; 325-375g)			o		Thorsell et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:12852-12857
Mutant rats	NPY overexpression	Elevated plus-maze	Sprague-Dawley background rats (5-month-old; 325-375g)			+	Animals were subjected to restraint stress prior to the test	Thorsell et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:12852-12857
Mutant rats	NPY overexpression	Vogel conflict test	Sprague-Dawley background rats (5-month-old; 325-375g)			+		Thorsell et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:12852-12857
Mutant rats	NPY overexpression	Elevated plus-maze	Sprague-Dawley background rats (1-year-old)			+	Animals were subjected to restraint stress prior to the test	Carvajal et al., 2004	Behav. Brain Res. 153:471-480
Mutant rats	NPY overexpression	Elevated plus-maze	Sprague-Dawley background rats (1-year-old)			o		Carvajal et al., 2004	Behav. Brain Res. 153:471-480

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Mutant rats	NPY overexpression	Open-field	Sprague-Dawley background rats (1-year-old)			+	Transgenic rats appeared less anxious than their WT counterparts	Carvajal et al., 2004	Behav. Brain Res. 153:471-480
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Wistar rats (250g)	100 pmol/side	amygdala, 3	+		Heilig, 1995	Regul. Pept. 59:201-205
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (220-240g)	0.07-2.3 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (250-270g)	1-5 nmol/5 µl	icv, 60	+		Heilig et al., 1989	Psychopharmacology 98:524-529
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Rats	3 nmol/5 µl	icv, 60	+		Kirby et al., 1995	J. Med. Chem. 38:4579-4586
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Rats	0.07-2.3 nmol	icv, 60	+	Locomotion was decreased	Broqua et al., 1994	Neuropeptides 26:16
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	ddY Mice (7-week-old)	0.7 nmol/4 µl	icv, 30	+		Nakajima et al., 1998	Peptides 19:359-363
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	ddY Mice (7-week-old)	7 pmol/4 µl	icv, 10	-		Nakajima et al., 1998	Peptides 19:359-363
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	ddY Mice (7-week-old)	7 pmol or 0.7 nmol/4 µl	icv, 10	-/+	Biphasic effects	Nakajima et al., 1998	Peptides 19:359-363
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Long-Evans rats (220-240g)	0.023-2.3 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Rats	0.23-2.3 nmol	icv, 60	+		Wettstein et al., 1994	Neuropeptides 26:16-17
Neuropeptide Y	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-275g)	1-5 nmol/5 µl	icv, 60	+		Heilig et al., 1993	Neuropsychopharmacology 8:357-363
Neuropeptide Y	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-275g)	50-100 pmol/0.5 µl	amygdala, 15	+		Heilig et al., 1993	Neuropsychopharmacology 8:357-363
Neuropeptide Y	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-275g)	1-5 nmol	icv, 60	+		Heilig et al., 1992	Regul. Pept. 41:61-69
Neuropeptide Y	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-250g)	4-6 µg/rat	icv, 15	+		Britton et al., 1997	Psychopharmacology 132:6-13
Neuropeptide Y	Endogenous peptide	Open-field	Sprague-Dawley rats (220-250g)	1-4 nmol/5 µl	icv, 60	?	NPY decreased spontaneous activity, suggesting sedation	Heilig and Murison, 1987	Regul. Pept. 19:221-231
Neuropeptide Y	Endogenous peptide	Stress-induced gastric erosion	Sprague-Dawley rats (220-250g)	2 nmol/5 µl	icv, 60	+	Animals were exposed to water immersion stress	Heilig and Murison, 1987	Eur. J. Pharmacol. 137:127-129
Neuropeptide Y	Endogenous	Vogel conflict	Sprague-	0.2-5 nmol/5	icv, 60	+	Water deprivation of 24	Heilig et al., 1989	Psychopharmacology

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
	peptide	test	Dawley rats (250-270g)	µl			hrs and electric shocks of 0.16 mA/2 s		98:524-529
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Wistar rats (280-350g)	10 pmol/0.5 µl	vicinity of locus coeruleus, 20	+		Kask et al., 1998	Brain Res. 788:345-348
Neuropeptide Y	Endogenous peptide	Social interaction	Wistar rats (300-350g)	10 pmol/100 nl/side	30, central amygdala	o		Sajdyk et al., 1999	Eur. J. Pharmacol. 368:143-147
Neuropeptide Y	Endogenous peptide	Social interaction	Wistar rats (300-350g)	10 pmol/100 nl/side	30, basolateral amygdala	+		Sajdyk et al., 1999	Eur. J. Pharmacol. 368:143-147
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Lewis rats		icv, 60	+		Von Hörsten et al., 1999	Soc. Neurosci. Abstr. 25:349
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	F344 rats		icv, 60	+		Von Hörsten et al., 1999	Soc. Neurosci. Abstr. 25:349
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Sprague Dawley rats		icv, 60	o		Von Hörsten et al., 1999	Soc. Neurosci. Abstr. 25:349
Neuropeptide Y	Endogenous peptide	Conflict test	Wistar rats (300-400g)	2-8 µg/2-5 µl	icv, 15	+	Random-interval 30 s was used	Britton et al., 2000	Peptides 21:37-44
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Wistar rats (300-400g)	4 µg/2-5 µl	icv, 15	+		Britton et al., 2000	Peptides 21:37-44
Neuropeptide Y	Endogenous peptide	Conflict test	Wistar rats	4-6 µg	icv, 15	+	Random-interval 30 s was used	Britton et al., 2001	Peptides 22:607-612
Neuropeptide Y	Endogenous peptide	Social interaction	WistarF/Han rats (350-390g)	225-2250 ng/0.25 µl/side	lateral septum, 20	+	Low light unfamiliar condition was used	Kask et al., 2001	Neuroscience 104:799-806
Neuropeptide Y	Endogenous peptide	Social interaction	WistarF/Han rats (350-390g)	22.5-2250 ng/0.25 µl/side	intramedial septum, 20	o	Low light unfamiliar condition was used	Kask et al., 2001	Neuroscience 104:799-806
Neuropeptide Y	Endogenous peptide	Light/dark test	Fisher-344 rats (180-200g)	0.5 nmol/5 µl	icv, 30	+		Sudakov et al., 2001	Psychopharmacology 154:327-335
Neuropeptide Y	Endogenous peptide	Light/dark test	Wistar Albino Glaxo rats (180-200g)	1 nmol/5 µl	icv, 30	+		Sudakov et al., 2001	Psychopharmacology 154:327-335
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	F344 rats	0.2-1 nmol/5 µl	icv, 15	+		Karl et al., 2003	Pharmacol. Biochem. Behav. 75:869-879
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	F344/DuCrj (DPPIV-) rats	0.2-1 nmol/5 µl	icv, 15	+		Karl et al., 2003	Pharmacol. Biochem. Behav. 75:869-879
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	F344/Crl (Ger/DPPIV-) rats	0.2-1 nmol/5 µl	icv, 15	+		Karl et al., 2003	Pharmacol. Biochem. Behav. 75:869-879
Neuropeptide Y	Endogenous peptide	Social interaction	F344 rats	0.2-1 nmol/5 µl	icv, 15	+		Karl et al., 2003	Pharmacol. Biochem. Behav. 75:869-879
Neuropeptide Y	Endogenous	Social interaction	F344/DuCrj	0.2-1 nmol/5	icv, 15	+		Karl et al., 2003	Pharmacol. Biochem.

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
	peptide		(DPPIV-) rats	µl					Behav. 75:869-879
Neuropeptide Y	Endogenous peptide	Social interaction	F344/Crl (Ger/DPPIV-) rats	0.2-1 nmol/5 µl	icv, 15	+		Karl et al., 2003	Pharmacol. Biochem. Behav. 75:869-879
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Wistar rats (280-315g)	0.2-6 nmol/10 µl	icv, 60	+		Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
Neuropeptide Y	Endogenous peptide	Open-field	Wistar rats (280-315g)	0.1-3 nmol/10 µl	icv, 60	+	The drug produced sedation from 0.2 nmol	Sørensen et al., 2004	J. Neurosci. Res. 77:723-729
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	C57BL/6J (7-8-week-old)	0.5-1 nmol/0.5 µl	icv, 15	+		Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Neuropeptide Y	Endogenous peptide	Light/dark test	C57BL/6J (7-8-week-old)	0.5-1 nmol/0.5 µl	icv, 15	+		Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Neuropeptide Y	Endogenous peptide	Conditioned fear	C57BL/6J (7-8-week-old)	0.5-1 nmol/0.5 µl	icv, 15	+	(1) The drug reduced freezing to context; (2) The shock was 0.2 mA/2 s	Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Neuropeptide Y	Endogenous peptide	Conditioned fear	C57BL/6J (7-8-week-old)	1 nmol/0.5 µl	icv, 15	+	(1) The drug reduced freezing to auditory cue; (2) The shock was 0.2 mA/2 s	Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (220-250g)	10-20 nM/1 µl	amygdala, 15	+		Kokare et al., 2005	Brain Res. 1043:107-114
Neuropeptide Y	Endogenous peptide	Social interaction	Wistar rats (275-300g)	100 pmol/100 nl	basolateral amygdala, 30	+	Animals were subjected to restraint stress prior to the test	Sajdyk et al., 2006	Stress 9:21-28
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0,3 nmol/5 µl/rat	icv, 10	+		Bacchi et al., 2006	Peptides 27:3202-3207
Neuropeptide Y	Endogenous peptide	Conflict test	Female Wistar rats (250-300g)	1-2.5 µg/side	lateral septum	+	(1) Rats were tested in late proestrus; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Peptides 27:2722-2230
Neuropeptide Y	Endogenous peptide	Conflict test	Female Wistar rats (250-300g)	2.5 µg/side	lateral septum	+	(1) Rats were tested in metestrus-diestrus phase; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Peptides 27:2722-2230
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Female Wistar rats (250-300g)	1-2 µg/side	lateral septum	+	Rats were tested in late proestrus	Molina-Hernández et al., 2006	Peptides 27:2722-2230

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Female Wistar rats (250-300g)	2 µg/side	lateral septum	+	Rats were tested in late proestrus	Molina-Hernández et al., 2006	Peptides 27:2722-2230
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Female and male WT BALB/cxC57BL/6 background mice (at least 8-week-old)	0,5-1 nmol/0,5 µl	icv, 15	+		Karlsson et al., 2008	Psychopharmacology 195:547-557
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Female and male Y1 KO BALB/cxC57BL/6 background mice (at least 8-week-old)	0,5-1 nmol/0,5 µl	icv, 15	(o)	The anxiolytic-like effects of NPY were lost in Y1 knockout mice	Karlsson et al., 2008	Psychopharmacology 195:547-557
Neuropeptide Y	Endogenous peptide	Vogel conflict test	Ovariectomized female Wistar rats (250-300g)	2.5-3 µg/µl	lateral septum, 30	+	Shocks of 0.4 mA/45 ms were applied	Olivera-Lopez et al., 2008	Peptides 29:1396-1403
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Ovariectomized female Wistar rats (250-300g)	2.5-3 µg/µl	lateral septum, 30	+		Olivera-Lopez et al., 2008	Peptides 29:1396-1403
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Wistar rats (250-275g)	10 pmol/100 nl	basolateral amygdala, for 5 days, o.d.	o		Sajdyk et al., 2008	J. Neurosci. 28:893-903
Neuropeptide Y	Endogenous peptide	Social interaction	Wistar rats (250-275g)	10 pmol/100 nl	basolateral amygdala, for 5 days, o.d.	+	The effects lasted up to 8 weeks	Sajdyk et al., 2008	J. Neurosci. 28:893-903
Neuropeptide Y	Endogenous peptide	Social interaction	Wistar rats (250-275g)	10 pmol/100 nl	basolateral amygdala, for 5 days, o.d.	+	(1) Animals were subjected to restraint stress prior to the test; (2) The effects lasted up to 8 weeks	Sajdyk et al., 2008	J. Neurosci. 28:893-903
Neuropeptide Y	Endogenous peptide	Stress-induced hyperthermia	Wistar rats (250-275g)	10 pmol/100 nl	basolateral amygdala, for 5 days, o.d.	+		Sajdyk et al., 2008	J. Neurosci. 28:893-903
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Sprague Dawley rats (350-500g)	3-10 µg/5 µl	icv, 60	+		Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Sprague Dawley rats	10 µg/5 µl	icv, 60	+		Gutman et al., 2008	J. Neurosci. 28:12682-12690

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
			(350-500g)						
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	10 pmol/0.5 µl/side	basolateral amygdala, 0	+		Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Sprague Dawley rats (350-500g)	10 pmol/0.5 µl/side	basolateral amygdala, 0	o		Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	10 pmol/0.5 µl/side	medial amygdala, 0	o		Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Sprague Dawley rats (350-500g)	10 pmol/0.5 µl/side	medial amygdala, 0	o		Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	10 µg/5 µl	icv, 60	+	NPY enhanced within-session extinction of fear-potentiated startle	Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	10 µg/5 µl	icv, 30	+	NPY enhanced extinction to contextual component of fear-potentiated startle	Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	Sprague Dawley rats (350-500g)	10 µg/5 µl	icv, 30	+	NPY enhanced extinction retention with context shift of fear-potentiated startle	Gutman et al., 2008	J. Neurosci. 28:12682-12690
Neuropeptide Y	Endogenous peptide	Fear-potentiated startle reflex	DBA/1J (2-3-month-old)	0.125 µg/0.3 µl	amygdala, 10	+		Fendt et al., 2009	Psychopharmacology 206:291-301
Neuropeptide Y	Endogenous peptide	Conditioned fear	DBA/1J (2-3-month-old)	0.5 µg/0.3 µl	amygdala, 10	+		Fendt et al., 2009	Psychopharmacology 206:291-301
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Long-Evans rats (300-400g)	1.5 µg/0.5 µl	lateral septum, 15	o		Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
Neuropeptide Y	Endogenous peptide	Shock-probe burying test	Long-Evans rats (300-400g)	1.5 µg/0.5 µl	lateral septum, 15	+	Shocks of 2.5 mA were delivered	Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
Neuropeptide Y	Endogenous peptide	Novelty-suppressed feeding	Long-Evans rats (300-400g)	1.5 µg/0.5 µl	lateral septum, 15	+		Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Female alcohol-preferring rats (123-317g)	2.5-10 µg/5 µl	icv, 30	+		Gilpin et al., 2011	Alcohol 45:137-145
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Female alcohol-preferring rats (123-317g)	2.5-10 µg/5 µl	icv, 30	+	Rats received footshocks (0.8 mA/0.5 s) on day 14 of alcohol abstinence	Gilpin et al., 2011	Alcohol 45:137-145

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Female alcohol-preferring rats (123-317g)	2.5-10 µg/5 µl	icv, 30	+	Animals were abstinent	Gilpin et al., 2011	Alcohol 45:137-145
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Female alcohol-preferring rats (123-317g)	2.5-10 µg/5 µl	icv, 30	+	(1) Rats received footshocks (0.8 mA/0.5 s) on day 14 of alcohol abstinence; (2) Animals were abstinent	Gilpin et al., 2011	Alcohol 45:137-145
Neuropeptide Y	Endogenous peptide	Social interaction	Female alcohol-preferring rats (123-317g)	2.5-10 µg/5 µl	icv, 30	+		Gilpin et al., 2011	Alcohol 45:137-145
Neuropeptide Y	Endogenous peptide	Social interaction	Female alcohol-preferring rats (123-317g)	2.5-10 µg/5 µl	icv, 30	+	Rats received 0.75 g/kg ethanol	Gilpin et al., 2011	Alcohol 45:137-145
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (200-250g)	5-10 µg/1 µl	dorsal hippocampus, 7 days	o		Cohen et al., 2012	Neuropsychopharmacology 37:350-363
Neuropeptide Y	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (200-250g)	5 µg/1 µl	dorsal hippocampus, 7 days	+	Animals were exposed to predator-scent stress for 15 min 7 days prior to testing	Cohen et al., 2012	Neuropsychopharmacology 37:350-363
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (200-250g)	5-10 µg/1 µl	dorsal hippocampus, 7 days	o		Cohen et al., 2012	Neuropsychopharmacology 37:350-363
Neuropeptide Y	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (200-250g)	5-10 µg/1 µl	dorsal hippocampus, 7 days	+	Animals were exposed to predator-scent stress for 15 min 7 days prior to testing	Cohen et al., 2012	Neuropsychopharmacology 37:350-363
Neuropeptide Y	Endogenous peptide	Stress-induced freezing	Sprague-Dawley rats (200-250g)	5-10 µg/1 µl	dorsal hippocampus, 7 days	+	Animals were exposed to predator-scent stress for 15 min 7 days prior to testing	Cohen et al., 2012	Neuropsychopharmacology 37:350-363
Neuropeptide Y+BIBO 3304 (200 pmol/side)	Endogenous peptide	Social interaction	Wistar rats (300-350g)	10 pmol/100 nl/side	30, basolateral amygdala	(o)	The antagonist Y_1 blocked the anxiolytic-like effects of NPY	Sajdyk et al., 1999	Eur. J. Pharmacol. 368:143-147
Neuropeptide Y+CRF (0.75 µg)	Endogenous peptide	Conflict test	Rats	1 µg	icv	(+)		Britton et al., 1997	Soc. Neurosci. Abstr. 23:521
Neuropeptide Y+Flumazenil (3-12 mg/kg)	Endogenous peptide	Conflict test	Wistar rats (200-250g)	16 µg/rat	icv, 15	+	No antagonism of the anxiolytic-like effects of NPY	Britton et al., 1997	Psychopharmacology 132:6-13

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
Neuropeptide Y+Idazoxan (a_2 antagonist)	Endogenous peptide	Vogel conflict test	Sprague-Dawley rats (250-270g)	0.2-5 nmol/5 µl	icv, 60	(-)		Heilig et al., 1989	Psychopharmacology 98:524-529
Neuropeptide Y+IPPO (picrotoxin ligand, 5-15 mg/kg)	Endogenous peptide	Conflict test	Wistar rats (200-250g)	16 µg/rat	icv, 15	+	No antagonism of the anxiolytic-like effects of NPY	Britton et al., 1997	Psychopharmacology 132:6-13
NPY+17-β-estradiol (25 µg/µl)	Endogenous peptide	Vogel conflict test	Ovariectomized female Wistar rats (250-300g)	2-2.5 µg/µl	lateral septum, 30	(+)	(1) Synergistic effects; (2) Shocks of 0.4 mA/45 ms were applied	Olivera-Lopez et al., 2008	Peptides 29:1396-1403
NPY+17-β-estradiol (25 µg/µl)	Endogenous peptide	Elevated plus-maze	Ovariectomized female Wistar rats (250-300g)	2-2.5 µg/µl	lateral septum, 30	(+)	Synergistic effects	Olivera-Lopez et al., 2008	Peptides 29:1396-1403
NPY+BIBO 3304 (0.15-0.3 µg/0.5 µl)	Endogenous peptide	Elevated plus-maze	Long-Evans rats (300-400g)	1.5 µg/0.5 µl	lateral septum, 15	o	No interaction	Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
NPY+BIBO 3304 (0.15-0.3 µg/0.5 µl)	Endogenous peptide	Shock-probe burying test	Long-Evans rats (300-400g)	1.5 µg/0.5 µl	lateral septum, 15	(o)	Shocks of 2.5 mA were delivered	Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
NPY+BIBO 3304 (0.15-0.3 µg/0.5 µl)	Endogenous peptide	Novelty-suppressed feeding	Long-Evans rats (300-400g)	1.5 µg/0.5 µl	lateral septum, 15	+	No interaction	Trent and Menard, 2011	Pharmacol. Biochem. Behav. 99:580-590
NPY+BIBO 3304 (250 ng)	Endogenous peptide	Social interaction	WistarF/Han rats (350-390g)	2250 ng/0.25 µl/side	lateral septum, 20	(o)	(1) Blockade of the effects of NPY; (2) Familiar lit area	Kask et al., 2001	Neuroscience 104:799-806
NPY+BIBO 3304 (250 ng)	Endogenous peptide	Conditioned fear	DBA/1J (2-3-month-old)	0.5 µg/0.3 µl	amygdala, 10	+	No antagonism	Fendt et al., 2009	Psychopharmacology 206:291-301
NPY+BII 0246 (250 ng)	Endogenous peptide	Social interaction	WistarF/Han rats (350-390g)	2250 ng/0.25 µl/side	lateral septum, 20	+	(1) No blockade of the effects of NPY; (2) Familiar lit area	Kask et al., 2001	Neuroscience 104:799-806
NPY+calcineurin peptide (1 pmol/100 nl)	Endogenous peptide	Social interaction	Wistar rats (250-275g)	10 pmol/100 nl	basolateral amygdala, for 5 days, o.d.	(o)	Antagonism of the effects of NPY	Sajdyk et al., 2008	J. Neurosci. 28:893-903
NPY+CRF (0.75 µg, icv)	Endogenous peptide	Conflict test	Wistar rats (300-400g)	2-8 µg/2-5 µl	icv, 15	(o)	(1) Antagonism of the anxiogenic effects of CRF; (2) Random-interval 30 s was used	Britton et al., 2000	Peptides 21:37-44
NPY+CRF (0.75 µg, icv)	Endogenous peptide	Elevated plus-maze	Wistar rats (300-400g)	4 µg/2-5 µl	icv, 15	(o)	Antagonism of the anxiogenic effects of CRF	Britton et al., 2000	Peptides 21:37-44
NPY+CRF (200 ng)	Endogenous peptide	Social interaction	WistarF/Han rats (350-390g)	2250 ng/0.25 µl/side	lateral septum, 20	(o)	(1) Blockade of the anxiogenic-like effects of CRF; (2) Familiar lit area	Kask et al., 2001	Neuroscience 104:799-806

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
NPY+CTAP (1 µg)	Endogenous peptide	Conflict test	Wistar rats	8 µg	icv, 15	(o)	(1) Partial blockade of the effects of NPY; (2) Random-interval 30 s was used	Britton et al., 2001	Peptides 22:607-612
NPY+D-Phe CRF_{12-41} (5 µg, icv)	Endogenous peptide	Conflict test	Wistar rats (300-400g)	1 µg/2-5 µl	icv, 15	(+)	(1) Potentiation of the effects of NPY; (2) Random-interval 30 s was used	Britton et al., 2000	Peptides 21:37-44
NPY+Flumazenil (3-12 mg/kg)	Endogenous peptide	Conflict test	Wistar rats		icv, 15	+	(1) No interaction; (2) Random-interval 30 s was used	Britton et al., 2001	Peptides 22:607-612
NPY+HS014 (1 nM)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (220-250g)	5 nM/1 µl	amygdala, 15	(+)	The combination produced anxiolytic-like effects	Kokare et al., 2005	Brain Res. 1043:107-114
NPY+mutant mice	Endogenous peptide	Conditioned fear	B6-TgH(npyy1KO) xC57BL/6JNpa mice (2-3-month-old)	0.5 µg/0.3 µl	amygdala, 10	+	No antagonism in Y1 KO mice	Fendt et al., 2009	Psychopharmacology 206:291-301
NPY+Naloxone (0.25-2 mg/kg)	Endogenous peptide	Conflict test	Wistar rats		icv, 15	(o)	(1) Blockade of the effects of NPY; (2) Random-interval 30 s was used	Britton et al., 2001	Peptides 22:607-612
NPY+saporin	Endogenous peptide	Elevated zero-maze	BALB/cJ mice (6-8-old, 25-30g)	48 ng/500nl/side	central amygdala, 10 days	-		Lyons and Thiele, 2010	Peptides 31:2193-2199
NPY+saporin	Endogenous peptide	Elevated zero-maze	BALB/cJ mice (6-8-old, 25-30g)	48 ng/500nl/side	basomedial hypothalamus, 10 days	+		Lyons and Thiele, 2010	Peptides 31:2193-2199
NPY+urocortin I (100 fmole)	Endogenous peptide	Floor choice test	Wistar rats (275-300g)	10 pmol/100 nl	basolateral amygdala, for 5 days, o.d.	(o)	NPY antagonized the anxiogenic-like effects of UCN I	Sajdyk et al., 2006	Stress 9:21-28
NPY+Y_1 Antisense ODN	Endogenous peptide	Elevated plus-maze	Wistar rats (250g)	100 pmol/side	amygdala, 15	(-)		Heilig, 1995	Regul. Pept. 59:201-205
NPY+α-MSH (250 ng)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (220-250g)	10 nM/1 µl	amygdala, 15	(o)	Blockade of the anxiolytic-like effects of NPY	Kokare et al., 2005	Brain Res. 1043:107-114
NPY_{13-36}	Y_2 agonist	Elevated plus-maze	ddY Mice (7-week-old)	20 pmol/4 µl	icv, 10	-		Nakajima et al., 1998	Peptides 19:359-363
NPY_{13-36}	Y_2 agonist	Elevated plus-	Sprague-	0.7-7 nmol/5	icv, 60	o		Broqua et al.,	Behav. Pharmacol.

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
		maze	Dawley rats (220-240g)	µl				1995	6:215-222
NPY_{13-36}	Y_2 agonist	Elevated plus-maze	Sprague-Dawley rats (250-270g)	0.4-2 nmol/5 µl	icv, 60	o		Heilig et al., 1989	Psychopharmacology 98:524-529
NPY_{13-36}	Y_2 agonist	Elevated plus-maze	Rats	0.7-7 nmol	icv, 60	o		Broqua et al., 1994	Neuropeptides 26:16
NPY_{13-36}	Y_2 agonist	Fear-potentiated startle reflex	Long-Evans rats (220-240g)	2.3-13.2 nmol/5 µl	icv, 60	o		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
NPY_{13-36}	Y_2 agonist	Fear-potentiated startle reflex	Rats	up to 13.2 nmol	icv, 60	o		Wettstein et al., 1994	Neuropeptides 26:16-17
NPY_{13-36}	Y_2 agonist	Geller-Seifter conflict test	Wistar rats (200-275g)	100-200 pmol/0.5 µl	amygdala, 15	+	Weak effects	Heilig et al., 1993	Neuropsychopharmacology 8:357-363
NPY_{13-36}	Y_2 agonist	Geller-Seifter conflict test	Wistar rats (200-250g)	2.5-15 µg/rat	icv, 15	o		Britton et al., 1997	Psychopharmacology 132:6-13
NPY_{13-36}	Y_2 agonist	Vogel conflict test	Sprague-Dawley rats (250-270g)	0.4-2 nmol/5 µl	icv, 60	o	Water deprivation of 24 hrs and electric shocks of 0.16 mA/2 s	Heilig et al., 1989	Psychopharmacology 98:524-529
NPY_{13-36}	Y_2 agonist	Elevated plus-maze	Wistar rats (280-350g)	100 pmol/0.5 µl	vicinity of locus coeruleus, 20	+		Kask et al., 1998	Brain Res. 788:345-348
NPY_{2-36}	$Y_{1/2}$ agonist	Elevated plus-maze	Sprague-Dawley rats (220-240g)	0.07-2.3 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
NPY_{2-36}	$Y_{1/2}$ agonist	Elevated plus-maze	Rats	0.07-2.3 nmol	icv, 60	+		Broqua et al., 1994	Neuropeptides 26:16
NPY_{2-36}	$Y_{1/2}$ agonist	Fear-potentiated startle reflex	Long-Evans rats (220-240g)	0.023-2.3 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
NPY_{2-36}	$Y_{1/2}$ agonist	Fear-potentiated startle reflex	Rats	0.23-2.3 nmol	icv, 60	+		Wettstein et al., 1994	Neuropeptides 26:16-17
Pancreatic peptide	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-250g)	5-15 µg/rat	icv, 15	o		Britton et al., 1997	Psychopharmacology 132:6-13
Peptide YY	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (220-240g)	0.07-2.3 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
Peptide YY	Endogenous peptide	Elevated plus-maze	Rats	0.07-2.3 nmol	icv, 60	+		Broqua et al., 1994	Neuropeptides 26:16
Peptide YY	Endogenous peptide	Fear-potentiated startle reflex	Long-Evans rats (220-240g)	0.023-2.3 nmol/5 µl	icv, 60	+		Broqua et al., 1995	Behav. Pharmacol. 6:215-222
Peptide YY	Endogenous	Fear-potentiated	Rats	0.23-2.3 nmol	icv, 60	+		Wettstein et al.,	Neuropeptides 26:16-

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
	peptide	startle reflex						1994	17
Peptide YY	Endogenous peptide	Geller-Seifter conflict test	Wistar rats (200-250g)	10-15 µg/rat	icv, 15	+		Britton et al., 1997	Psychopharmacology 132:6-13
PYY_{3-36}	Y_2 agonist	Open-field	Sprague-Dawley rats (150-170g)	1 nmol/day	icv, for 14 days	-		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
PYY_{3-36}	Y_2 agonist	Open-field	OBX Sprague-Dawley rats (150-170g)	1 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
PYY_{3-36}	Y_2 agonist	Social interaction	Sprague-Dawley rats (150-170g)	1 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
PYY_{3-36}	Y_2 agonist	Social interaction	OBX Sprague-Dawley rats (150-170g)	1 nmol/day	icv, for 14 days	o		Morales-Medina et al., 2012	Neuropharmacology 62:200-208
rAAV-NPY	Hippocampal NPY overexpression	Elevated plus-maze	C57BL/6-129/SvJ mice			+		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
rAAV-NPY	Hippocampal NPY overexpression	Open-field	C57BL/6-129/SvJ mice			+		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
rAAV-NPY	Hippocampal NPY overexpression	Light/dark test	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
rAAV-NPY	Hippocampal NPY overexpression	Holeboard	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
rAAV-NPY	Hippocampal NPY overexpression+ Y1 knockout	Elevated plus-maze	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
rAAV-NPY	Hippocampal NPY overexpression+ Y1 knockout	Open-field	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
rAAV-NPY	Hippocampal NPY overexpression+ Y1 knockout	Light/dark test	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175

Drug	Mechanism	Test	Animals	Doses	Routes	Effects	Comments	Reference	
rAAV-NPY	Hippocampal NPY overexpression+ Y1 knockout	Holeboard	C57BL/6-129/SvJ mice			o		Lin et al., 2010	Eur. Neuropsychopharmacol. 20:164-175
Viral vector encoding NPY	NPY overexpression	Elevated plus-maze	Long-Evans rats (175-200g)	2 x 106 PFU/µl	amygdala, 3-4 days	+		Primeaux et al., 2005	Neuropsychopharmacology 30:1589-1597
Y-28	Y_1 agonist	Conditioned fear	DBA/1J (2-3-month-old)	0.01-0.4 µg/0.3 µl	amygdala, 10	o		Fendt et al., 2009	Psychopharmacology 206:291-301
Y-36	Y_1 agonist	Conditioned fear	DBA/1J (2-3-month-old)	0.62 µg/0.3 µl	amygdala, 10	o		Fendt et al., 2009	Psychopharmacology 206:291-301

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Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
[Sar^{9}Met(O$_2$)^{11}]-Substance-P	NK_1 agonist	Defensive rage	Cat	10 pmol/0,25 µl	anterior medial hypothalamus	-		Gregg and Siegel, 1999	Soc. Neurosci. Abstr. 25:606
[Sar^{9}Met(O$_2$)^{11}]-Substance-P	NK_1 agonist	Elevated plus-maze	Wistar rats (45-day-old; 170g	10-100 pmol/0.2 µl	dorsal PAG, 5	-		Bassi et al., 2007	Neuropeptides 41:365-374
[Sar^{9}Met(O$_2$)^{11}]-Substance-P	NK_1 agonist	Ultrasonic distress vocalizations	Wistar rats (45-day-old; 170g	10-100 pmol/0.2 µl	dorsal PAG, 5	+		Bassi et al., 2007	Neuropeptides 41:365-374
[Sar^{9}Met(O$_2$)^{11}]-Substance-P+CP-96,345 (1 nM/0,25 µl)	NK_1 agonist	Defensive rage	Cat	10 pmol/0,25 µl	anterior medial hypothalamus	(o)	Antagonism of the anxiogenic-like effects	Gregg and Siegel, 1999	Soc. Neurosci. Abstr. 25:606
[Trp^{7}b-Ala^{8}]NKA$_{(4-10)}$	NK_3 antagonist	Elevated plus-maze	Adult Swiss mice	100 pmol	icv, 5	o		Ribeiro and DeLima, 1998	Neurosci. Lett. 258:155-158
[Trp^{7}b-Ala^{8}]NKA$_{(4-10)}$	NK_3 antagonist	Elevated plus-maze	Swiss mice (25-35g)	10 pmol/2 µl	icv, 5	-		Ribeiro et al., 1999	Neuropeptides 33:181-188
[Trp^{7}b-Ala^{8}]NKA$_{(4-10)}$	NK_3 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	(o)	Blockade of the anxiolytic-like action of diazepam	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
[Trp^{7}b-Ala^{8}]NKA$_{(4-10)}$+diazepam (0.5 mg/kg)	NK_3 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	(o)	Blockade of the anxiolytic-like action of diazepam	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
[Trp^{7}b-Ala^{8}]NKA$_{(4-10)}$+Naloxone (2 mg/kg)	NK_3 antagonist	Elevated plus-maze	Adult Swiss mice	100 pmol	icv, 5	+	The combination produced anxiolytic-like effects	Ribeiro and DeLima, 1998	Neurosci. Lett. 258:155-158
[β-Ala^{8}]neurokinin A-(4-10)	NK_2 agonist	Elevated plus-maze	Swiss mice (25-30g)	1000 pmol/5 µl	icv, 0	-		Teixeira et al., 1996	Eur. J. Pharmacol. 311:7-14
[β-Ala^{8}]neurokinin A-(4-10)	NK_2 agonist	Elevated plus-maze	Mice	500 pmol/5 µl	icv, 5	-	Animals were placed in an open-field 5 min prior testing	De Lima et al., 1995	Soc. Neurosci. Abstr. 21:1696
1-7 N terminal	Substance P fragment	Elevated plus-maze	Wistar rats (250-300g)	35-70 pmol/0.2 µl	dorsal PAG, 0	o		De Araújo et al., 1999	Peptides 20:1437-43
1-7 N terminal	Substance P fragment	Elevated plus-maze	Wistar rats (250-350g)	0.67 ng/0.5 µl	ventral pallidum, 0	+		Nikolaus et al., 1999	Neurosci. Lett. 283:37-40

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
7-11 C terminal	Substance P fragment	Elevated plus-maze	Wistar rats (250-300g)	70 pmol/0.2 µl	dorsal PAG, 0	-		De Araújo et al., 1999	Peptides 20:1437-43
7-11 C terminal	Substance P fragment	Elevated plus-maze	Wistar rats (250-350g)	0.45 ng/0.5 µl	ventral pallidum, 0	+		Nikolaus et al., 1999	Neurosci. Lett. 283:37-40
CGP 49823	NK_1 antagonist	Elevated plus-maze	Rats		po	o		Vassout et al., 1994	Neuropeptides 26 (Suppl.):38
CGP 49823	NK_1 antagonist	Social interaction	Hooded Lister rats (200-230g)	3-30	po, 90	+	Animals were tested in an unfamiliar arena	File, 1997	Pharmacol. Biochem. Behav. 58:747-752
CGP 49823	NK_1 antagonist	Social interaction	Hooded Lister rats (200-230g)	10	po, for 3 weeks (o.d.)	+	Animals were tested in an unfamiliar arena	File, 1997	Pharmacol. Biochem. Behav. 58:747-752
CGP 49823	NK_1 antagonist	Social interaction	Hooded Lister rats (200-230g)	10	po, for 6 weeks (o.d.)	+	Animals were tested in an unfamiliar arena	File, 1997	Pharmacol. Biochem. Behav. 58:747-752
CGP 49823	NK_1 antagonist	Social interaction	Rats	MED=10	po	+		Vassout et al., 1994	Neuropeptides 26 (Suppl.):38
CGP 49823	NK_1 antagonist	Social interaction	Rats	MED=10	po, subchronic	+		Vassout et al., 1994	Neuropeptides 26 (Suppl.):38
CGP 49823	NK_1 antagonist, poorly brain penetrant	Distress vocalizations	Guinea pig pups (2-week-old)	30	sc, 30	+	Weak effects	Rupniak et al., 2000	Neuropharmacology 39:1413-21
CGP 49823+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=13	ip, 30	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
CGP 49823+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>40	po, 60	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
Compound A	NK_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	100-1000 pmol/1 µl/side	medial amygdala, 5	o		Ebner et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:4280-4285
Compound A	NK_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	1 nmol/1 µl/side	medial amygdala, 5	+	The drug reversed heighened anxiety produced by restraint stress	Ebner et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:4280-4285
Compound A+substance P (1 pmol)	NK_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	100 pmol/1 µl/side	medial amygdala, 5	(o)	Blockade of the anxiogenic-like effects of SP	Ebner et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:4280-4285

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP-100,263	NK_1 antagonist (enantiomer of CP-99,994)	Stress-induced foot tapping	Female and male Mongolian gerbils (40-70g)	3	ip, 30	o	Six 1 s electrical stimuli, at 60 s, 2 mA were delivered	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
CP-122,721	NK_1 antagonist	Elevated plus-maze	Female Mongolian gerbils (30-50g)	30	po	+	High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:371-379
CP-96,345	NK_1 antagonist	Light/dark test	Swiss mice (17-37g)	5	ip	+	Non-specific effects	Zernig et al., 1993	Neurosci. Lett. 151:64-66
CP-96,345	NK_1 antagonist	Light/dark test	Swiss mice	1-10	ip, 45	+	Non-specific effects	Zernig et al., 1992	Neurosci. Lett. 143:169-172
CP-96,345	NK_1 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3 and 1	ip, 30	+	Flight, risk assessment and defensive aggression were affected	Blanchard et al., 2003	Eur. J. Pharmacol. 463:97-116
CP-96,345+Naloxone (2 mg/kg)	NK_1 antagonist	Light/dark test	Swiss mice	5	ip, 45	+	Non-specific effects	Zernig et al., 1992	Neurosci. Lett. 143:169-172
CP-96,345+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=5	ip, 30	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
CP-96,345+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>=40	po, 60	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
CP-99,994	NK_1 antagonist	Stress-induced foot tapping	Female and male Mongolian gerbils (40-70g)	3	ip, 30	+	Six 1 s electrical stimuli, at 60 s, 2 mA were delivered	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
CP-99,994	NK_1 antagonist	Elevated plus-maze	Female Mongolian gerbils (30-50g)	3 and 30	po	+	(1) Weak effects; (2) High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:371-379
CP-99,994	NK_1 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.3 and 1	ip, 30	+	Flight, risk assessment and defensive aggression were affected	Blanchard et al., 2003	Eur. J. Pharmacol. 463:97-116

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP-99,994	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-300g)	MED=40	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
CP-99,994	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	ID_{50}=3.5	ip, 30	+	Shocks of 1.75 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
CP-99,994	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	MED>5	ip, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
CP-99,994	NK_1 antagonist	Vogel conflict test	Wistar rats (225-300g)	MED>40	ip, 30	o	Shocks of 0.3 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
CP-99,994	NK_1 antagonist	Marble burying	NMRI mice (30-35g)	MED>40	ip, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
CP-99,994+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=6.3	ip, 30	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
CP-99,994+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>40	po, 60	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
DiMe-C7	Substance P analog	Elevated plus-maze	Rats	0.74 pmol	ventral pallidum	+		Huston et al., 1998	Soc. Neurosci. Abstr. 24:1925
DiMe-C7+WIN51,708 (10-20 mg/kg)	Substance P analog	Elevated plus-maze	Rats	0.74 pmol	ventral pallidum	+		Huston et al., 1998	Soc. Neurosci. Abstr. 24:1925
FK 888	NK_1 antagonist	Elevated plus-maze	Swiss mice (25-30g)	1 and 100 pmol/5 µl	icv, 0	+		Teixeira et al., 1996	Eur. J. Pharmacol. 311:7-14
FK 888	NK_1 antagonist	Elevated plus-maze	Mice	0.1-500 pmol/5 µl	icv, 5	+	Animals were placed in an open-field 5 min prior testing	De Lima et al., 1995	Soc. Neurosci. Abstr. 21:1696
FK 888	NK_1 antagonist	Elevated plus-maze	Wistar rats	100 pmol	icv, 5	o		De Lima and Ribeiro, 1996	Soc. Neurosci. Abstr. 22:1154
FK 888	NK_1 antagonist	Elevated plus-maze	Wistar rats (280-300g)	100 pmol/2 µl	lateral septum, 5	o		Gavioli et al., 2002	Behav. Brain Res. 134:411-415

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
FK 888	NK_1 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	+		Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
FK 888	NK_1 antagonist	Elevated plus-maze	Female Swiss mice (25-30g)	100 pmol/2 µl	icv, 5	+		Teixeira and De Lima, 2003	Neuropeptides 37:307-315
FK 888	NK_1 antagonist	Elevated plus-maze	Female Swiss mice (25-30g)	100 pmol/2 µl	icv, 5	+	The drug reversed heighened anxiety produced by swim stress	Teixeira and De Lima, 2003	Neuropeptides 37:307-315
FK 888	NK_1 antagonist	Elevated plus-maze	Adult Wistar rats	100 pmol/2 µl	icv, 1	o		Duarte et al., 2004	Behav. Brain Res. 154:501-510
FK 888	NK_1 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (adult)	100 pmol/2 µl	icv, 5	o		Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
FK 888	NK_1 antagonist	Escape behavior in the elevated T-maze	Wistar rats (adult)	100 pmol/2 µl	icv, 5	o		Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
FK 888+diazepam (1 mg/kg)	NK_1 antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (adult)	100 pmol/2 µl	icv, 5	o	No interaction	Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
FK 888+diazepam (1 mg/kg)	NK_1 antagonist	Escape behavior in the elevated T-maze	Wistar rats (adult)	100 pmol/2 µl	icv, 5	o	No interaction	Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
FK 888+diazepam (28 days)	NK_1 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	+		Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
FK 888+flumazenil (1 mg/kg)	NK_1 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	o	No interaction	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
FK 888+PTZ (20 mg/kg)	NK_1 antagonist	Elevated plus-maze	Swiss mice (30-40g)	10 pmol/2 µl	icv, 0	(o)	Blockade of the anxiogenic-like activity of PTZ	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
GR 64349	NK_2 agonist	Open-field	Rats	100-1000 pmol	dorsal raphe	-		Stratton et al., 1993	J. Psychopharmacol. 7 (Suppl.):A11
GR 64349	NK_2 agonist	Social interaction	Rats	10-300 pmol	dorsal raphe	-	LLF conditions	Stratton et al., 1993	J. Psychopharmacol. 7 (Suppl.):A11
GR100679	NK_2 antagonist	Elevated plus-maze	Rats	3-300 pmol	dorsal raphe	+	HLU conditions	Stratton et al., 1993	J. Psychopharmacol. 7 (Suppl.):A11

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GR100679	NK_2 antagonist	Light/dark test	CRH Mice (28-35g)	0.02-200 µg	sc, 30	+		Stratton et al., 1993	Eur. J. Pharmacol. 250:R11-2
GR115211	NK_2 antagonist	Social interaction	Rats	3-300 pmol	dorsal raphe	+	HLU conditions	Stratton et al., 1993	J. Psychopharmacol. 7 (Suppl.):A11
GR159897	NK_2 antagonist	Elevated plus-maze	Rats	1.25-125 ng	dorsal raphe	+		Stratton et al., 1994	Br. J. Pharmacol. 112 (Suppl.):49P
GR159897	NK_2 antagonist	Human threat	Female and male Marmosets (259-400g)	0.2, 10-50 µg	sc, 30	+		Walsh et al., 1995	Psychopharmacology 121:186-191
GR159897	NK_2 antagonist	Light/dark test	Mice	0.0005-50 µg	sc, 30	+		Stratton et al., 1994	Br. J. Pharmacol. 112 (Suppl.):49P
GR159897	NK_2 antagonist	Light/dark test	CRH mice (28-35g)	0.0005, 0.05-50 µg	sc, 30	+		Walsh et al., 1995	Psychopharmacology 121:186-191
GR159897	NK_2 antagonist	Social interaction	Rats	1.25-125 ng	dorsal raphe	+		Stratton et al., 1994	Br. J. Pharmacol. 112 (Suppl.):49P
GR159897	NK_2 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.01-3	ip, 30	+	All defensive behaviors were decreased	Blanchard et al., 2003	Eur. J. Pharmacol. 463:97-116
GR203040+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=0.16	ip, 30	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
GR203040+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=1.3	po, 60	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
GR205171	NK_1 antagonist	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}=2.7	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR205171	NK_1 antagonist	Distress vocalizations	Mice (8-day old)	30	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR205171	NK_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (270-300g)	10-30	sc, 30	o		Rupniak et al., 2001	Behav. Pharmacol. 12:497-508
GR205171	NK_1 antagonist	Marble burying	NMRI mice (20-25g)	10-40	ip, 30	+		Millan et al., 2002	Neuropharmacology 42:677-684
GR205171	NK_1 antagonist	Social interaction	Mongolian gerbils	0.3	ip, 30	+		Pozzato et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S23
GR205171	NK_1 antagonist	Social interaction	Mongolian gerbils	0.3	ip, o.d. for 3 weeks	+		Pozzato et al., 2003	Behav. Pharmacol. 14 (Suppl. 1):S23

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GR205171	NK_1 antagonist	Distress vocalizations	Sprague-Dawley rats (9-11-day old)	30	sc, 30	+		Rupniak et al., 2003	Neuropharmacology 45:231-241
GR205171	NK_1 antagonist	Elevated plus-maze	Mongolian gerbils (60-75g)	5	ip, 30	+		Heldt et al., 2009	Behav. Pharmacol. 20:584-595
GR205171	NK_1 antagonist	Fear-potentiated startle reflex	Mongolian gerbils (60-75g)	0.3-5	ip, 30	+	Footshocks of 0.6 mA were applied	Heldt et al., 2009	Behav. Pharmacol. 20:584-595
GR205171	NK_1 antagonist	Distress vocalizations	Hartley guinea pigs (275-325g)	MED=0.04	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR205171	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-300g)	MED=40	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR205171	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	ID_{50}=0.01	ip, 30	+	Shocks of 1.75 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR205171	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	MED=0.16	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR205171	NK_1 antagonist	Vogel conflict test	Wistar rats (225-300g)	MED=10	ip, 30	+	Shocks of 0.3 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR205171	NK_1 antagonist	Marble burying	NMRI mice (30-35g)	MED=5.3	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR205171	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	0.16-10	ip, 30	o		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR205171	NK_1 antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.63-10	ip, 30	o		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR205171	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-250g)	40	ip, 30	+		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GR205171	NK_1 antagonist	Elevated plus-maze	Syrian hamsters (*M. auratus*, 3-6-month-old)	20	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
GR205171	NK_1 antagonist	T-tube	Syrian hamsters (*M. auratus*, 3-6-month-old)	20	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
GR205171	NK_1 antagonist	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	20	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
GR205171+citalopram (0.63 mg/kg)	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	10	ip, 30	(o)	Blockade of the anxiogenic-like effects of CIT	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR205171+citalopram (2.5 mg/kg)	NK_1 antagonist	Social interaction	Sprague-Dawley rats (240-260g)	10	ip, 30	(o)	Blockade of the anxiogenic-like effects of CIT	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR205171+citalopram (5 mg/kg)	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-250g)	10	ip, 30	(+)	Potentiation of the anxiolytic-like effects of CIT	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR205171+fluoxetine (40 mg/kg)	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	0.16	ip, 30	(o)	(1) Shocks of 1.75 mA/0.5 s were delivered; (2) the drugblocked the anxiogenic-like effects of fluoxetine	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR226206	Low affinity NK_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (270-300g)	10-30	sc, 30	o		Rupniak et al., 2001	Behav. Pharmacol. 12:497-508
GR226206	Low affinity NK_1 antagonist	Marble burying	NMRI mice (20-25g)	0.63-40	ip, 30	o		Millan et al., 2002	Neuropharmacology 42:677-684
GR226206	Low affinity NK_1 antagonist	Distress vocalizations	Sprague-Dawley rats (9-11-day old)	30	sc, 30	+		Rupniak et al., 2003	Neuropharmacology 45:231-241
GR226206	NK_1 antagonist	Distress vocalizations	Hartley guinea pigs (275-325g)	MED>2.5	ip, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GR226206	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-300g)	MED>40	ip, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR226206	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	ID_{50}=1.5	ip, 30	+	Shocks of 1.75 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR226206	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	MED>0.63	ip, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR226206	NK_1 antagonist	Vogel conflict test	Wistar rats (225-300g)	MED=40	ip, 30	+	Shocks of 0.3 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR226206	NK_1 antagonist	Marble burying	NMRI mice (30-35g)	MED>40	ip, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
GR226206	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	0.63	ip, 30	o		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR226206	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-250g)	2.5-40	ip, 30	o		Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR226206+citalopram (0.63 mg/kg)	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	10	ip, 30	-	No interaction	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR226206+citalopram (2.5 mg/kg)	NK_1 antagonist	Social interaction	Sprague-Dawley rats (240-260g)	10	ip, 30	-	No interaction	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR226206+citalopram (5 mg/kg)	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-250g)	40	ip, 30	o	No interaction	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR226206+fluoxetine (40 mg/kg)	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	0.16	ip, 30	-	(1) Shocks of 1.75 mA/0.5 s were delivered; (2) no interaction	Gobert et al., 2009	Neuropsychopharmacology 34:1039-1056
GR73632	NK_1 agonist	Defensive rage	Cat	4-12 nmol	PAG, 5-200	-		Gregg and Siegel, 1999	Soc. Neurosci. Abstr. 25:606
GR73632	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	-	The drug elicited audible	Rupniak et al., 2000	Neuropharmacology 39:1413-21

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							vocalizations		
GR73632	NK_1 agonist	Drug-induced foot tapping	Female and male Mongolian gerbils (40-70g)	1-10	icv, 3 pmol/5 µl	-		Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
GR73632+buspirone (10 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	-	No antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+CP 100,263 (3-10 mg/kg)	NK_1 agonist	Drug-induced foot tapping	Female and male Mongolian gerbils (40-70g)	3 pmol/5 µl	icv	-	No antagonism of the effects of GR73632	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
GR73632+CP-100,893 (10 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	-	No antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+CP-99,994 (0.1-10 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	(o)	Antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+CP-99,994 (3-10 mg/kg)	NK_1 agonist	Drug-induced foot tapping	Female and male Mongolian gerbils (40-70g)	3 pmol/5 µl	icv	(o)	Antagonism of the effects of GR73632	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
GR73632+diazepam (3 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	-	No antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+fluoxetine (30 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	(o)	Antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+fluoxetine (30 mg/kg)	NK_1 agonist	Drug-induced foot tapping	Female and male Mongolian gerbils (40-70g)	3 pmol/5 µl	icv	-	No antagonism of the effects of GR73632	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GR73632+imipramine (30 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	(o)	Antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+L-733,061 (3 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	(o)	Antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+L-733,061 (3 mg/kg)	NK_1 agonist	Distress vocalizations	Guinea pigs (250-300g)	0.1-0.3 nmol	icv, 0	-	No antagonism of the vocalizations elicited by GR	Rupniak et al., 2000	Neuropharmacology 39:1413-21
GR73632+MK869 (1-3 mg/kg)	NK_1 agonist	Drug-induced foot tapping	Female and male Mongolian gerbils (40-70g)	3 pmol/5 µl	icv	(o)	Antagonism of the effects of GR73632	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
GR82334	NK_1 antagonist	Defensive rage	Female and male cats (2-4 kg)	8 nmol/0.5 µl	PAG, 30	o		Bhatt and Siegel, 2006	Behav. Brain Res. 167:251-260
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	1 nmol/0.5 µl	medial amygdala, 5	+		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	1 nmol/0.5 µl	basolateral amygdala, 5	+		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	0.2-1 nmol/0.5 µl	central amygdala, 5	o		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	6 nmol/0.5 µl	ventromedial hypothalamus, 5	+		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	1-6 nmol/0.5 µl	dorsomedial hypothalamus, 5	o		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	1 nmol/0.5 µl	dorsolateral PAG, 5	+		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	1 nmol/0.5 µl	ventrolateral PAG, 5	o		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GR82334	NK_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	1 nmol/0.5 µl	superior colliculus, 5	o		Zhao et al., 2009	Neuropsychopharmacology 34:331-340.
GR82334+IL-2 (500 pg/0.5 µl)	NK_1 antagonist	Defensive rage	Female and male cats (2-4 kg)	8 nmol/0.5 µl	PAG, 30	(o)	The drug antagonized the facilitating effects on defensive rage by IL-2	Bhatt and Siegel, 2006	Behav. Brain Res. 167:251-260
L-733,060	NK_1 antagonist	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}=3.2	sc, 30	+		Rupniak et al., 2000	Neuropharmacology 39:1413-21
L-733,060	NK_1 antagonist	Elevated plus-maze	Female Mongolian gerbils (30-50g)	10	po	+	High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:371-379
L-733,060	NK_1 antagonist	Tonic immobility	Dunkin Hartley Guinea pigs (600-800g)	2.5-5	sc, 30	+		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
L-733,060	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-300g)	MED>40	ip, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
L-733,060	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	ID_{50}=3.6	ip, 30	+	Shocks of 1.75 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
L-733,060	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	MED=2.5	sc, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
L-733,060	NK_1 antagonist	Vogel conflict test	Wistar rats (225-300g)	MED=20	ip, 30	+	Shocks of 0.3 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
L-733,060	NK_1 antagonist	Marble burying	NMRI mice (30-35g)	MED=13.5	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
L-733,060+Substance P	NK_1 antagonist	Distress vocalizations	Guinea pig pups		sc, 30	+		Kramer et al., 1998	Science 281:1640-1645

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
L-733,061	NK_1 antagonist, enantiomer of L-733,060	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}=>30	sc, 30	o		Rupniak et al., 2000	Neuropharmacology 39:1413-21
L-742,694	NK_1 antagonist	Elevated plus-maze	Female Mongolian gerbils (30-50g)	3-10	po	+	High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:371-379
L-760,735	NK_1 antagonist	Elevated plus-maze	Duncan Hartley Guinea pigs (280-321g)	3	sc, 30	o	Animals were handled daily for 4 days	Rupniak et al., 2001	Behav. Pharmacol. 12:497-508
L-760,735	NK_1 antagonist	Distress vocalizations	Guinea pig pups (300-340g)	15 nmol/side/0.5µl	basolateral nucleus of the amygdala, 30	+		Boyce et al., 2001	Neuropharmacology 41:130-137
L-760,735	NK_1 antagonist	Distress vocalizations	Guinea pig pups (300-340g)	15 nmol/side/0.5µl	thalamus, 30	o		Boyce et al., 2001	Neuropharmacology 41:130-137
L-760,735+Substance P	NK_1 antagonist	Distress vocalizations	Guinea pig pups	ID_{50}=0.9	sc, 30	+		Kramer et al., 1998	Science 281:1640-1645
L-760,735+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=1	ip, 60	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
L-760,735+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=2.5	po, 60	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
L-770,765	Low affinity NK_1 antagonist	Distress vocalizations	Guinea pig pups (300-340g)	15 nmol/side/0.5µl	basolateral nucleus of the amygdala, 30	o		Boyce et al., 2001	Neuropharmacology 41:130-137
L-770,765	Low affinity NK_1 antagonist	Distress vocalizations	Guinea pig pups (300-340g)	15 nmol/side/0.5µl	thalamus, 30	o		Boyce et al., 2001	Neuropharmacology 41:130-137
L-781,773	Low affinity NK_1 antagonist	Elevated plus-maze	Duncan Hartley Guinea pigs (280-321g)	3	sc, 30	o	Animals were handled daily for 4 days	Rupniak et al., 2001	Behav. Pharmacol. 12:497-508
L-796,325	NK_1 antagonist, enantiomer of GR20171	Distress vocalizations	Guinea pig pups (2-week-old)	ID_{50}>30	sc, 30	o		Rupniak et al., 2000	Neuropharmacology 39:1413-21

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
L-796,325	NK_1 antagonist, enantiomer of GR20171	Distress vocalizations	Mice (8-day old)	30	sc, 30	o		Rupniak et al., 2000	Neuropharmacology 39:1413-21
L-822,429	NK_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	5 nmol/5 µl	icv, 10	+		Ebner et al., 2008	Ann. N.Y. Acad. Sci. 1144:67-73
LY303870	NK_1 antagonist, poorly brain penetrant	Distress vocalizations	Guinea pig pups (2-week-old)	30	sc, 30	+	Weak effects	Rupniak et al., 2000	Neuropharmacology 39:1413-21
MDL-103392+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>10	ip, 30	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
MDL-103392+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>40	po, 60	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
MK-869	NK_1 antagonist	Stress-induced foot tapping	Female and male Mongolian gerbils (40-70g)	0,3-3	ip, 30	+	Six 1 s electrical stimuli, at 60 s, 2 mA were delivered	Ballard et al., 1999	Behav. Pharmacol. 10 (Suppl. 1):S5
MK-869	NK_1 antagonist	Stress-induced foot tapping	Female and male Mongolian gerbils (40-70g)	1-3	ip, 30	+	Six 1 s electrical stimuli, at 60 s, 2 mA were delivered	Ballard et al., 2001	Eur. J. Pharmacol. 412:255-64
MK-869	NK_1 antagonist	Elevated plus-maze	Female Mongolian gerbils (30-50g)	0.03-3	po	+	High-level light conditions were used (500 lux)	Varty et al., 2002	Neuropsychopharmacology 27:371-379
MK-869	NK_1 antagonist	Distress vocalizations	Female Dunkan Hartley guinea pigs (350-500g, 6-week pregnant)	MED=10	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
MK-869	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	ID_{50}=36.9	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MK-869	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	MED=1.25	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
MK-869	NK_1 antagonist	Vogel conflict test	Wistar rats (225-300g)	MED=40	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
MK-869	NK_1 antagonist	Marble burying	NMRI mice (25-30g)	MED=7.5	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
MK-869+Substance P	NK_1 antagonist	Distress vocalizations	Guinea pig pups	ID_{50}=0.7	po, 4 h	+		Kramer et al., 1998	Science 281:1640-1645
MK-869+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=0.12	ip, 30	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
MK-869+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=0.20	po, 60	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
Mutant mice	NK_1 knock-out	Open-field	129/SvxC57BL/6 mice (8-16-week-old)			o		De Felipe et al., 1998	Nature 392:394-397
Mutant mice	NK_1 knock-out	Open-field	129/SvxC57BL/6 mice			o	No difference in phenotypes. Open-field with novel objects	Murtra et al., 2000	Nature 405:180-183
Mutant mice	NK_1 knock-out	Elevated plus-maze	129/SvxC57BL/6 mice			o	No difference in phenotypes	Murtra et al., 2000	Nature 405:180-183
Mutant mice	NK_1 knock-out	Distress vocalizations	J129/C57 hybrid mouse pups (8-9-day old)			+	KO mice vocalized less than WT mice	Rupniak et al., 2000	Neuropharmacology 39:1413-21
Mutant mice	NK_1 receptor disruption	Elevated plus-maze	129/SvEv background mice (12-20-week-old)			+	Anxiety-related behavior was decreased in -/- animals	Santarelli et al., 2001	Proc. Natl. Acad. Sci. U. S. A. 98:1912-1917
Mutant mice	NK_1 receptor disruption	Novelty-suppressed feeding	129/SvEv background mice (12-20-week-old)			+	Anxiety-related behavior was decreased in -/- animals	Santarelli et al., 2001	Proc. Natl. Acad. Sci. U. S. A. 98:1912-1917

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	NK_1 receptor disruption	Distress vocalizations	129/SvEv background mice (8 day-old)			+	Anxiety-related behavior was decreased in -/- animals	Santarelli et al., 2001	Proc. Natl. Acad. Sci. U. S. A. 98:1912-1917
Mutant mice	NK_1 receptor disruption	Elevated plus-maze	J129/C57 hybrid mouse pups (20-30g)			+	Anxiety-related behavior was decreased in -/- animals	Rupniak et al., 2001	Behav. Pharmacol. 12:497-508
Mutant mice	NK_1 knock-out	Light/dark test	C57BL/6Jx129/Sv background (25-31g)			?	Mutant mice groomed more, but showed less risk assessment	Herpfer et al., 2004	Eur. Neuropsychopharmacol. 14 (Suppl. 1):S34
Mutant mice+desipramine (10 mg/kg)	NK_1 knock-out	Light/dark test	C57BL/6Jx129/Sv background (25-31g)			?	The drug reduced grooming in mutant mice to a level of WT animals	Herpfer et al., 2004	Eur. Neuropsychopharmacol. 14 (Suppl. 1):S34
Neurokinin A	Preferential NK_2 agonist	Elevated plus-maze	Swiss mice (25-30g)	10-100 pmol/5 µl	icv, 0	-		Teixeira et al., 1996	Eur. J. Pharmacol. 311:7-14
Neurokinin A	Preferential NK_2 agonist	Elevated plus-maze	Swiss mice (30-40g)	10 pmol/2 µl	icv, 0	-		Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Neurokinin A+diazepam (0.5 mg/kg)	Preferential NK_2 agonist	Elevated plus-maze	Swiss mice (30-40g)	10 pmol/2 µl	icv, 0	(o)	Blockade of the anxiolytic-like action of diazepam	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Neurokinin B	Endogenous NK_3 ligand	Elevated plus-maze	Swiss mice (25-35g)	1-500 pmol/2 µl	icv, 5	o		Ribeiro et al., 1999	Neuropeptides 33:181-188
NKP608	NK_1 antagonist	Social interaction	Sprague-Dawley rats (180-200g)	0.03-1	po, 90	+	HLU conditions	Vassout et al., 2000	Regul. Pept. 96:7-16
NKP608	NK_1 antagonist	Social interaction	Sprague-Dawley rats (350-400g)	0.03-3	po, 90	+	HLU conditions	Vassout et al., 2000	Regul. Pept. 96:7-16
NKP608	NK_1 antagonist	Social interaction	Lister hooded rats	0.01-0.1	po, 90	o	LLF conditions	File, 2000	Psychopharmacology 152:105-109
NKP608	NK_1 antagonist	Social interaction	Lister hooded rats	0.01-0.1	po, 90	+	Low light unfamiliar conditions	File, 2000	Psychopharmacology 152:105-109
NKP608	NK_1 antagonist	Social interaction	Lister hooded rats	0.01-0.1	po, 90	+	HLU conditions	File, 2000	Psychopharmacology 152:105-109

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NKP608	NK_1 antagonist	Social interaction	Lister hooded rats	0.01-0.1	po, for 3 weeks, o.d.	+	(1) HLU conditions; (2) No withdrawal was observed 24 h later	File, 2000	Psychopharmacology 152:105-109
NKP608	NK_1 antagonist	Social interaction	Lister hooded rats	0.01-0.1	po, for 6 weeks, o.d.	+	(1) HLU conditions; (2) No withdrawal was observed 24 h later	File, 2000	Psychopharmacology 152:105-109
NKP608	NK_1 antagonist	Stress-induced hyperthermia	OF1/IC mice (18-20 g)	0.1	po, 60	+	Weak effect	Spooren et al., 2002	Eur. J. Pharmacol. 435:161-170
NKP608	NK_1 antagonist	Stress-induced hyperthermia	OF1/IC mice (18-20 g)	0.1	po, 60	+	Weak effect	Spooren et al., 2002	Eur. J. Pharmacol. 435:161-170
NKP608	NK_1 antagonist	Elevated plus-maze	Lewis rats (230-238g)	0.3	po, 90	+		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Elevated plus-maze	SHR rats (229-235g)	0.003-0.3	po, 90	o		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Elevated plus-maze	Female Lewis rats (172-174g)	0.003-0.3	po, 90	o		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Elevated plus-maze	Female SHR rats (159-161g)	0.03	po, 90	+		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Open-field	Lewis rats (230-238g)	0.003-0.3	po, 90	o		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Open-field	SHR rats (229-235g)	0.003-0.3	po, 90	+		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Open-field	Female Lewis rats (172-174g)	0.003-0.3	po, 90	o		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Open-field	Female SHR rats (159-161g)	0.003-0.3	po, 90	o		Vendruscolo et al., 2003	Psychopharmacology 170:287-293
NKP608	NK_1 antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	0.001	po, 90	+	Weak effect	Rodgers et al., 2004	Behav. Brain Res. 154:183-192
NKP608	NK_1 antagonist	Elevated plus-maze	Swiss-Webster mice (11-12-week-old)	0.0003-0.03	po, 90	o		Rodgers et al., 2004	Behav. Brain Res. 154:183-192

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
R116301+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=0.16	ip, 30	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
R116301+substance P	NK_1 antagonist	Thumping	Gerbils	ED50=0.32	po, 60 min to 7 h	(o)	The drug antagonized SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
RP 67580	NK_1 antagonist	Light/dark test	Swiss mice (17-37g)	0.03-10	ip	o		Zernig et al., 1993	Neurosci. Lett. 151:64-66
RP 67580	NK_1 antagonist	Stress-induced analgesia	Wistar rats (375-400g)	3 µg/0,5 µl/side	ventral tegmental area, 3	+	Pain was investigated in the formalin test	Altier and Stewart, 1999	Physiol. Behav. 66:717-721
RP 67580	NK_1 antagonist	Elevated plus-maze	129/SvEv NK_1 +/+ mice (12-20-week-old)	1.5-5	sc, 30	+		Santarelli et al., 2001	Proc. Natl. Acad. Sci. U. S. A. 98:1912-1917
RP 67580	NK_1 antagonist	Elevated plus-maze	129/SvEv NK_1 -/- mice (12-20-week-old)	1.5-5	sc, 30	(o)	No anxiolytic-like activity in NK_1 -/- receptor mice	Santarelli et al., 2001	Proc. Natl. Acad. Sci. U. S. A. 98:1912-1917
RP 67580	NK_1 antagonist	Elevated plus-maze	129/SvEv NK_1 +/+ mice (8 day-old)	1.5-5	sc, 30	+		Santarelli et al., 2001	Proc. Natl. Acad. Sci. U. S. A. 98:1912-1917
RP 67580	NK_1 antagonist	Elevated plus-maze	129/SvEv NK_1 -/- mice (8 day-old)	1.5-5	sc, 30	(o)	No anxiolytic-like activity in NK_1 -/- receptor mice	Santarelli et al., 2001	Proc. Natl. Acad. Sci. U. S. A. 98:1912-1917
RP 67580	NK_1 antagonist	Marble burying	NMRI mice (20-25g)	10-40	ip, 30	+		Millan et al., 2002	Neuropharmacology 42:677-684
RP 67580	NK_1 antagonist	Stress-induced colonic hypersensitivity	Wistar rats (240-260g)	3	ip, 24h	o	The drug was injected 15 min before water avoidance stress on day 1	Schwetz et al., 2004	Am. J. Physiol. Gastrointest. Liver Physiol. 286:G683-G691
RP 67580	NK_1 antagonist	Stress-induced colonic hypersensitivity	Wistar rats (240-260g)	1-3	ip, 60	+	The drug was injected 60 min before colorectal distension on day 2	Schwetz et al., 2004	Am. J. Physiol. Gastrointest. Liver Physiol. 286:G683-G691
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Distress vocalizations	Female Dunkan Hartley guinea pigs (350-500g, 6-week	MED=0.63	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			pregnant)						
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	MED>40	ip, 30	o		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Marble burying	NMRI mice (25-30g)	ID50=2.8	sc, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Social interaction	Mongolian gerbils (50-70g)	MED>2.5	sc, 30	o		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
S41744	NK_1 receptor antagonist and 5-HT reuptake inhibitor	Vogel conflict test	Wistar rats (225-300g)	MED=10	ip, 30	+		Millan et al., 2010	Eur. Neuropsychopharmacol. 20:599-621
Saredutant	NK_2 antagonist	Elevated plus-maze	Swiss mice (25-30g)	1-100 pmol/5 µl	icv, 0	+		Teixeira et al., 1996	Eur. J. Pharmacol. 311:7-14
Saredutant	NK_2 antagonist	Elevated plus-maze	Mice	0.1-500 pmol/5 µl	icv, 5	+	Animals were placed in an open-field 5 min prior testing	De Lima et al., 1995	Soc. Neurosci. Abstr. 21:1696
Saredutant	NK_2 antagonist	Human threat	Female and male Marmosets (259-400g)	10-50 µg	sc, 30	+		Walsh et al., 1995	Psychopharmacology 121:186-191
Saredutant	NK_2 antagonist	Light/dark test	Swiss mice		ip, 30	+	60 W white light	Bernatzky and Saria, 1995	Soc. Neurosci. Abstr. 21:1696
Saredutant	NK_2 antagonist	Light/dark test	CRH mice (28-35g)	0.0005-5 µg	sc, 30	+		Walsh et al., 1995	Psychopharmacology 121:186-191
Saredutant	NK_2 antagonist	Light/dark test	CRH Mice (28-35g)	0.05-5 µg	sc, 30	+		Stratton et al., 1993	Eur. J. Pharmacol. 250:R11-2
Saredutant	NK_2 antagonist	Conflict test	Wistar-Kyoto rats (350-400g)	0.1-3	ip, 30	o	VI30s for food and VI10s for shock	Griebel et al., 2001	Psychopharmacology 158:241-251

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Saredutant	NK_2 antagonist	Conflict test	Sprague-Dawley rats (190-230g)	0.1-3	ip, 30	o	Shock of 0.6 mA/10 ms	Griebel et al., 2001	Psychopharmacology 158:241-251
Saredutant	NK_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (190-230g)	3	ip, 30	+		Griebel et al., 2001	Psychopharmacology 158:241-251
Saredutant	NK_2 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.03-1	ip, 30	+	Mostly active on defensive aggression	Griebel et al., 2001	Psychopharmacology 158:241-251
Saredutant	NK_2 antagonist	Staircase test	Wistar rats (190-230g)	3	ip, 30	+	Following cat exposure	Griebel et al., 2001	Psychopharmacology 158:241-251
Saredutant	NK_2 antagonist	Free-exploration test	Swiss mice (10-week-old)	0.1-3	ip, 30	o	Following car exposure	Griebel et al., 2001	Psychopharmacology 158:241-251
Saredutant	NK_2 antagonist	Free-exploration test	Swiss mice (10-week-old)	0.3-1	ip, b.i.d. for 5 days	+	Following car exposure	Griebel et al., 2001	Psychopharmacology 158:241-251
Saredutant	NK_2 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	0.1-1	ip, 30	+	Mostly active on defensive aggression	Griebel et al., 2001	Neurosci. Biobehav. Rev. 25:619-626
Saredutant	NK_2 antagonist	Tonic immobility	Dunkin Hartley Guinea pigs (600-800g)	0.04-2.5	sc, 30	+		Kurre Olsen and Hogg, 2001	Behav. Pharmacol. 12 (Suppl. 1):S56
Saredutant	NK_2 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	+		Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Saredutant	NK_2 antagonist	Elevated plus-maze	Adult Wistar rats	100 pmol/2 µl	icv, 1	o		Duarte et al., 2004	Behav. Brain Res. 154:501-510
Saredutant	NK_2 antagonist	Social interaction	Mongolian gerbils (*Meriones unguiculatus*) (7-week-old, 50-60g)	3-10	po, 60	+		Salomé et al., 2006	Pharmacol. Biochem. Behav. 83:533-539
Saredutant	NK_2 antagonist	Elevated plus-maze	Wistar rats (220-240g)	1-3	ip, 30	+		Micale et al., 2008	Pharmacol. Biochem. Behav. 90:463-469

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Saredutant	NK_2 antagonist	Elevated plus-maze	Wistar rats (220-240g)	1-3	ip, 30	+	Animals were subjected to 5 min of swim stress prior to testing	Micale et al., 2008	Pharmacol. Biochem. Behav. 90:463-469
Saredutant	NK_2 antagonist	Stress-induced grooming	Swiss mice (30-50g)	1-3	ip, 30	+		Micale et al., 2008	Pharmacol. Biochem. Behav. 90:463-469
Saredutant	NK_2 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (3-4-day-old)	3-10	sc, 30	+		Louis et al., 2008	Pharmacol. Biochem. Behav. 89:36-45
Saredutant	NK_2 antagonist	Social interaction	Sprague-Dawley rats (7-8-week-old, 200-220g)	20	ip, 30	+		Louis et al., 2008	Pharmacol. Biochem. Behav. 89:36-45
Saredutant	NK_2 antagonist	Holeboard	C57BL/6J mice (18-20g)	3-30	po, 30	o		Rogacki et al., 2011	Pharmacol. Biochem. Behav. 98:405-411
Saredutant	NK_2 antagonist	Stress-induced hyperthermia	C57BL/6J mice (18-20g)	30	ip, 60	+		Rogacki et al., 2011	Pharmacol. Biochem. Behav. 98:405-411
Saredutant	NK_2 antagonist	Four-plate test	Swiss Webster mice (20-27g)	3-30	po, 60	+		Rogacki et al., 2011	Pharmacol. Biochem. Behav. 98:405-411
Saredutant	NK_2 antagonist	Mouse defense test battery	CD1 mice (35-45g)	500 pmol/0.2 µl	ventral hippocampus, 5	+	The drug decreased vocalizations and increased escape attempts	Genaro Borelli et al., 2010	Neurosci. Lett. 485:241-245
Saredutant	NK_2 antagonist	Mouse defense test battery	CD1 mice (35-45g)	10 pmol/0.2 µl	ventral hippocampus, 5	+		Genaro Borelli et al., 2010	Neurosci. Lett. 485:241-245
Saredutant+diazepam (28 days)	NK_2 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	+		Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Saredutant+flumazenil (1 mg/kg)	NK_2 antagonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	+	No blockade of the anxiolytic-like action of SR48968	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Saredutant+PTZ (20 mg/kg)	NK_2 antagonist	Elevated plus-maze	Swiss mice (30-40g)	10 pmol/2 µl	icv, 0	(o)	Blockade of the anxiolytic-like action of diazepam	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Saredutant+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>40	ip, 30	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
Saredutant+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>40	po, 60	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
SB 222200	NK_3 antagonist	DPAG stimulation	Wistar rats (250-280g)	100 pmol/0.2 µl	dorsolateral PAG, 10	+		Broiz et al., 2012	Neuroscience 201:134-145
SB 222200	NK_3 antagonist	DPAG stimulation	Wistar rats (250-280g)	50 pmol/0.2 µl	dorsolateral PAG, 10	o	Test was performed following contextual fear conditioning (10x0.6 mA/1 s)	Broiz et al., 2012	Neuroscience 201:134-145
Senktide	NK_3 agonist	Elevated plus-maze	Mice	0.1-500 pmol/5 µl	icv, 5	+	Animals were placed in an open-field 5 min prior testing	De Lima et al., 1995	Soc. Neurosci. Abstr. 21:1696
Senktide	NK_3 agonist	Elevated plus-maze	Adult Swiss mice	10 pmol	icv, 5	+		Ribeiro and DeLima, 1998	Neurosci. Lett. 258:155-158
Senktide	NK_3 agonist	Elevated plus-maze	Swiss mice (25-35g)	100-500 pmol/2 µl	icv, 5	+		Ribeiro et al., 1999	Neuropeptides 33:181-188
Senktide	NK_3 agonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	(o)	Blockade of the anxiolytic-like action of diazepam	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Senktide	NK_3 agonist	Open-field	Wistar rats (23-25-month-old / 470-800g)	0.2-0.4	sc, 30	+		Schäble et al., 2011	Eur. Neuropsychopharmacol. 21:484-494
Senktide+[Trp^7b-Ala^8]$NKA_{(4-10)}$ (100 pmol)	NK_3 agonist	Elevated plus-maze	Swiss mice (25-35g)	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiolytic-like effects	Ribeiro et al., 1999	Neuropeptides 33:181-188
Senktide+diazepam (28 days)	NK_3 agonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	o	No interaction	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Senktide+flumazenil (1 mg/kg)	NK_3 agonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	o	No interaction	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Senktide+Naloxone (2 mg/kg)	NK_3 agonist	Elevated plus-maze	Adult Swiss mice	10 pmol	icv, 5	+	Potentiation of the anxiolytic-like	Ribeiro and DeLima, 1998	Neurosci. Lett. 258:155-158

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							effects		
Senktide+PTZ (20 mg/kg)	NK_3 agonist	Elevated plus-maze	Swiss mice (30-40g)	100 pmol/2 µl	icv, 0	-	No blockade of the anxiogenic-like activity of PTZ	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Senktide+SR142801 (100 pmol)	NK_3 agonist	Elevated plus-maze	Swiss mice (25-35g)	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiolytic-like effects	Ribeiro et al., 1999	Neuropeptides 33:181-188
SP1-7	NK_1 agonist	Free observation	Female and male marmosets (Callithrix penicillata, 250-350g)	5, 50 and 500 µg/kg	ip, 5	+	Predator confrontation model of fear/anxiety	Barros et al., 2002	Peptides 23:967-973
SP1-7	NK_1 agonist	Elevated plus-maze	Adult Wistar rats	10 pmol/2 µl	icv, 1	o		Duarte et al., 2004	Behav. Brain Res. 154:501-510
SP6-11	NK_1 agonist	Elevated plus-maze	Adult Wistar rats	1 pmol/2 µl	icv, 1	+		Duarte et al., 2004	Behav. Brain Res. 154:501-510
SP6-11+FK 888 (100 pmol/ 2 µl)	NK_1 agonist	Elevated plus-maze	Adult Wistar rats	1 pmol/2 µl	icv, 1	(o)	Antagonism of the anxiogenic-like effects	Duarte et al., 2004	Behav. Brain Res. 154:501-510
SP6-11+Saredutant (100 pmol/ 2 µl)	NK_1 agonist	Elevated plus-maze	Adult Wistar rats	1 pmol/2 µl	icv, 1	(o)	Antagonism of the anxiogenic-like effects	Duarte et al., 2004	Behav. Brain Res. 154:501-510
Spantide	NK_1 antagonist	DPAG stimulation	Wistar rats (250-280g)	100 pmol/0.2 µl	dorsolateral PAG, 10	+		Broiz et al., 2012	Neuroscience 201:134-145
Spantide	NK_1 antagonist	DPAG stimulation	Wistar rats (250-280g)	100 pmol/0.2 µl	dorsolateral PAG, 10	+	Test was performed following contextual fear conditioning (10x0.6 mA/1 s)	Broiz et al., 2012	Neuroscience 201:134-145
SR140333	NK_1 antagonist	Light/dark test	Swiss mice		ip, 30	o	60 W white light	Bernatzky and Saria, 1995	Soc. Neurosci. Abstr. 21:1696
SR140333	NK_1 antagonist	Stress-induced colonic hypersensitivity	Wistar rats (240-260g)	3	ip, 24h	o	The drug was injected 15 min before water avoidance stress on day 1	Schwetz et al., 2004	Am. J. Physiol. Gastrointest. Liver Physiol. 286:G683-G691

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SR140333	NK_1 antagonist	Stress-induced colonic hypersensitivity	Wistar rats (240-260g)	1-3	ip, 60	+	The drug was injected 60 min before colorectal distension on day 2	Schwetz et al., 2004	Am. J. Physiol. Gastrointest. Liver Physiol. 286:G683-G691
SR140333+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>40	ip, 30	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
SR140333+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>40	po, 60	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
SR140801+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>10	sc, 10	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
SR140801+substance P	NK_1 antagonist	Thumping	Gerbils	ED50>10	po, 60	-	The drug did not antagonize SP-induced thumping	Megens et al., 2002	J. Pharmacol. Exp. Ther. 302:696-709
SR142801	NK_3 antagonist	Elevated plus-maze	Adult Swiss mice	100 pmol	icv, 5	o		Ribeiro and DeLima, 1998	Neurosci. Lett. 258:155-158
SR142801	NK_3 antagonist	Elevated plus-maze	Swiss mice (25-35g)	1-500 pmol/2 µl	icv, 5	o		Ribeiro et al., 1999	Neuropeptides 33:181-188
SR142801	NK_3 antagonist	Social interaction	Mongolian gerbils (*Meriones unguiculatus*) (7-week-old, 50-60g)	1-10	po, 60	+		Salomé et al., 2006	Pharmacol. Biochem. Behav. 83:533-539
SR142801+Naloxone (2 mg/kg)	NK_3 antagonist	Elevated plus-maze	Adult Swiss mice	100 pmol	icv, 5	-	The combination produced anxiogenic-like effects	Ribeiro and DeLima, 1998	Neurosci. Lett. 258:155-158
SR144190	NK_2 antagonist	Mouse defense test battery	Swiss mice (10-week-old)	3-10	ip, 30	+	Mostly active on defensive aggression	Griebel et al., 2001	Neurosci. Biobehav. Rev. 25:619-626
SSR240600	NK_1 antagonist	Distress vocalizations	Guinea pig pups (9-day old)	1-10	ip, 30	+		Steinberg et al., 2002	J. Pharmacol. Exp. Ther. 303:1180-1188
SSR240600	NK_1 antagonist	Stress-induced hyperthermia	Guinea pigs	3-10	ip, 60	+		Steinberg et al., 2002	J. Pharmacol. Exp. Ther. 303:1180-1188

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SSR240600	NK_1 antagonist	Social interaction	Mongolian gerbils (*Meriones unguiculatus*) (7-week-old, 50-60g)	1-10	po, 60	o		Salomé et al., 2006	Pharmacol. Biochem. Behav. 83:533-539
SSR240600+GR73632 (0.2 nmol)	NK_1 antagonist	Distress vocalizations	Guinea pig pups (9-day old)	1-10	ip, 30	(o)	The drug antagonized GR-induced distress vocalizations	Steinberg et al., 2002	J. Pharmacol. Exp. Ther. 303:1180-1188
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Rats	50 µg	ip	+		Jentiens et al., 1996	In : Proceedings 2nd Meeting of European Neuroscience, Strasbourg, p. 197
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Rats	1 ng	nucleus basalis magnocellularis	+		Jentiens et al., 1996	In : Proceedings 2nd Meeting of European Neuroscience, Strasbourg, p. 197
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Rats	50 µg	ip	+		Hasenöhrl et al., 1996	Soc. Neurosci. Abstr. 22:1152
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Rats	1 ng	nucleus basalis magnocellularis	+		Hasenöhrl et al., 1996	Soc. Neurosci. Abstr. 22:1152
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Swiss mice (25-30g)	1-10 pmol/5 µl	icv, 0	-		Teixeira et al., 1996	Eur. J. Pharmacol. 311:7-14
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Rats	0.5	ip	-		Jentiens et al., 1996	In : Proceedings 2nd Meeting of European Neuroscience, Strasbourg, p. 197
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Swiss mice	10 pmol/2 µl	icv, 5	-		De Lima et al., 1997	Soc. Neurosci. Abstr. 23:1859
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Rats	500 µg	ip	-		Hasenöhrl et al., 1996	Soc. Neurosci. Abstr. 22:1152
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats	10 pmol	icv, 5	-		De Lima and Ribeiro, 1996	Soc. Neurosci. Abstr. 22:1154
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats	10 pmol	bed nucleus of the stria terminalis, 5	-		De Lima and Ribeiro, 1996	Soc. Neurosci. Abstr. 22:1154
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats	10 pmol	basolateral nucleus of the amygdala, 5	-		De Lima and Ribeiro, 1996	Soc. Neurosci. Abstr. 22:1154

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Mice	0.1-500 pmol/5 µl	icv, 5	o	Animals were placed in an open-field 5 min prior testing	De Lima et al., 1995	Soc. Neurosci. Abstr. 21:1696
Substance P	Preferential NK_1 agonist	Social interaction	Rats	1 ng	nucleus basalis magnocellularis	+		Jentiens et al., 1996	In : Proceedings 2nd Meeting of European Neuroscience, Strasbourg, p. 197
Substance P	Preferential NK_1 agonist	Social interaction	Rats	1 ng	nucleus basalis magnocellularis	+		Hasenöhrl et al., 1996	Soc. Neurosci. Abstr. 22:1152
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (250-350g)	50 and 500 µg	ip, 0	+/-	Biphasic effects	Hasenöhrl et al., 1998	Eur. J. Pharmacol. 354:123-133
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (250-350g)	1 ng	nucleus basalis magnocellularis	+		Hasenöhrl et al., 1998	Eur. J. Pharmacol. 354:123-133
Substance P	Preferential NK_1 agonist	Social interaction	Wistar rats (250-350g)	1 ng	nucleus basalis magnocellularis	+		Hasenöhrl et al., 1998	Eur. J. Pharmacol. 354:123-133
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (250-300g)	25-100 ng	dorsal PAG, 0	-		Aguiar and Brandao, 1996	Physiol. Behav. 60:1183-1186
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Rats	0.74 pmol	ventral pallidum	+		Huston et al., 1998	Soc. Neurosci. Abstr. 24:1925
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (250-300g)	1 ng	ventral pallidum, 0	+		Nikolaus et al., 1999	Neuropeptides 10:2293-2296
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (280-320g)	10 pmol/2 µl	lateral septum, 5	-	In "freezing" animals	Gavioli et al., 1999	Neuropeptides 10:3399-3403
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (280-320g)	10 pmol/2 µl	lateral septum, 5	o	In "darting" animals	Gavioli et al., 1999	Neuropeptides 10:3399-3403
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (280-320g)	10 pmol/2 µl	icv, 5	-		Gavioli et al., 1999	Neuropeptides 10:3399-3403
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (250-300g)	35-70 pmol/0.2 µl	dorsal PAG, 0	-		De Araújo et al., 1999	Peptides 20:1437-43
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (250-350g)	1 ng/0.5 µl	ventral pallidum, 0	+		Nikolaus et al., 1999	Neurosci. Lett. 283:37-40
Substance P	Preferential NK_1 agonist	Elevated T-maze	Wistar rats (200-250g)	0.25-0.5	ip, 20	+	Weak effects (% time central square was increased only)	Echeverry et al., 2001	Peptides 22:1031-1036
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Female mice	10 pmol/2 µl	icv, 5	-		Baretta et al., 2001	Behav. Brain Res. 121:199-205

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Substance P	Preferential NK_1 agonist	Light/dark test	Fisher-344 rats (180-200g)	1 nmol/5 µl	icv, 30	+		Sudakov et al., 2001	Psychopharmacology 154:327-335
Substance P	Preferential NK_1 agonist	Light/dark test	Wistar Albino Glaxo rats (180-200g)	7 nmol/5 µl	icv, 30	+		Sudakov et al., 2001	Psychopharmacology 154:327-335
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (280-300g)	10 pmol/2 µl	lateral septum, 5	-		Gavioli et al., 2002	Behav. Brain Res. 134:411-415
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Swiss mice (30-40g)	10 pmol/2 µl	icv, 0	-		Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Substance P	Preferential NK_1 agonist	Mouse defense test battery	Swiss mice (10-week-old)	0.5 and 1	ip, 30	+	Flight and defensive aggression were affected	Blanchard et al., 2003	Eur. J. Pharmacol. 463:97-116
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Sprague-Dawley rats (250-350g)	0.1-1 pmol/1 µl/side	medial amygdala, 5	-		Ebner et al., 2004	Proc. Natl. Acad. Sci. U. S. A. 101:4280-4285
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Female Swiss mice (25-30g)	10 pmol/2 µl	icv, 5	-		Teixeira and De Lima, 2003	Neuropeptides 37:307-315
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Adult Wistar rats	10 pmol/2 µl	icv, 1	-		Duarte et al., 2004	Behav. Brain Res. 154:501-510
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Female and male Swiss mice (3-month-old, 25-30g)	10 pmol	icv, 1	-	SP was anxiogenic in both genders	Teixeira et al., 2004	Pharmacol. Biochem. Behav. 79:1-9
Substance P	Preferential NK_1 agonist	Open-field	Female and male Swiss mice (3-month-old, 25-30g)	10 pmol	icv, 1	-	SP reduced locomotion, but not rearing, in both genders	Teixeira et al., 2004	Pharmacol. Biochem. Behav. 79:1-9
Substance P	Preferential NK_1 agonist	Holeboard	Female and male Swiss mice (3-month-old, 25-30g)	10 pmol	icv, 1	o		Teixeira et al., 2004	Pharmacol. Biochem. Behav. 79:1-9
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (290-300g)	100-1000 ng/0.5 µl	dorsal hippocampus, 0	+		Carvalho et al., 2008	Peptides 29:1191-1200

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Substance P	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (290-300g)	10-1000 ng/0.5 µl	ventral hippocampus, 0	o		Carvalho et al., 2008	Peptides 29:1191-1200
Substance P	Preferential NK_1 agonist	Open-field	Wistar rats (290-300g)	100 ng/0.5 µl	dorsal hippocampus, 0	+		Carvalho et al., 2008	Peptides 29:1191-1200
Substance P	Preferential NK_1 agonist	Open-field	Wistar rats (290-300g)	10-1000 ng/0.5 µl	ventral hippocampus, 0	o		Carvalho et al., 2008	Peptides 29:1191-1200
Substance P	Preferential NK_1 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (adult)	10 pmol/2 µl	icv, 5	o		Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
Substance P	Preferential NK_1 agonist	Escape behavior in the elevated T-maze	Wistar rats (adult)	10 pmol/2 µl	icv, 5	o		Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
Substance P *free acid*	Preferential NK_1 agonist	Elevated plus-maze	Adult Wistar rats	1 pmol/2 µl	icv, 1	-		Duarte et al., 2004	Behav. Brain Res. 154:501-510
Substance P methyl ester	NK_1 agonist	Elevated plus-maze	Swiss mice (25-30g)	1-10 pmol/5 µl	icv, 0	-		Teixeira et al., 1996	Eur. J. Pharmacol. 311:7-14
Substance P methyl ester	NK_1 agonist	Elevated plus-maze	Mice	0.1-500 pmol/5 µl	icv, 5	-	Animals were placed in an open-field 5 min prior testing	De Lima et al., 1995	Soc. Neurosci. Abstr. 21:1696
Substance P methyl ester	NK_1 agonist	Elevated plus-maze	Wistar rats	10 pmol	icv, 5	-		De Lima and Ribeiro, 1996	Soc. Neurosci. Abstr. 22:1154
Substance P+7-NI (0.25 nmol, icv)	Preferential NK_1 agonist	Elevated plus-maze	Female mice	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiogenic-like effects by the NOS inhibitor	Baretta et al., 2001	Behav. Brain Res. 121:199-205
Substance P+8-Br-cGMP (20 nmol, icv)	Preferential NK_1 agonist	Elevated plus-maze	Female mice	10 pmol/2 µl	icv, 5	(-)	Potentiation of the anxiogenic-like effects by the cGMP analog	Baretta et al., 2001	Behav. Brain Res. 121:199-205
Substance P+diazepam (0.5 mg/kg)	Preferential NK_1 agonist	Elevated plus-maze	Swiss mice (30-40g)	10 pmol/2 µl	icv, 0	+	No blockade of the anxiolytic-like action of diazepam	Ribeiro et al., 2002	Prog. Neuro-Psychopharmacol. Biol. Psychiat. 26:861-869
Substance P+diazepam (1 mg/kg)	Preferential NK_1 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (adult)	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiolytic-like effects of diazepam	Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
Substance P+diazepam (1 mg/kg)	Preferential NK_1 agonist	Escape behavior in the elevated T-maze	Wistar rats (adult)	10 pmol/2 µl	icv, 5	o	No interaction	Duzzioni et al., 2008	Behav. Brain Res. 187:140-145

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Substance P+diazepam (1 mg/kg)+FK 888 (100 pmol/0.2 µl)	Preferential NK_1 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (adult)	10 pmol/2 µl	icv, 5	(+)	Antagonism by FK 888 of the antagonism of the anxiolytic-like effects of diazepam	Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
Substance P+diazepam (1 mg/kg)+FK 888 (100 pmol/0.2 µl)	Preferential NK_1 agonist	Escape behavior in the elevated T-maze	Wistar rats (adult)	10 pmol/2 µl	icv, 5	o	No interaction	Duzzioni et al., 2008	Behav. Brain Res. 187:140-145
Substance P+FK 888 (100 pmol/2 µl)	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (280-300g)	10 pmol/2 µl	lateral septum, 5	(o)	Antagonism of the anxiogenic-like effects of SP	Gavioli et al., 2002	Behav. Brain Res. 134:411-415
Substance P+FK 888 (100 pmol/2 µl)	Preferential NK_1 agonist	Elevated plus-maze	Female Swiss mice (25-30g)	10 pmol/2 µl	icv, 5	(o)	Blockade of the anxiogenic-like effects of SP	Teixeira and De Lima, 2003	Neuropeptides 37:307-315
Substance P+L-NAME (3 nmol, icv)	Preferential NK_1 agonist	Elevated plus-maze	Female mice	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiogenic-like effects by the NOS inhibitor	Baretta et al., 2001	Behav. Brain Res. 121:199-205
Substance P+L-NOARG (20 nmol/kg, ip)	Preferential NK_1 agonist	Elevated plus-maze	Female mice	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiogenic-like effects by the NOS inhibitor	Baretta et al., 2001	Behav. Brain Res. 121:199-205
Substance P+N-N-nitro-L-arginine (0.02 µmol)	Preferential NK_1 agonist	Elevated plus-maze	Swiss mice	10 pmol/2 µl	icv, 5	(+)		De Lima et al., 1997	Soc. Neurosci. Abstr. 23:1859
Substance P+phosphoramidon (2 pmol/2 µl)	Preferential NK_1 agonist	Elevated plus-maze	Adult Wistar rats	10 pmol/2 µl	icv, 1	-	The peptidase inhibitor potentiated the effects of SP	Duarte et al., 2004	Behav. Brain Res. 154:501-510
Substance P+SNAP (2 nmol, icv)	Preferential NK_1 agonist	Elevated plus-maze	Female mice	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiogenic-like effects by the NO donor	Baretta et al., 2001	Behav. Brain Res. 121:199-205
Substance P+thiorphan (0.2 pmol/ 2 µl)+phosphoramidon (2 pmol/2 µl)	Preferential NK_1 agonist	Elevated plus-maze	Adult Wistar rats	10 pmol/2 µl	icv, 1	+	The combination produced anxiolytic-like effects	Duarte et al., 2004	Behav. Brain Res. 154:501-510

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Substance P+thiorphan (0.2 pmol/2 µl)	Preferential NK_1 agonist	Elevated plus-maze	Adult Wistar rats	10 pmol/2 µl	icv, 1	-	The peptidase inhibitor potentiated the effects of SP	Duarte et al., 2004	Behav. Brain Res. 154:501-510
Substance P+WIN51,708 (10-20 mg/kg)	Preferential NK_1 agonist	Elevated plus-maze	Rats	0.74 pmol	ventral pallidum	(o)		Huston et al., 1998	Soc. Neurosci. Abstr. 24:1925
Substance P+WIN51,708 (20 mg/kg)	Preferential NK_1 agonist	Elevated plus-maze	Wistar rats (250-300g)	1 ng	ventral pallidum, 0	(o)	Antagonism of the anxiolytic-like effects	Nikolaus et al., 1999	Neuropeptides 10:2293-2296
Substance P-saporin	NK_1 receptor loss	Elevated plus-maze	Hybrid C57BL/6 x 129S2/Sv mice (6-8-week-old)	1 µl/1 µM	amygdala, 5 weeks	-	The ablation of the amygdala by SP-SAP increased anxiety	Gadd et al., 2003	J. Neurosci. 23:8271-8280
Tac1-deficient mice	Substance P and neurokinin A are absent	Open-field	C57BL/6J background (3-4-month old)			+	Mice spent more time in the central area	Bilkei-Gorzo et al., 2002	J. Neurosci. 22:10046-10052
Tac1-deficient mice	Substance P and neurokinin A are absent	Elevated zero-maze	C57BL/6J background (3-4-month old)			+	Stretch attend postures were reduced	Bilkei-Gorzo et al., 2002	J. Neurosci. 22:10046-10052
Tac1-deficient mice	Substance P and neurokinin A are absent	Conflict test	C57BL/6J background (3-4-month old)			+	Mice showed reduced latency to feed	Bilkei-Gorzo et al., 2002	J. Neurosci. 22:10046-10052
Tac1-deficient mice	Substance P and neurokinin A are absent	Social interaction	C57BL/6J background (3-4-month old)			+	Time spent in interaction was increased	Bilkei-Gorzo et al., 2002	J. Neurosci. 22:10046-10052
Vestipitant	NK_1 antagonist	Distress vocalizations	Hartley guinea pigs (275-325g)	MED=2.5	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
Vestipitant	NK_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-300g)	MED=10	ip, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
Vestipitant	NK_1 antagonist	Stress-induced foot-tapping	Mongolian gerbils (50-70g)	ID_{50}=0.15	ip, 30	+	Shocks of 1.75 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Vestipitant	NK_1 antagonist	Social interaction	Mongolian gerbils (50-70g)	MED>0.63	sc, 30	o		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
Vestipitant	NK_1 antagonist	Vogel conflict test	Wistar rats (225-300g)	MED=20	ip, 30	+	Shocks of 0.3 mA/0.5 s were delivered	Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
Vestipitant	NK_1 antagonist	Marble burying	NMRI mice (30-35g)	MED=11.2	sc, 30	+		Brocco et al., 2008	Eur. Neuropsychopharmacol. 18:729-750
Vestipitant	NK_1 antagonist	Elevated plus-maze	Syrian hamsters (*M. auratus*, 3-6-month-old)	5	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
Vestipitant	NK_1 antagonist	T-tube	Syrian hamsters (*M. auratus*, 3-6-month-old)	5	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
Vestipitant	NK_1 antagonist	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	5	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
WIN51,708	NK_1 antagonist	Elevated plus-maze	Wistar rats (250-300g)	20	ip, 20	+		Nikolaus et al., 1999	Neuropeptides 10:2293-2296

Vasopressin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
[Adamantaneacetyl[1], O-Et-D-Tyr[2], Val[4], Aminobutyryl[6], Arg[8,9]]-vasopressin+morphine (5 µg/5 µl)	V_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (300-350g)	25-125 µg/5 µl	icv, 60	(o)	Blockade of the anxiogenic-like effects of morphine	Kahveci et al., 2006	Pharmacol. Biochem. Behav. 85:859-867
1-desamino-8-D-AVP	V_2 agonist	Stress-induced gastric lesions	Brattleboro rats (220-260g)	200 µg	sc, 5	o	(1) Restraint+water immersion stress; (2) Rats had hereditary diabetes insipidus that produces lack of AVP	Honda et al., 1994	Am. J. Physiol. 266:R1448-53
Antisense ODN	V_1 inhibition	Elevated plus-maze	Wistar rats (350g)	0,5 µg/µl	septum, via osmotic pump for 4 days	+		Landgraf et al., 1995	J. Neurosci. 15:4250-4258
$d(CH_2)_5Tyr(Et)VAVP$	$V_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (220-270g)	40 ng/2 µl/min	septum, 30	o		Appenrodt et al., 1998	Physiol. Behav. 64:543-7
$d(CH_2)_5Tyr(Et)VAVP$	$V_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (±350g)	2 ng/µl/bilateral	lateral septum	-		Everts and Koolhaas, 1999	Brain Res. 99:7-16
$d(CH_2)_5Tyr(Et)VAVP$	$V_{1/2}$ antagonist	Shock-probe burying test	Wistar rats (±350g)	2 ng/µl/bilateral	lateral septum	o	Electric shock of 1.5 mA was administered	Everts and Koolhaas, 1999	Brain Res. 99:7-16
$d(CH_2)_5Tyr(Et)VAVP$	$V_{1/2}$ antagonist	Elevated plus-maze	Wistar rats (300g)	5 ng	lateral septum, perfusion for 30 min	+		Liebsh et al., 1996	Neurosci. Lett. 217:101-104
$d(CH_2)_5Tyr(Et)VAVP$	$V_{1/2}$ antagonist	Elevated plus-maze	HAB rats	5 ng/200 µl/h	paraventricular nucleus, 30	+	The drug was infused by inverse microdialysis	Wigger et al., 2004	Neuropsychopharmacology 29:1-14
$d(CH_2)_5Tyr(Et)VAVP$	$V_{1/2}$ antagonist	Light-enhanced startle	Testosterone-replaced castrated Sprague-Dawley rats	500 ng/5 µl	icv, 0	o		Toufexis et al., 2005	J. Neurosci. 25:9010-9016
$d(CH_2)_5Tyr(Me)AVP$	V_1 antagonist	Stress-induced gastric lesions	Long-Evans rats (250-310g)	5 µg/5 µl	icv, 5	-	Restraint+water immersion stress	Honda et al., 1994	Am. J. Physiol. 266:R1448-53

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Deamino-Pen[1], O-Me-Tyr[2], Arg[8]]-vasopressin+morphine (5 µg/5 µl)	V_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (300-350g)	25-125 µg/5 µl	icv, 60	(o)	Blockade of the anxiogenic-like effects of morphine	Kahveci et al., 2006	Pharmacol. Biochem. Behav. 85:859-867
JNJ-17308616	V_{1a} antagonist	Elevated plus-maze	CD rats (180-220g)	100	ip, 30	+		Bleickardt et al., 2009	Psychopharmacology 202:711-718
JNJ-17308616	V_{1a} antagonist	Elevated zero-maze	Sprague-Dawley rats (200-250g)	30	po, 60	+		Bleickardt et al., 2009	Psychopharmacology 202:711-718
JNJ-17308616	V_{1a} antagonist	Ultrasonic Distress vocalizations	Female and male CD rats (11-day-old, 25-30g)	100	ip, 30	+		Bleickardt et al., 2009	Psychopharmacology 202:711-718
JNJ-17308616	V_{1a} antagonist	Conflict test	CD rats (500-800g)	30	ip, 30	+	Shocks of 0,7 mA/0,5 s were delivered	Bleickardt et al., 2009	Psychopharmacology 202:711-718
JNJ-17308616	V_{1a} antagonist	Marble burying	CD1 mice (25g)	100	ip, 30	+		Bleickardt et al., 2009	Psychopharmacology 202:711-718
Mutant mice	V_{1a} reexpression in V_{1a} KO	Elevated plus-maze	C57/BL6-129/SvJ background mice (2-5-month-old)			o	Animals treated with LacZ virus were not different from V_{1a} KO mice	Bielsky et al., 2005	Neuron 47:503-513
Mutant mice	V_{1a} reexpression in V_{1a} KO	Open-field	C57/BL6-129/SvJ background mice (2-5-month-old)			o	Animals treated with LacZ virus were not different from V_{1a} KO mice	Bielsky et al., 2005	Neuron 47:503-513
Mutant mice	V_{1a} reexpression in V_{1a} KO	Light/dark test	C57/BL6-129/SvJ background mice (2-5-month-old)			o	Animals treated with LacZ virus were not different from V_{1a} KO mice	Bielsky et al., 2005	Neuron 47:503-513
Mutant mice	V_{1a} overexpression	Light/dark test	C57/BL6-129/SvJ background mice (2-5-month-old)			-	Mice treated with NSE-V_{1a} viral vector showed increased anxiety-related behaviors	Bielsky et al., 2005	Neuron 47:503-513
Mutant mice	V_{1a} KO	Open-field	Female C57/BL6-129/SvJ background mice (2-5-month-old)			o	V_{1a} KO mice performed normally	Bielsky et al., 2005	Neuron 47:503-513

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	V_{1a} KO	Light/dark test	Female C57/BL6-129/SvJ background mice (2-5-month-old)			o	V_{1a} KO mice performed normally	Bielsky et al., 2005	Neuron 47:503-513
Mutant mice	V_{1a} KO	Light/dark test	Female C57/BL6-129/SvJ background mice (2-5-month-old)			o	V_{1a} KO mice performed normally	Bielsky et al., 2005	Neuron 47:503-513
Mutant mice	V_{1b} KO	Light/dark test	C57/BL6-129/SvJ background mice (3-7-month-old)			o	No phenotypic difference between WT and KO mice	Egashira et al., 2005	Neuropsychopharmacology 30:1996-2005
Mutant mice	V_{1b} KO	Elevated plus-maze	C57/BL6-129/SvJ background mice (3-7-month-old)			o	No phenotypic difference between WT and KO mice	Egashira et al., 2005	Neuropsychopharmacology 30:1996-2005
Mutant mice	V_{1b} KO	Ultrasonic Distress vocalizations	Female C57/BL6 background mice (4-month-old)			+	KO mice vocalized less when exposed to a C57BL/6J adult female mouse	Scattoni et al., 2008	Behav. Brain Res. 187:371-378
Mutant mice	V_{1b} KO	Ultrasonic Distress vocalizations	Female C57/BL6 background mice pups (3-12-day-old)			o		Scattoni et al., 2008	Behav. Brain Res. 187:371-378
Mutant mice	V_{1b} KO	Ultrasonic Distress vocalizations	Female C57/BL6 background mice pups (9-day-old)			+	KO mice vocalized less when separated a second time from their mother	Scattoni et al., 2008	Behav. Brain Res. 187:371-378
SR121463	V_2 antagonist	Air-jet stress	Wistar rats (320-340g)	100-500 ng/5 µl	icv, 3	+	The drug reduced cardiovascular stress response	Stojičić et al., 2008	Neuropharmacology 54:824-836
SR49059	V_{1a} antagonist	Air-jet stress	Wistar rats (320-340g)	100-500 ng/5 µl	icv, 3	+	The drug reduced cardiovascular stress response	Stojičić et al., 2008	Neuropharmacology 54:824-836
SSR149415	V_{1b} antagonist	Vogel conflict test	Sprague-Dawley rats (180-290g)	3-10	ip, 30	+	Electric shocks of 0.6 mA/500 ms	Griebel et al., 2002	Proc. Natl. Acad. Sci. U. S. A. 99:6370-6375
SSR149415	V_{1b} antagonist	Elevated plus-maze	Sprague-Dawley rats (180-290g)	10-30	po, 60	+		Griebel et al., 2002	Proc. Natl. Acad. Sci. U. S. A. 99:6370-6375
SSR149415	V_{1b} antagonist	Light/dark test	BALB/c mice	1, 10-30	ip, 30	+		Griebel et al.,	Proc. Natl. Acad. Sci. U. S.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			(17-32g)					2002	A. 99:6370-6375
SSR149415	V_{1b} antagonist	Mouse defense test battery	Swiss mice (10-week old)	1-30	po, 60	+	The drug affected predominantly defensive aggression	Griebel et al., 2002	Proc. Natl. Acad. Sci. U. S. A. 99:6370-6375
SSR149415	V_{1b} antagonist	Elevated plus-maze	Swiss CD1 mice (17-32g)	3	po, 60	+	Mice were defeated by an aggressive mouse prior to test	Griebel et al., 2002	Proc. Natl. Acad. Sci. U. S. A. 99:6370-6375
SSR149415	V_{1b} antagonist	Four-plate test	NMRI mice (17-23g)	3-10	ip, 30	+	Electric shocks of 1 mA/0.2 s	Serradeil-Le Gal et al., 2002	J. Pharmacol. Exp. Ther. 300:1122-1130
SSR149415	V_{1b} antagonist	Four-plate test	NMRI mice (17-23g)	3-10	po, 60	+	Electric shocks of 1 mA/0.2 s	Serradeil-Le Gal et al., 2002	J. Pharmacol. Exp. Ther. 300:1122-1130
SSR149415	V_{1b} antagonist	Four-plate test	NMRI mice (17-23g)	10	po, 1 to 4 h	+	Electric shocks of 1 mA/0.2 s	Serradeil-Le Gal et al., 2002	J. Pharmacol. Exp. Ther. 300:1122-1130
SSR149415	V_{1b} antagonist	Ultrasonic distress vocalizations	Female and male Sprague-Dawley rat pups (9- to 11-day-old, 21-30g)	30	ip, 30	+	There was a statistically non-significant tendency	Iijima and Chaki, 2005	Pharmacol. Biochem. Behav. 82:652-657
SSR149415	V_{1b} antagonist	Social interaction	Mongolian gerbils (*Meriones unguiculatus*) (7-week-old, 50-60g)	3-10	po, 60	+		Salomé et al., 2006	Pharmacol. Biochem. Behav. 83:533-539
SSR149415	V_{1b} antagonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	1-10 ng/0.3 µl/side	basolateral amygdala, 10	+		Salomé et al., 2006	Psychopharmacology 187:237-244
SSR149415	V_{1b} antagonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	1-100 ng/0.3 µl/side	central amygdala, 10	o		Salomé et al., 2006	Psychopharmacology 187:237-244
SSR149415	V_{1b} antagonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	10-100 ng/0.3 µl/side	central amygdala, 10	o		Salomé et al., 2006	Psychopharmacology 187:237-244
SSR149415	V_{1b} antagonist	Social interaction	FSL rats	10-30	ip, for 14 days, o.d.	+		Overstreet and Griebel, 2005	Pharmacol. Biochem. Behav. 82:223-227

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SSR149415	V_{1b} antagonist	Conditioned fear stress	Mice	10-30	po, 60	+		Griebel et al., 2003	Curr. Drug Target CNS Neurol. Disord. 2:191-200
SSR149415	V_{1b} antagonist	Distress vocalizations	Hartley guinea pig pups (5-day-old)	20-30	ip, 30	+		Griebel et al., 2005	Curr. Pharm. Des. 11:1549-1559
SSR149415	V_{1b} antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (7-day-old)	10-30	sc, 30	+		Griebel et al., 2005	Curr. Pharm. Des. 11:1549-1559
SSR149415	V_{1b} antagonist	Four-plate test	Mongolian gerbils	10-30	po, 60	+	Electric shocks of 1 mA/0.2 s	Griebel et al., 2005	Curr. Pharm. Des. 11:1549-1559
SSR149415	V_{1b} antagonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	1-100 ng/0.3 µl/side	lateral septum, 10	o		Stemmelin et al., 2005	Neuropsychopharmacology 30:35-42
SSR149415	V_{1b} antagonist	Vogel conflict test	Sprague-Dawley rats (200-250g)	1-100 ng/0.3 µl/side	lateral septum, 10	o	Electric shocks of 0.6 mA/500 ms were delivered	Stemmelin et al., 2005	Neuropsychopharmacology 30:35-42
SSR149415	V_{1b} antagonist	Distress vocalizations	Female and male Hartley Guinea pig pups (5-21-day-old)	30	ip, 15	+		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
SSR149415	V_{1b} antagonist	Ultrasonic distress vocalizations	Female and male CD rat pups (7-10-day-old, 25-30g)	30	ip, 15	+		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
SSR149415	V_{1b} antagonist	Elevated plus-maze	CD rats (180-280g)	30	ip, 15	+		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
SSR149415	V_{1b} antagonist	Conflict test	CD rats (500-800g)	30	ip, 15	+	Shocks of 0,7 mA/0,5 s were delivered	Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
SSR149415	V_{1b} antagonist	Marble burying	CD1 mice (25g)	3-30	ip, 15	o		Hodgson et al., 2007	Pharmacol. Biochem. Behav. 86:431-440
SSR149415	V_{1b} antagonist	Elevated plus-maze	Sprague-Dawley rats (200-350g)	10-200 ng/0.5 µl/side	dorsal hippocampus, 15	+		Engin and Treit, 2008	Neuropeptides 42:411-421
SSR149415	V_{1b} antagonist	Elevated plus-maze	Sprague-Dawley rats	10-200 ng/0.5 µl/side	ventral hippocampus,	o		Engin and Treit, 2008	Neuropeptides 42:411-421

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			(200-350g)		15				
SSR149415	V_{1b} antagonist	Shock-probe burying test	Sprague-Dawley rats (200-350g)	50-200 ng/0.5 µl/side	dorsal hippocampus, 15	o	Shocks of 2 mA were delivered	Engin and Treit, 2008	Neuropeptides 42:411-421
SSR149415	V_{1b} antagonist	Shock-probe burying test	Sprague-Dawley rats (200-350g)	50-200 ng/0.5 µl/side	ventral hippocampus, 15	o	Shocks of 2 mA were delivered	Engin and Treit, 2008	Neuropeptides 42:411-421
SSR149415	V_{1b} antagonist	Stress-induced visceral hyperalgesia	Wistar rats (250-275g)	1-3	ip for 11 days, o.d.	+	Rats were subjected to water avoidance stress	Bradesi et al., 2009	Am. J. Physiol. Gastrointest. Liver Physiol. 296:G302-G309
SSR149415	V_{1b} antagonist	Stress-induced cognitive impairment	Swiss mice (28-32g)	10	ip, 30	+	Object recognition test following rat exposure	Urani et al., 2011	Pharmacol. Biochem. Behav. 98:425-431
SSR149415	V_{1b} antagonist	Air-jet stress	Wistar rats (320-340g)	100-500 ng/5 µl	icv, 3	+	The drug reduced cardiovascular stress response	Stojičić et al., 2008	Neuropharmacology 54:824-836
SSR149415	V_{1b} antagonist	Elevated plus-maze	C57BL/6J mice (25-28g)	10	ip, 60	+	Animals were subjected to 10-day chronic social conflict stress	Amikishieva et al., 2011	Exp. Oncol. 33:126-129
SSR149415	V_{1b} antagonist	Social interaction	C57BL/6J mice (25-28g)	10	po, 60	+	Animals were subjected to 10-day chronic social conflict stress	Amikishieva et al., 2011	Exp. Oncol. 33:126-129
SSR149415	V_{1b} antagonist	Open-field	C57BL/6J mice (25-28g)	10	po, 60	o	Animals were subjected to 10-day chronic social conflict stress	Amikishieva et al., 2011	Exp. Oncol. 33:126-129
SSR149415	V_{1b} antagonist	Social interaction	Swiss-Webster mice (8-10-week-old)	30	ip, 60	+	Animals were subjected to 10-day chronic social defeat stress	Litvin et al., 2011	Physiol. Behav. 103:393-403
Vasopressin	Endogenous peptide	Stress-induced gastric lesions	Sprague-Dawley rats (300-350g)	2-3 ng/5 µl	icv, 5	+	Following restraint stress. Gastric lesions were evaluated 5 h after injection	Büyükcoskun and Özlük, 1999	Physiol. Res. 48:451-55
Vasopressin	Endogenous peptide	Elevated plus-maze	Wistar rats (220-270g)	200 pg/2 µl/min	mediolateral septum, 25	+		Appenrodt and Schwarzberg,	Physiol. Behav. 68:735-9

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								2000	
Vasopressin	Endogenous peptide	Elevated plus-maze	Wistar rats (220-270g)	10 ng/5 µl	icv, 60	+		Appenrodt and Schwarzberg, 2000	Physiol. Behav. 68:735-9
Vasopressin	Endogenous peptide	Elevated plus-maze	Wistar rats (220-270g)	200 pg/2 µl/min	septum, 30	+		Appenrodt et al., 1998	Physiol. Behav. 64:543-7
Vasopressin	Endogenous peptide	Elevated plus-maze	Wistar rats (220-270g)	500 ng	ip, 30	+		Appenrodt et al., 1998	Physiol. Behav. 64:543-7
Vasopressin	Endogenous peptide	Stress-induced gastric lesions	Brattleboro rats (220-260g)	3 ng/5 µl	icv, 5	+	(1) Restraint+water immersion stress; (2) Rats had hereditary diabetes insipidus that produces lack of AVP	Honda et al., 1994	Am. J. Physiol. 266:R1448-53
Vasopressin	Endogenous peptide	Elevated plus-maze	Wistar rats (300g)	0.25 ng	lateral septum, perfusion for 30 min	o		Liebsh et al., 1996	Neurosci. Lett. 217:101-104
Vasopressin	Endogenous peptide	Elevated plus-maze	Female OT -/- mice (C57BL/6, background, 6-11-month old)	2 ng/2 µl	icv, 5	o		Mantella et al., 2003	Endocrinology, 144:2291-2296
Vasopressin	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	ED50=1.29 ng/kg	im, 10	+		Braida et al., 2012	Psychopharmacology 220:319-330
Vasopressin+desglyDTyrOVT	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.98	im, 10	(o)		Braida et al., 2012	Psychopharmacology 220:319-330
Vasopressin+pinealectomy	Endogenous peptide	Elevated plus-maze	Wistar rats (220-270g)	200 pg/2 µl/min	mediolateral septum, 25	(o)	Pinealectomy blocked the anxiolytic-like effects	Appenrodt and Schwarzberg, 2000	Physiol. Behav. 68:735-9
Vasopressin+pinealectomy	Endogenous peptide	Elevated plus-maze	Wistar rats (220-270g)	10 ng/5 µl	icv, 60	(o)	Pinealectomy blocked the	Appenrodt and Schwarzberg,	Physiol. Behav. 68:735-9

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							anxiolytic-like effects	2000	
Vasopressin+SDR149415	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.95	im, 10	(o)		Braida et al., 2012	Psychopharmacology 220:319-330
Vasopressin+SR49059	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.88	im, 10	(o)		Braida et al., 2012	Psychopharmacology 220:319-330
Vasotocin	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	ED50=0.01 ng/kg	im, 10	+		Braida et al., 2012	Psychopharmacology 220:319-330
Vasotocin+desglyDTyrOVT	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.92	im, 10	(o)		Braida et al., 2012	Psychopharmacology 220:319-330
Vasotocin+SDR149415	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.98	im, 10	(o)		Braida et al., 2012	Psychopharmacology 220:319-330
Vasotocin+SR49059	Endogenous peptide	Fear response to predator	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.98	im, 10	(o)		Braida et al., 2012	Psychopharmacology 220:319-330
β-mercapto	V_1 antagonist	Stress-induced gastric lesions	Sprague-Dawley rats (300-350g)	4.5-5 ng/5 µl	icv, 5	-	Following restraint stress. Gastric lesions were evaluated 5 h after injection	Büyükcoskun and Özlük, 1999	Physiol. Res. 48:451-55
β-mercapto	V_1 antagonist	Light-enhanced startle	Testosterone-replaced castrated Sprague-Dawley rats	500 ng/5 µl	icv, 0	o		Toufexis et al., 2005	J. Neurosci. 25:9010-9016
β-mercapto	V_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (200-350g)	200 ng/0.5 µl/side	ventral hippocampus, 15	+		Engin and Treit, 2008	Neuropeptides 42:411-421

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference
β-mercapto	V_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (200-350g)	50-200 ng/0.5 µl/side	dorsal hippocampus, 15	o		Engin and Treit, 2008 Neuropeptides 42:411-421
β-mercapto	V_1 antagonist	Shock-probe burying test	Sprague-Dawley rats (200-350g)	50-200 ng/0.5 µl/side	dorsal hippocampus, 15	o	Shocks of 2 mA were delivered	Engin and Treit, 2008 Neuropeptides 42:411-421
β-mercapto	V_1 antagonist	Shock-probe burying test	Sprague-Dawley rats (200-350g)	50-200 ng/0.5 µl/side	ventral hippocampus, 15	o	Shocks of 2 mA were delivered	Engin and Treit, 2008 Neuropeptides 42:411-421

OFQ

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Compound 1: *(R)-NH*	ORL1 agonist	Vogel conflict test	ddY mice (26-30g)	10	po, 60	+	Shocks of 0.5 mA were applied	Hayashi et al., 2009	Chem. Biol. Drug Des. 74:369-381
Compound **1c**	ORL1 agonist	Elevated plus-maze	Rats	1-3.2	ip, 30	+		Wichmann et al., 1999	Bioorg. Med. Chem. Lett. 9:2343-2348
Compound 2: *(R)-NH-Me*	ORL1 agonist	Vogel conflict test	ddY mice (26-30g)	10	po, 60	o	Shocks of 0.5 mA were applied	Hayashi et al., 2009	Chem. Biol. Drug Des. 74:369-381
Compound 3: SO2Me	ORL1 agonist	Vogel conflict test	ddY mice (26-30g)	10	po, 60	+	Shocks of 0.5 mA were applied	Hayashi et al., 2009	Chem. Biol. Drug Des. 74:369-381
Compound **3c**	ORL1 agonist	Elevated plus-maze	Rats	0.3-3	ip, 30	+		Wichmann et al., 2000	Eur. J. Med. Chem. 35:839-851
Compound 4: OCH2-CH2OH	ORL1 agonist	Vogel conflict test	ddY mice (26-30g)	10	po, 60	+	Shocks of 0.5 mA were applied	Hayashi et al., 2009	Chem. Biol. Drug Des. 74:369-381
Compound 5: CH2NH2	ORL1 agonist	Vogel conflict test	ddY mice (26-30g)	10	po, 60	o	Shocks of 0.5 mA were applied	Hayashi et al., 2009	Chem. Biol. Drug Des. 74:369-381
J-113397	ORL1 antagonist	Conflict test	CD rats	10	ip, 30	o	Srambled foot shocks (0,7 mA/500 ms) were applied	Varty et al., 2005	Psychopharmacology 182:132-143
J-113397	ORL1 antagonist	Elevated plus-maze	ddY mice (25-32g)	3.2	sc, 45	o		Uchiyama et al., 2008	Eur. J. Pharmacol. 590:185-189
J-113397	ORL1 antagonist	Vogel conflict test	ddY mice (25-30g)	30	sc, 45	o	Shocks of 0.5 mA were applied	Hirao et al., 2008	Eur. J. Pharmacol. 579:189-195
MCOPPB	ORL1 agonist	Vogel conflict test	Sprague-Dawley rats	10	po, 60	+	Shocks of 0.5 mA were applied	Hirao et al., 2008	J. Pharmacol. Sci. 106:361-368
MCOPPB	ORL1 agonist	Vogel conflict test	Sprague-Dawley rats	10	po, for 2 or 5 days, o.d.	+	Shocks of 0.5 mA were applied	Hirao et al., 2008	J. Pharmacol. Sci. 106:361-368
Mutant mice	Nociceptin-deficient	Acoustic startle reflex	Female and male 129/Ola x C57BL/6 mice			o	Animals were housed individually	Ouagazzal et al., 2003	Behav. Brain Res. 144:111-117

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	Nociceptin-deficient	Acoustic startle reflex	Female and male 129/Ola x C57BL/6 mice			-	(1) Mutant mice displayed increased anxiety-like behaviors (2) They were housed in groups and females were submitted to restraint stress	Ouagazzal et al., 2003	Behav. Brain Res. 144:111-117
Mutant mice	Nociceptin-deficient	Light/dark test	Female and male 129/Ola x C57BL/6 mice			o	Animals were housed individually	Ouagazzal et al., 2003	Behav. Brain Res. 144:111-117
Mutant mice	Nociceptin-deficient	Light/dark test	129/Ola x C57BL/6 mice			-	(1) Mutant mice displayed increased anxiety-like behaviors (2) They were housed in groups	Ouagazzal et al., 2003	Behav. Brain Res. 144:111-117
Mutant mice	Nociceptin-deficient	Light/dark test	Female 129/Ola x C57BL/6 mice			o	Animals were housed in groups and subjected to restraint stress	Ouagazzal et al., 2003	Behav. Brain Res. 144:111-117
Mutant mice	Nociceptin receptor knockout	Elevated plus-maze	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			-	Mutant mice displayed increased anxiety-like behaviors	Gavioli et al., 2007	Peptides 28:1229-1239
Mutant mice	Nociceptin receptor knockout	Light/dark test	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			-	Mutant mice displayed increased anxiety-like behaviors	Gavioli et al., 2007	Peptides 28:1229-1239
Mutant mice	Nociceptin receptor knockout	Open-field	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			o	Mutant mice did not display any particular phenotype in this test	Gavioli et al., 2007	Peptides 28:1229-1239
Mutant mice	Nociceptin receptor knockout	Novelty-suppressed feeding	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			+	Mutant mice displayed decreased anxiety-like behaviors	Gavioli et al., 2007	Peptides 28:1229-1239

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	Nociceptin receptor knockout	Escape behavior in the elevated T-maze	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			-	Mutant mice displayed increased anxiety-like behaviors	Gavioli et al., 2007	Peptides 28:1229-1239
Mutant mice	Nociceptin receptor knockout	Inhibitory avoidance in the elevated T-maze	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			o	Mutant mice did not display any particular phenotype on inhibitor avoidance	Gavioli et al., 2007	Peptides 28:1229-1239
Mutant mice	Nociceptin receptor knockout	Stress-induced hyperthermia	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			o	Mutant mice did not display any particular phenotype in this test	Gavioli et al., 2007	Peptides 28:1229-1239
Mutant mice	Nociceptin receptor knockout	Holeboard	C57BL/6J x 129 x CD1 background mice (2-3-month-old, 28-35g)			o	Mutant mice did not display any particular phenotype on inhibitor avoidance	Gavioli et al., 2007	Peptides 28:1229-1239
Nociceptin/orphanin FQ	Endogenous ligand	Stress-induced ethanol-seeking behavior	Wistar rats (200-250g)	2 µg/1 µl	icv, 5	+	Test based on footshock (0.5 mA) stress-induced reinstatement of extinguished ethanol-seeking behavior	Martin-Fardon et al., 2000	Neuroreport 11:1939-43
Nociceptin/orphanin FQ	Endogenous ligand	Stress-induced cocaine-seeking behavior	Wistar rats (200-250g)	0.12 µg/1 µl	icv, 5	o	Test based on footshock (0.5 mA) stress-induced reinstatement of extinguished cocaine-seeking behavior	Martin-Fardon et al., 2000	Neuroreport 11:1939-43
Nociceptin/orphanin FQ	Endogenous ligand	Stress-suppressed feeding	Wistar rats (200-250g)	1-2 µg/1 µl/rat	icv, 5	+	Shock intensity was 0.5 mA/0.5 s	Ciccocioppo et al., 2001	Neuroreport 12:1145-1149
Nociceptin/orphanin FQ	Endogenous ligand	Stress-suppressed feeding	Wistar rats (200-250g)	1-2 µg/1 µl/rat	icv, 5	+	Following restraint	Ciccocioppo et al., 2001	Neuroreport 12:1145-1149
Nociceptin/orphanin FQ	Endogenous ligand	CRF-suppressed feeding	Wistar rats (200-250g)	0.1-2 µg/1 µl/rat	icv, 5	+		Ciccocioppo et al., 2001	Neuroreport 12:1145-1149
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Swiss mice (30-40g)	10-100 pmol/2 µl	icv, 5	+		Gavioli et al., 2002	Br. J. Pharmacol. 136:764-772

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Nociceptin/orphanin FQ	Endogenous ligand	Open-field	Long-Evans rats (250-300g)	0.001-1 nmol/1 µl	icv, 5	-		Fernandez et al., 2004	Neuropsychopharmacology 29:59-71
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Long-Evans rats (250-300g)	0.01-1 nmol/1 µl	icv, 5	-		Fernandez et al., 2004	Neuropsychopharmacology 29:59-71
Nociceptin/orphanin FQ	Endogenous ligand	Light/dark test	Long-Evans rats (250-300g)	0.01-1 nmol/1 µl	icv, 5	-		Fernandez et al., 2004	Neuropsychopharmacology 29:59-71
Nociceptin/orphanin FQ	Endogenous ligand	Mouse defense test battery	Swiss mice (10-week-old)	1-3 nmol/5 µl	icv, 15	+	The drug mainly affected defensive aggression	Griebel et al., 1999	Brain Res. 836:221-224
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Wistar rats (180-200g)	0.75-1.5 nmol/rat	icv, 5	-	Locomotion was reduced	Vitale et al., 2006	Peptides 27:2193-2200
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Wistar rats (180-200g)	1 nmol/rat	icv, 5 and 120 min	+		Vitale et al., 2006	Peptides 27:2193-2200
Nociceptin/orphanin FQ	Endogenous ligand	Shock-probe burying test	Wistar rats (180-200g)	0.75-1.5 nmol/rat	icv, 5	+		Vitale et al., 2006	Peptides 27:2193-2200
Nociceptin/orphanin FQ	Endogenous ligand	Shock-probe burying test	Wistar rats (180-200g)	1 nmol/rat	icv, 5 and 120 min	+		Vitale et al., 2006	Peptides 27:2193-2200
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	10 pmol/2 µl	icv, 5	+		Gavioli et al., 2008	Peptides 29:1404-1412
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	ddY mice (25-32g)	0.1-0.32 nmol/5 µl	icv, 10	+		Uchiyama et al., 2008	Eur. J. Pharmacol. 590:185-189
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Sprague-Dawley rats (200-300g)	10-100 nmol/2 µl	dorsal hippocampus, 10	o		Uchiyama et al., 2008	Eur. J. Pharmacol. 590:185-189
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Sprague-Dawley rats (200-300g)	10-32 nmol/2 µl	central amygdala, 10	+		Uchiyama et al., 2008	Eur. J. Pharmacol. 590:185-189
Nociceptin/orphanin FQ	Endogenous ligand	Open-field	Long-Evans rats (260-315g)	0.1-1 nmol/1 µl	icv, 0	-		Green et al., 2007	Neuropeptides 41:399-410
Nociceptin/orphanin FQ	Endogenous ligand	Open-field	Long-Evans rats (260-315g)	0.1-1 nmol/0.5 µl	amygdala, 0	-		Green et al., 2007	Neuropeptides 41:399-410
Nociceptin/orphanin FQ	Endogenous ligand	Open-field	Long-Evans rats (260-315g)	1 nmol/0.5 µl	bed nucleus of the stria terminalis, 0	-		Green et al., 2007	Neuropeptides 41:399-410

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Sprague-Dawley rats (200-300g, 6-7-week-old)	10-32 pmol/1 µl	central amygdala, 10	+		Uchiyama et al., 2008	Neurosci. Lett. 431:66-70
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Sprague-Dawley rats (200-300g, 6-7-week-old)	10-100 pmol/1 µl	basolateral amygdala, 10	o		Uchiyama et al., 2008	Neurosci. Lett. 431:66-70
Nociceptin/orphanin FQ	Endogenous ligand	Escape behavior in the elevated T-maze	Sprague-Dawley rats (200-300g, 6-7-week-old)	32 pmol/1 µl	central amygdala, 10	+		Uchiyama et al., 2008	Neurosci. Lett. 431:66-70
Nociceptin/orphanin FQ	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Sprague-Dawley rats (200-300g, 6-7-week-old)	32 pmol/1 µl	central amygdala, 10	o		Uchiyama et al., 2008	Neurosci. Lett. 431:66-70
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Wistar rats (200-250g)	2 µg/1 µl	icv, 10	+		Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Wistar rats (200-250g)	1-2 µg/1 µl	icv, 10	+	The drug was given 1 week following termination of chronic ethanol	Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.
Nociceptin/orphanin FQ	Endogenous ligand	Shock-probe burying test	Wistar rats (200-250g)	2 µg/1 µl	icv, 10	+	Shocks of 1.5 mA were applied	Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.
Nociceptin/orphanin FQ	Endogenous ligand	Shock-probe burying test	Wistar rats (200-250g)	1-2 µg/1 µl	icv, 10	+	(1) The drug was given 1 week following termination of chronic ethanol; (2) Shocks of 1.5 mA were applied	Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Wistar rats (200-250g)	2 µg/1 µl	icv, 10	+		Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.
Nociceptin/orphanin FQ	Endogenous ligand	Elevated plus-maze	Wistar rats (200-250g)	1-2 µg/1 µl	icv, 10	-	The drug was given 3 week following termination of chronic ethanol	Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Nociceptin/orphanin FQ	Endogenous ligand	Shock-probe burying test	Wistar rats (200-250g)	2 µg/1 µl	icv, 10	+	Shocks of 1.5 mA were applied	Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.
Nociceptin/orphanin FQ	Endogenous ligand	Shock-probe burying test	Wistar rats (200-250g)	1 µg/1 µl	icv, 10	-	(1) The drug was given 3 week following termination of chronic ethanol; (2) Shocks of 1.5 mA were applied	Aujla et al., 2012	Addict. Biol. doi: 10.1111/j.1369-1600.2012.00466.x.
Nociceptin/orphanin FQ+ diazepam (0.75 mg/kg)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	3 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiolytic-like action of diazepam	Gavioli et al., 2008	Peptides 29:1404-1412
Nociceptin/orphanin FQ+ PTZ (20 mg/kg)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiogenic-like action of PTZ	Gavioli et al., 2008	Peptides 29:1404-1412
Nociceptin/orphanin FQ+(+)-bicuculline (5.6 mg/kg)	Endogenous ligand	Elevated plus-maze	ddY mice (25-32g)	0.32 nmol/5 µl	icv, 10	(o)	Antagonism of the anxiolytic-like effects of nociceptin	Uchiyama et al., 2008	Eur. J. Pharmacol. 590:185-189
Nociceptin/orphanin FQ+flumazenil (1 mg/kg)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	10 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiolytic-like action of nociceptin	Gavioli et al., 2008	Peptides 29:1404-1412
Nociceptin/orphanin FQ+flumazenil (10 mg/kg)	Endogenous ligand	Elevated plus-maze	ddY mice (25-32g)	0.32 nmol/5 µl	icv, 10	(o)	Antagonism of the anxiolytic-like effects of nociceptin	Uchiyama et al., 2008	Eur. J. Pharmacol. 590:185-189
Nociceptin/orphanin FQ+J-113397 (0.1-3.2 mg/kg)	Endogenous ligand	Elevated plus-maze	ddY mice (25-32g)	0.32 nmol/5 µl	icv, 10	(o)	Antagonism of the anxiolytic-like effects of nociceptin	Uchiyama et al., 2008	Eur. J. Pharmacol. 590:185-189
Nociceptin/orphanin FQ+J-113397 (10 mg/kg)	Endogenous ligand	Elevated plus-maze	Sprague-Dawley rats (200-300g, 6-7-week-old)	32 pmol/1 µl	central amygdala, 10	(o)		Uchiyama et al., 2008	Neurosci. Lett. 431:66-70
Nociceptin/orphanin FQ+J-113397 (10 mg/kg)	Endogenous ligand	Escape behavior in the elevated T-maze	Sprague-Dawley rats (200-300g, 6-7-week-old)	32 pmol/1 µl	central amygdala, 10	(o)		Uchiyama et al., 2008	Neurosci. Lett. 431:66-70

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Nociceptin/orphanin FQ+nocistatin (1 pmol/2 µl)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-40g)	10-100 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiogenic-like action of NST	Gavioli et al., 2002	Br. J. Pharmacol. 136:764-772
Nociceptin/orphanin FQ+nocistatin-C6 (0.1 pmol/2 µl)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-40g)	10-100 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiogenic-like action of NST	Gavioli et al., 2002	Br. J. Pharmacol. 136:764-772
Nociceptin/orphanin FQ+UFP-101 (10 nmol/rat)	Endogenous ligand	Elevated plus-maze	Wistar rats (180-200g)	1 nmol/rat	icv, 5 and 120 min	(o)	Antagonism of the anxiolytic-like action of the peptide	Vitale et al., 2006	Peptides 27:2193-2200
Nociceptin/orphanin FQ+UFP-101 (10 nmol/rat)	Endogenous ligand	Shock-probe burying test	Wistar rats (180-200g)	1 nmol/rat	icv, 5 and 120 min	(o)	Antagonism of the anxiolytic-like action of the peptide	Vitale et al., 2006	Peptides 27:2193-2200
Nocistatin	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	0.01 pmol/2 µl	icv, 5	-		Gavioli et al., 2008	Peptides 29:1404-1412
Nocistatin+ diazepam (0.75 mg/kg)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	0.1 pmol/2 µl	icv, 5	(o)	Antagonism of the anxiolytic-like action of diazepam	Gavioli et al., 2008	Peptides 29:1404-1412
Nocistatin+ PTZ (20 mg/kg)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	0.01 pmol/2 µl	icv, 5	(-)	Potentation of the anxiogenic-like action of PTZ	Gavioli et al., 2008	Peptides 29:1404-1412
Nocistatin+flumazenil (1 mg/kg)	Endogenous ligand	Elevated plus-maze	Swiss mice (30-35g)	0.1 pmol/2 µl	icv, 5	-	No interaction	Gavioli et al., 2008	Peptides 29:1404-1412
PCPB	ORL1 agonist	Vogel conflict test	ddY mice (25-30g)	30	po, 60	+	Shocks of 0.5 mA were applied	Hirao et al., 2008	Eur. J. Pharmacol. 579:189-195
PCPB+J-113397 (0.3-30 mg/kg)	ORL1 agonist	Vogel conflict test	ddY mice (25-30g)	30	po, 60	(o)	(1) Antagonism of the effects of PCPB; (2) Shocks of 0.5 mA were applied	Hirao et al., 2008	Eur. J. Pharmacol. 579:189-195
Ro 64-6198	ORL1 agonist	Elevated plus-maze	Sprague-Dawley rats (120-150g)	1-3.2	ip, 30	+		Jenck et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:4938-43
Ro 64-6198	ORL1 agonist	Fear-potentiated startle reflex	Wistar rats (260-280g)	3.2-10	ip, 30	+		Jenck et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:4938-43

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ro 64-6198	ORL1 agonist	Conflict test	Wistar rats (200-250g)	1	ip, 30	+		Jenck et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:4938-43
Ro 64-6198	ORL1 agonist	DPAG stimulation	Wistar rats (300-150g)	10	ip, 30	+/o	Weak anxiolytic-like effects	Jenck et al., 2000	Proc. Natl. Acad. Sci. U. S. A. 97:4938-43
Ro 64-6198	ORL1 agonist	Stress-suppressed feeding	Wistar rats (200-250g)	0.3-2.5	ip, 30 & 60	+	Animals were subjected to restraint stress	Ciccocioppo et al., 2002	Psychopharmacology 161:113-119
Ro 64-6198	ORL1 agonist	Ultrasonic distress vocalizations	CD rat pups (8-10-day-old)	1-3	ip, 30	+		Varty et al., 2005	Psychopharmacology 182:132-143
Ro 64-6198	ORL1 agonist	Distress vocalizations	Hartley guinea pig pups (5-18-day-old)	0,3-1	ip, 30	+		Varty et al., 2005	Psychopharmacology 182:132-143
Ro 64-6198	ORL1 agonist	Conflict test	CD rats	3-10	ip, 30	+	Srambled foot shocks (0,7 mA/500 ms) were applied	Varty et al., 2005	Psychopharmacology 182:132-143
Ro 64-6198	ORL1 agonist	Geller-Seifter conflict test	C57BL/6 and 129X1Sv background mice	3	ip, 30	+	Foot shocks of 0,7 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 182:132-143
Ro 64-6198	ORL1 agonist	Geller-Seifter conflict test	C57BL/6 and 129X1Sv background mice lacking the ORL1 receptor	1-3	ip, 30	(o)	(1) The deletion abolished the effects of Ro 64-6198; (2) Foot shocks of 0,7 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 182:132-143
Ro 64-6198	ORL1 agonist	Ultrasound-induced defensive behaviors	Lister hooded rats (220-250g)	10	ip, 30	+	The drug reduced freezing, but not escape-like behavior	Nicolas et al., 2007	Psychopharmacology doi: 10.1007/s00213-007-0838-4
Ro 64-6198	ORL1 agonist	Vogel conflict test	Sprague-Dawley rats (200g)	0,3-3	ip, 30	+	Shocks of 0.5 mA/250 ms were applied	Goeldner et al., 2012	Psychopharmacology 222:203-214
Ro 64-6198	ORL1 agonist	Social approach-avoidance test	Lewis rats (200-220g)	0,3-3	ip, 30	+		Goeldner et al., 2012	Psychopharmacology 222:203-214
Ro 64-6198	ORL1 agonist	Novelty-suppressed feeding	C57BL/6J mice (25g)	0,3-3	ip, 30	+		Goeldner et al., 2012	Psychopharmacology 222:203-214
Ro 64-6198	ORL1 agonist	Stress-induced hyperthermia	NMRI mice (22g)	0,3-3	ip, 30	+		Goeldner et al., 2012	Psychopharmacology 222:203-214

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ro 64-6198+[Nphe1]NC(1-13)NH2 (33-66 µg/rat)	ORL1 agonist	Stress-suppressed feeding	Wistar rats (200-250g)	0.3	ip, 30 and 60	(o)	The ORL1 antagonist blocked restraint-induced anorexia	Ciccocioppo et al., 2002	Psychopharmacology 161:113-119
Ro 64-6198+CRF (0.2 µl/rat)	ORL1 agonist	Stress-suppressed feeding	Wistar rats (200-250g)	0.3-2.5	ip, 30 and 60	(o)	The ORL1 agonist antagonized CRF-induced anorexia	Ciccocioppo et al., 2002	Psychopharmacology 161:113-119
Ro 64-6198+J-113397 (10 mg/kg)	ORL1 agonist	Conflict test	CD rats	3	ip, 30	(o)	(1) antagonism of the effects of Ro 64-6198; (2) Srambled foot shocks (0,7 mA/500 ms) were applied	Varty et al., 2005	Psychopharmacology 182:132-143
Ro 64-6198+naltrexone (3 mg/kg)	ORL1 agonist	Conflict test	CD rats	3	ip, 30	+	(1) no antagonism of the effects of Ro 64-6198; (2) Srambled foot shocks (0,7 mA/500 ms) were applied	Varty et al., 2005	Psychopharmacology 182:132-143
SCH 221510	ORL1 agonist	Elevated plus-maze	CD rats (200-500g)	1-10	po, 120	+		Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
SCH 221510	ORL1 agonist	Vogel conflict test	CD rats (200-500g)	3-30	po, 120	+	Shock intensity was 0.4 mA/0.5 s	Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
SCH 221510	ORL1 agonist	Conflict test	CD rats (200-500g)	10	po, 120	+	Shock intensity was 0.7 mA/0.5 s	Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
SCH 221510	ORL1 agonist	Elevated plus-maze	Female Mongolian gerbils (30-50g)	3-10	po, 120	+		Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
SCH 221510	ORL1 agonist	Distress vocalizations	Dunkin Hartley Guinea pig pups (2-3-day-old)	0.3-3	po, 120	+		Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
SCH 221510	ORL1 agonist	Fear-potentiated startle reflex	Wistar rats (200-500g)	10	po, 120	+		Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
SCH 221510	ORL1 agonist	Vogel conflict test	CD rats (200-500g)	10	po, for 14 days, b.i.d.	+	Shock intensity was 0.4 mA/0.5 s	Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SCH 221510+J-113397 (3-10 mg/kg)	ORL1 agonist	Vogel conflict test	CD rats (200-500g)	3-30	po, 120	(o)	(1) Antagonism of the anxiolytic-like effects; (2) Shock intensity was 0.4 mA/0.5 s	Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
SCH 221510+naltrexone (3-10 mg/kg)	ORL1 agonist	Vogel conflict test	CD rats (200-500g)	3-30	po, 120	+	(1) No interaction; (2) Shock intensity was 0.4 mA/0.5 s	Varty et al., 2008	J. Pharmacol. Exp. Ther. 326:672-682
UFP-101	ORL1 antagonist	Elevated plus-maze	Wistar rats (180-200g)	10 nmol/rat	icv, 10	o		Vitale et al., 2006	Peptides 27:2193-2200
UFP-101	ORL1 antagonist	Shock-probe burying test	Wistar rats (180-200g)	10 nmol/rat	icv, 10	o		Vitale et al., 2006	Peptides 27:2193-2200

Glutamate

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(-)-NANM	NMDA channel blocker	Conflict test	Sprague-Dawley rats (250-288g)	5.6-17	ip	+	A multiple FI90/FI90 (punishment) schedule was used	McMillan et al., 1991	J. Pharmacol. Exp. Ther. 258:1015-1018
(+)-3	mGluR2/3 and mGluR8 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (225-274g)	0.0003-0.003	po, 60	+		Collado et al., 2004	J. Med. Chem. 47:456-466
(+)-NANM	NMDA channel blocker	Conflict test	Sprague-Dawley rats (250-288g)	10-17	ip	+	A multiple FI90/FI90 (punishment) schedule was used	McMillan et al., 1991	J. Pharmacol. Exp. Ther. 258:1015-1018
(S)-3,4-DCPG	mGluR8 agonist	Vogel conflict test	Wistar rats (250-270g)	10-100 nmol/0.5 µl/site	hippocampus CA1, 10	o	The shock intensity was 0.5 mA	Stachowicz et al., 2005	Pharmacol. Rep. 57:856-860
(S)-3,4-DCPG	mGluR8 agonist	Vogel conflict test	Wistar rats (250-270g)	10-100 nmol/0.5 µl/site	basolateral amygdala, 10	o	The shock intensity was 0.5 mA	Stachowicz et al., 2005	Pharmacol. Rep. 57:856-860
(S)-3,4-DCPG	mGluR8 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats	30-3000 nmol/0.5 µl	amygdala, 0	+	The drug reduced both acquisition and expression of Conditioned fear stress	Schmid and Fendt, 2006	Neuropharmacology 50:154-164
(S)-3,4-DCPG	mGluR8 agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	10 µM/2 µl	central amygdala, 15-20	o		Palazzo et al., 2008	Neuropharmacology 55:537-245
(S)-3,4-DCPG	mGluR8 agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	10 µM/2 µl	central amygdala, 15-20	+	Rats were arthritic	Palazzo et al., 2008	Neuropharmacology 55:537-245
(S)-3,4-DCPG	mGluR8 agonist	Conditioned fear	C57BL/6j (25-30g)	10 nmol/0.2 µl	basolateral amygdala	-	Shocks of 0.7 mA/2 s were applied	Dobi et al., 12012	Neuropharmacology 66:274-289
(S)-4CPG	Group 1 mGluR antagonist	Vogel conflict test	Wistar rats (230-270g)	20 µg/1 µl	dorsal hippocampus, 10	+		Tatarczyńska et al., 2001	Psychopharmacology 158:94-99
1-Aminocyclopropane carboxylate	NMDA glycine-B partial agonist	Fear-potentiated startle reflex	CD rats (250-450g)	200-500	ip, 30	+		Anthony and Nevins, 1993	Eur. J. Pharmacol. 250:317-324
2-APH	NMDA antagonist	Four-plate test	Female NMRI mice (23-27g)	80	ip, 30	+	Animals received electric shocks of 1 mA/60 ms	Stephens et al., 1986	Psychopharmacology 90:166-169

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
2-APH	NMDA antagonist	Elevated plus-maze	Wistar rats (350g)	160	ip, 30	+		Stephens et al., 1986	Psychopharmacology 90:166-169
2-APH	NMDA antagonist	PTZ discriminative stimulus	Wistar rats (350g)	10-80	ip, 30	o	The drug did not antagonize the PTZ cue	Stephens et al., 1986	Psychopharmacology 90:166-169
2-APH+DMCM (3.13 mg/kg)	NMDA antagonist	Four-plate test	Female NMRI mice (23-27g)	5-80	ip, 30	-	(1) No antagonism of the anxiogenic-like effects of DMCM; (2) Animals received electric shocks of 1 mA/60 ms	Stephens et al., 1986	Psychopharmacology 90:166-169
4-MPPTS	mGluR2 potentiator	Fear-potentiated startle reflex	Sprague-Dawley rats (325-400g)	0.1-1	sc	+		Johnson et al., 2005	Psychopharmacology 179:271-283
5,7-Dichlorokynurenic acid	NMDA Glycine antagonist	Vogel conflict test	Wistar rats (180-220g)	5 µg/5 µl	icv, 5	+	Electric shocks of 0.4 mA were applied	Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
5,7-Dichlorokynurenic acid	NMDA Glycine antagonist	Open-field	Wistar rats (180-220g)	0.5-5 µg/5 µl	icv, 5	o		Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
5,7-Dichlorokynurenic acid	NMDA Glycine antagonist	Social interaction	Wistar rats (200-300g)	0.1	ip, 30	+		Corbett and Dunn, 1993	Neuropharmacology 32:461-466
5,7-Dichlorokynurenic acid	NMDA Glycine antagonist	Elevated plus-maze	Wistar rats (200-250g)	100	ip, 30	+		Corbett and Dunn, 1993	Neuropharmacology 32:461-466
5,7-Dichlorokynurenic acid	NMDA Glycine antagonist	Conflict test	Wistar rats (200-250g)	100-173	ip, 30	+	VI-30/FR-10 schedule was used	Corbett and Dunn, 1993	Neuropharmacology 32:461-466
5,7-Dichlorokynurenic acid	NMDA Glycine antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day old)	120-240	ip, 30	+		Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
7-Chlorokynurenic acid	NMDA Glycine antagonist	Conflict test	White Carneau pigeons (500-600g)	40-80	im, 60	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
7-Chlorokynurenic acid	NMDA Glycine antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	25	sc, 30	+		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
7-Chlorokynurenic acid	NMDA Glycine antagonist	Elevated plus-maze	NIH Swiss mice (20-25g)	25	ip, 15	+		Trullas et al., 1989	Pharmacol. Biochem. Behav. 34:313-316
7-Chlorokynurenic acid	NMDA Glycine antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	30-100	ip, 30	+		Anthony and Nevins, 1993	Eur. J. Pharmacol. 250:317-324
7-Chlorokynurenic acid	NMDA Glycine antagonist	Elevated plus-maze	Wistar rats (200-250g)	4 nmol/0.25 µl	dorso medial hypothalamus, 10	-	The drug also decreased exploration behavior	Jardim and Guimarães, 2004	Pharmacol. Biochem. Behav. 79:541-546
7-Chlorokynurenic acid	NMDA Glycine antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (4-month-old, 260-320g)	8 nmol/0.3 µl	dorsal PAG, 10	o		Santos et al., 2006	Neuropharmacology 51:203-212
A-841720	mGluR1 antagonist	Conditioned fear	Sprague-Dawley rats (220-250g)	10-30	ip, 30	+	(1) The drug reduced freezing 24 hrs after acquisition session (Shocks of 0.45 mA/1 s); (2) The drug was given prior to acquisition	Morè et al., 2007	Behav. Pharmacol. 18:273-281
A-841720	mGluR1 antagonist	Conditioned fear	Sprague-Dawley rats (220-250g)	10	ip, for 5 days, o.d.	+	(1) The drug reduced freezing 24 hrs after acquisition session (Shocks of 0.45 mA/1 s); (2) The drug was given prior to acquisition	Morè et al., 2007	Behav. Pharmacol. 18:273-281
A-841720	mGluR1 antagonist	Passive-avoidance	Sprague-Dawley rats (220-250g)	10-30	ip, 30	+	(1) The drug reduced freezing 24 hrs after acquisition session (Shocks of 1 mA/1 s); (2) The drug was given prior to acquisition	Morè et al., 2007	Behav. Pharmacol. 18:273-281
ABHxD-I	Non-selective group I, II and III mGluR agonist	Vogel conflict test	Wistar rats (230-270g)	2-10 µg/1 µl	dorsal hippocampus, 10	o		Tatarczyńska et al., 2001	Psychopharmacology 158:94-99

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Acamprosate	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-250g)	200-400	ip, 30	o		Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
Acamprosate	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-250g)	400	ip, 30	+	Anxiety was increased by withdrawal from ethanol	Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
ACEA 1021	NMDA Glycine antagonist	Elevated plus-maze	ICR mice (15-20g)	30	ip, 40	+	Positive effects on open arm entries only	Wiley et al., 1995	Eur. J. Pharmacol. 294:101-107
ACPC	NMDA Glycine antagonist	Conflict test	White Carneau pigeons (500-600g)	20-160	im, 5	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
ACPC	NMDA Glycine antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	12.5-200	sc, 20 to 260	+		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
ACPC	NMDA Glycine antagonist	Elevated plus-maze	NIH Swiss mice (20-25g)	300-400	ip, 15	+		Trullas et al., 1989	Pharmacol. Biochem. Behav. 34:313-316
ACPC	NMDA Glycine antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	100-600	ip, 15	o		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
ACPC+glycine (200 mg/kg)	NMDA Glycine antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	50	sc, 30	(o)	Antagonism of the effects of ACPC	Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
ACPC+NMDA (1 mg/kg)	NMDA Glycine antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	50	sc, 30	+	No antagonism of the effects of ACPC	Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
ACPT+BIBO 3304 (128 ng/0.5 µl/site)	Group 3 mGluR agonist	Elevated plus-maze	Wistar rats (200-230g)	1.5 µg/0.5 µl/site	amygdala, 30	(o)	Antagonism of the effects of L-CCG-I	Wierońska et al., 2005	Pharmacol. Rep. 57:734-743
ACPT-I	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (200-250g)	7.5-15 nmol/0.5 µl/site	hippocampus, 10	+	The shock intensity was 0.5 mA	Pałucha et al., 2004	Neuropharmacology 46:151-159
ACPT-I	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (200-250g)	7.5-15 nmol/0.5 µl/site	hippocampus, 10	+	The shock intensity was 0.5 mA	Tatarczyńska et al., 2002	Pol. J. Pharmacol. 54:707-710
ACPT-I	Group 3 mGluR agonist	Elevated plus-maze	Wistar rats (200-230g)	1.5 µg/0.5 µl/site	amygdala, 30	+		Wierońska et al., 2005	Pharmacol. Rep. 57:734-743

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
ACPT-I	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (200-250g)	7,5 nmol/0.5 µl/site	basolateral amygdala, 10	o	The shock intensity was 0.5 mA	Stachowicz et al., 2006	Neuropharmacology 52:306-312
ACPT-I	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (230-270g)	3,75 nmol/0.5 µl/site	hippocampus, 10	o	The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
ACPT-I	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (230-270g)	7,5 nmol/0.5 µl/site	hippocampus, 10	+	The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
ACPT-I	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (200-250g)	25-50	ip, 60	+	Shocks of 0.5 mA were delivered	Stachowicz et al., 2009	Neuropharmacology 57:227-234
ACPT-I	Group 3 mGluR agonist	Elevated plus-maze	Swiss mice (23-25g)	50	ip, 30	+		Stachowicz et al., 2009	Neuropharmacology 57:227-234
ACPT-I	Group 3 mGluR agonist	Stress-induced hyperthermia	Swiss mice (23-25g)	10-30	ip, 60	+		Stachowicz et al., 2009	Neuropharmacology 57:227-234
ACPT-I+CPPG (7.5-75 nmol/rat)	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (200-250g)	7.5 nmol/0.5 µl/site	hippocampus, 10	(o)	(1) Blockade of the anxiolytic-like effects; (2) The shock intensity was 0.5 mA	Pałucha et al., 2004	Neuropharmacology 46:151-159
ACPT-I+flumazenil (10 mg/kg)	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (230-270g)	7,5 nmol/0.5 µl/site	hippocampus, 10	(o)	(1) Antagonism of the effects of ACPT-I; (2) The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
ACPT-I+flumazenil (10 mg/kg)	Group 3 mGluR agonist	Stress-induced hyperthermia	Swiss mice (23-25g)	20	ip, 60	(o)		Stachowicz et al., 2009	Neuropharmacology 57:227-234
ACPT-I+ritanserin (0.5 mg/kg)	Group 3 mGluR agonist	Stress-induced hyperthermia	Swiss mice (23-25g)	20	ip, 60	+	No interaction	Stachowicz et al., 2009	Neuropharmacology 57:227-234
ACPT-I+WAY100635 (0.1 mg/kg)	Group 3 mGluR agonist	Stress-induced hyperthermia	Swiss mice (23-25g)	20	ip, 60	(o)		Stachowicz et al., 2009	Neuropharmacology 57:227-234
AIDA	Group 1 mGluR antagonist	Vogel conflict test	Wistar rats (230-270g)	1-2	ip, 60	+	The shock intensity was 0.5 mA	Kłodzińska et al., 2004	J. Physiol. Pharmacol. 55:113-126
AIDA	Group 1 mGluR antagonist	Elevated plus-maze	Wistar rats (230-270g)	0.5-2	ip, 60	+		Kłodzińska et al., 2004	J. Physiol. Pharmacol. 55:113-126
AIDA	Group 1 mGluR antagonist	Four-plate test	Swiss mice (23-27g)	0.5-8	ip, 60	o		Kłodzińska et al., 2004	J. Physiol. Pharmacol. 55:113-126

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AIDA	Group 1 mGluR antagonist	Flight behavior	Wistar rats (220-240g)	30-100 nmol/0.2 µl	dorsolateral PAG, 5	o		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
AIDA	Group 1 mGluR antagonist	Elevated plus-maze	Wistar rats (220-240g)	10-30 nmol/0.2 µl	dorsolateral PAG, 10	+		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
AIDA	Group 1 mGluR antagonist	Elevated plus-maze	Wistar rats (220-240g)	30 nmol/0.2 µl	superior colliculus, 10	o		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
AIDA	Group 1 mGluR antagonist	Vogel conflict test	Wistar rats (220-240g)	10-30 nmol/0.2 µl	dorsolateral PAG, 10	+	Shocks of 0,5 mA/2 s were applied	Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
AIDA	Group 1 mGluR antagonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (220-280g)	50 µm/0.5 µl/side	basolateral amygdala, 5	o	Rats received estradiol replacement	De Jesus-Burgos et al., 2012	Pharmacol. Biochem. Behav. 101:369-378
AIDA	Group 1 mGluR antagonist	Light/dark test	Wistar rats (25-day-old)	10-20	ip, at P12 and 18	+		Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139
AIDA	Group 1 mGluR antagonist	Light/dark test	Wistar rats (25-day-old)	10-20	ip, at P12, 18 and 25	+		Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139
AIDA	Group 1 mGluR antagonist	Light/dark test	Wistar rats (25-day-old)	10-20	ip, at P12 and 18	o	Light-dark experienced animals	Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139
AIDA	Group 1 mGluR antagonist	Light/dark test	Wistar rats (25-day-old)	10-20	ip, at P12, 18 and 25	o	Light-dark experienced animals	Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139
AIDA+tACPD (30 nmol/0,2 µl)	Group 1 mGluR antagonist	Flight behavior	Wistar rats (220-240g)	30-100 nmol/0.2 µl	dorsolateral PAG, 5	(o)	Blockade of the effects of tACPD	Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
AIDA+tADA (10 nmol/0,2 µl)	Group 1 mGluR antagonist	Flight behavior	Wistar rats (220-240g)	30 nmol/0.2 µl	dorsolateral PAG, 5	(o)	Blockade of the effects of tACPD	Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
ALX-5407	GlyT1 inhibitor	Stress-induced hyperthermia	DBA/2 mice (25-35g)	3-10	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
ALX-5407	GlyT1 inhibitor	Elevated plus-maze	C57BL/6J (8-12-week-old)	1	ip, 120	-		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
ALX-5407	GlyT1 inhibitor	Open-field	C57BL/6J (8-12-week-old)	1	ip, 120	o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
ALX-5407	GlyT1 inhibitor	Novel object	C57BL/6J (8-12-week-old)	1	ip, 120	o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Amantadine	NMDA channel blocker	Elevated plus-maze	Sprague-Dawley rats (220-250g)	10-100	ip, 30	o		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
AMN082	mGluR7 agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	25 µM/2 µl	central amygdala, 15-20	-		Palazzo et al., 2008	Neuropharmacology 55:537-245
AMN082	mGluR7 agonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	25 µM/2 µl	central amygdala, 15-20	o	Rats were arthritic	Palazzo et al., 2008	Neuropharmacology 55:537-245
AMN082	mGluR7 agonist	Four-plate test	Swiss mice (28-32g)	6	ip, 60	+		Stachowicz et al., 2008	Behav. Pharmacol. 19:597-603
AMN082	mGluR7 agonist	Stress-induced hyperthermia	Swiss mice (28-32g)	3-6	ip, 60	+		Stachowicz et al., 2008	Behav. Pharmacol. 19:597-603
AMN082	mGluR7 agonist	Stress-induced hyperthermia	C57Bl/6J mGluR7 KO mice (18-23g)	6	ip, 60	(o)	Anxiolytic-like activity was lost in knockout mice	Stachowicz et al., 2008	Behav. Pharmacol. 19:597-603
AMN082	mGluR7 agonist	Conditioned fear	129S1/SvImJ (3-5-month-old)	6	po, 2 h	+	(1) Drug was given prior to extinction training; (2) Shocks of 0.5 mA/1 s were applied	Whittle et al., 2013	Neuropharmacology 64:414-423
AMN082	mGluR7 agonist	Conditioned fear	C57BL/6j (25-30g)	300 pmol/0.2 µl	basolateral amygdala	+	Shocks of 0.7 mA/2 s were applied	Dobi et al., 12012	Neuropharmacology 66:274-289
AMN082+flumazenil (10 mg/kg)	mGluR7 agonist	Stress-induced hyperthermia	Swiss mice (28-32g)	6	ip, 60	(o)	Blockade of the anxiolytic-like effects of AMN082	Stachowicz et al., 2008	Behav. Pharmacol. 19:597-603
AP-5	NMDA antagonist	Conditioned fear	Sprague-Dawley rats	12.5 nmol/0.3 µl	amygdala, 0	+	Second-order Conditioned fear stress was prevented by AP5	Gewirtz and Davis, 1997	Nature 388:471-474

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AP-5	NMDA antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats	12.5 nmol/0.3 µl	amygdala, 0	-	AP5 enhanced expression of Conditioned fear stress	Gewirtz and Davis, 1997	Nature 388:471-474
AP-5	NMDA antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day old)	7.5-60	ip, 30	+	The drug had muscle relaxant side effects	Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
AP-5	NMDA antagonist	Elevated plus-maze	Wistar rats (225-250g)	30-60	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
AP-5	NMDA antagonist	Social interaction	Wistar rats (225-250g)	30-60	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
AP-5	NMDA antagonist	Conditioned fear	C57BL/6NCrl mice (8-9-week-old)	1 µg/0,5 µl/side	dorsal hippocampus, 15	+	Mice were tested in the same context one month after the administration of an electric shock (1,5 mA/2 s)	Siegmund and Wotjak, 2007	Physiol. Behav. 90:103-107
AP-5	NMDA antagonist	Elevated plus-maze	Wistar rats (300-350g, 12-15-week-old)	3-6 nmol/0.3 µl	dorsal PAG, 10	+		Kincheski and Carobrez, 2009	Behav. Brain Res. 206:120-126.
AP-5	NMDA antagonist	Elevated plus-maze	Wistar rats (300-350g, 12-15-week-old)	3-6 nmol/0.3 µl	dorsal PAG, 10	+	Maze-experienced rats were used	Kincheski and Carobrez, 2009	Behav. Brain Res. 206:120-126.
AP-5	NMDA antagonist	Step-down inhibitory avoidance	Wistar rats (300-350g, 12-15-week-old)	3-6 nmol/0.3 µl	dorsal PAG, 10	+	Shocks of 0.4 mA/2 s were applied	Kincheski and Carobrez, 2009	Behav. Brain Res. 206:120-126.
AP-5	NMDA antagonist	Social interaction	Sprague-Dawley rats (300-350g)	10 pmol/100 nl	bed nucleus of the stria terminalis, 30	o		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
AP-7	NMDA antagonist	Vogel conflict test	Wistar rats (180-220g)	0.5 µg/5 µl	icv, 5	+	Electric shocks of 0.4 mA were applied	Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
AP-7	NMDA antagonist	Open-field	Wistar rats (180-220g)	2.5 µl/5 µl	icv, 5	+		Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
AP-7	NMDA antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	7-30	sc, 30 min to 8 h	+		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AP-7	NMDA antagonist	Conflict test	CRW Wistar rats (300-400g)	10-30	ip	+	Two alternating reinforcement schedules were used (VI30 and FR10)	Bennett and Amrick, 1986	Life Sci. 39:2455-2461
AP-7	NMDA antagonist	Elevated plus-maze	Wistar rats (250-300g)	2-20 nmol/0.5 µl	dorsal PAG, 5	+		Guimarães et al., 1991	Psychopharmacology 103:91-94
AP-7	NMDA antagonist	Elevated plus-maze	Wistar rats (225-250g)	20-40	ip, 30	o		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
AP-7	NMDA antagonist	Social interaction	Wistar rats (225-250g)	20-40	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
AP-7	NMDA antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	10-30	ip, 30	+		Anthony and Nevins, 1993	Eur. J. Pharmacol. 250:317-324
AP-7	NMDA antagonist	Elevated plus-maze	Wistar rats (200-250g)	2 nmol/0.5 µl	dorsal PAG, 10	+		Molchanov and Guimarães, 2002	Psychopharmacology 160:30-38
AP-7	NMDA antagonist	Elevated plus-maze	Wistar rats (200-250g)	2 nmol/0.5 µl	ventrolateral PAG, 10	+		Molchanov and Guimarães, 2002	Psychopharmacology 160:30-38
AP-7	NMDA antagonist	Elevated plus-maze	Wistar rats (200-250g)	2-20 nmol/0.25 µl	ventrolateral PAG, 10	+		Molchanov and Guimarães, 2002	Psychopharmacology 160:30-38
AP-7	NMDA antagonist	Vogel conflict test	Wistar rats (200-250g)	2 nmol/0.5 µl	dorsal PAG, 10	+	Shocks of 0.5 mA were applied	Molchanov and Guimarães, 2002	Psychopharmacology 160:30-38
AP-7	NMDA antagonist	Vogel conflict test	Wistar rats (200-250g)	2 nmol/0.5 µl	ventrolateral PAG, 10	+	Shocks of 0.5 mA were applied	Molchanov and Guimarães, 2002	Psychopharmacology 160:30-38
AP-7	NMDA antagonist	Vogel conflict test	Wistar rats (200-250g)	2 nmol/0.5 µl	ventrolateral PAG, 10	+	Shocks of 0.5 mA were applied	Molchanov and Guimarães, 2002	Psychopharmacology 160:30-38
AP-7	NMDA antagonist	Vogel conflict test	Wistar rats (200-250g)	2 nmol/0.25 µl	dorso medial hypothalamus, 10	o		Jardim and Guimarães, 2004	Pharmacol. Biochem. Behav. 79:541-546
AP-7	NMDA antagonist	Elevated plus-maze	Wistar rats (200-250g)	0.2 nmol/0.3 µl	dorso medial hypothalamus, 10	-	Effects may have been contaminated by sedation	Jardim et al., 2005	Pharmacol. Biochem. Behav. 82:182-189
AP-7	NMDA antagonist	Vogel conflict test	Wistar rats (200-250g)	2 nmol/0.3 µl	dorso medial hypothalamus, 10	+	Shocks of 0.5 mA/2 s were applied	Jardim et al., 2005	Pharmacol. Biochem. Behav. 82:182-189

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AP-7	NMDA antagonist	Vogel conflict test	Wistar rats (200-250g)	2 nmol/0.3 µl	lateral hypothalamus, 10	o	Shocks of 0.5 mA/2 s were applied	Jardim et al., 2005	Pharmacol. Biochem. Behav. 82:182-189
AP-7	NMDA antagonist	Free observation	Wistar rats (220-250g)	5 nmol/2 µl	icv, 10	+	Cat exposure. The drug increased the time rats remained close to the cat	Beijamini and Guimarães, 2006	Behav. Brain Res. 170:52-61
AP-7	NMDA antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	1 nmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio et al., 2006	Life Sci. 79:2238-2244
AP-7	NMDA antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	1 nmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio et al., 2006	Life Sci. 79:2238-2244
AP-7	NMDA antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	2-4 nmol/0,2 µl	dorsolateral PAG, 10	+	The drug impaired inhibitory avoidance	Bertoglio and Zangrossi, 2006	Behav. Pharmacol. 17:589-596
AP-7	NMDA antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	2-4 nmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio and Zangrossi, 2006	Behav. Pharmacol. 17:589-596
AP-7	NMDA antagonist	Light/dark test	Wistar rats (100-110g)	10 nmol/0.2 µl	dorsal PAG, 5	+	The drug reduced anxiogenic-like effects of diazepam withdrawal	Souza-Pinto et al., 2007	Pharmacol. Biochem. Behav. 87:250-257
AP-7	NMDA antagonist	Free observation	Wistar rats (220-240g)	2 nmol/0.2 µl	dorsal PAG, 10	+	Cat exposure	Aguiar et al., 2009	J. Neurosci. Res. 87:2418-2429
AP-7+CCK4 (0,08 nmol/0,2 µl)	NMDA antagonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	1 nmol/0,2 µl	dorsolateral PAG, 10	o	No interaction	Bertoglio et al., 2006	Life Sci. 79:2238-2244
AP-7+CCK4 (0,08 nmol/0,2 µl)	NMDA antagonist	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	1 nmol/0,2 µl	dorsolateral PAG, 10	-	No interaction	Bertoglio et al., 2006	Life Sci. 79:2238-2244
AP-7+glycine (200 mg/kg)	NMDA antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	10	sc, 30	+	No antagonism of the effects of AP-7	Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
AP-7+NMDA (1 mg/kg)	NMDA antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	10	sc, 30	(o)	Antagonism of the effects of AP-7	Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AP-7+SIN-1 (300 nmol)	NMDA antagonist	Flight behavior	Wistar rats (220-240g)	2 nmol/0.2 µl	dorsal PAG, 10	(o)	The drug blocked flight behavior induced by the nitric oxide donor SIN-1	Moreira et al., 2004	Psychopharmacology 171:199-203
APDC	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (350-450g)	3 µg/side	amygdala, 0	+		Walker et al., 2002	Behav. Neurosci. 116:1075-1083
APPES	mGluR2 potentiator	Fear-potentiated startle reflex	Sprague-Dawley rats (325-400g)	0.1	sc	+		Johnson et al., 2005	Psychopharmacology 179:271-283
Arcaine	NMDA receptor polyamine-binding site antagonist	Conditioned fear	Wistar rats (230-250g)	0.02 nmol/0.5 µl/side	amygdala	+	(1) The drug was administered before training on day 1; (2) Similar effects between context and tone	Rubin et al., 2004	J. Neurosci. 24:2328-2334
Arcaine	NMDA receptor polyamine-binding site antagonist	Conditioned fear	Wistar rats (230-250g)	0.002-0.02 nmol/0.5 µl/side	amygdala	+	(1) The drug was administered after training on day 1; (2) Similar effects between context and tone	Rubin et al., 2004	J. Neurosci. 24:2328-2334
Arcaine	NMDA receptor polyamine-binding site antagonist	Conditioned fear	Wistar rats (220-260g)	10	ip	+	(1) The drug was administered after training on day 1; (2) Similar effects between context and tone; (3) Shock of 0.6 mA/1 s	Camera et al., 2007	Psychopharmacology 192:457-464
Arcaine	NMDA receptor polyamine-binding site antagonist	Conditioned fear	Wistar rats (220-260g)	10	ip	+	(1) The drug was administered up to 180 min after training on day 1; (2) Similar effects between context and tone; (3) Shock of 0.6 mA/1 s	Camera et al., 2007	Psychopharmacology 192:457-464
ATPA	GluR5 agonist	Elevated plus-maze	C57BL/6 mice (6-10-week-old)	5-10	ip, 30	+		Wu et al., 2007	PLoS ONE 2:e167
ATPA	GluR5 agonist	Open-field	Sprague-Dawley rats (200-220g)	250 pmol/1 µl	basolateral amygdala, 0	-		Aroniadou-Anderjaska et al., 2012	Neuroscience 221:157-169

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AZ12216052	mGluR8 PAM	Elevated zero-maze	C57BL/6J mice (2-year-old)	10	ip, 120	+		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
AZ12216052	mGluR8 PAM	Elevated zero-maze	mGluR8 KO, C57BL/6J mice (2-year-old)	10	ip, 120	+		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
AZ12216052	mGluR8 PAM	Acoustic startle reflex	C57BL/6J mice (2-year-old)	10	ip, 120	+		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
AZ12216052	mGluR8 PAM	Acoustic startle reflex	mGluR8 KO, C57BL/6J mice (2-year-old)	10	ip, 120	+		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
AZ12216052	mGluR8 PAM	Social interaction	Female and male C57BL/6J mice (2-year-old)	10	ip, 120	o		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
AZ12216052	mGluR8 PAM	Elevated zero-maze	C57BL/6J mice (2-month-old)	10	ip, 30	+		Duvoisin et al., 2010	Behav. Brain Res. 212:168-173
AZ12216052	mGluR8 PAM	Acoustic startle reflex	C57BL/6J mice (2-month-old)	10	ip, 30	+		Duvoisin et al., 2010	Behav. Brain Res. 212:168-173
AZ12216052	mGluR8 PAM	Elevated zero-maze	$Apoe^{-/-}$ mice (2-month-old)	10	ip, 30	+		Duvoisin et al., 2010	Behav. Brain Res. 212:168-173
BINA	mGluR2 potentiator	Stress-induced hyperthermia	C57BL6/J (8-10-week-old)	32	ip, 60	+		Galici et al., 2006	J. Pharmacol. Exp. Ther. 318:173-185
BINA	mGluR2 potentiator	Elevated plus-maze	C57BL6/J (8-10-week-old)	10-32	ip, 60	+		Galici et al., 2006	J. Pharmacol. Exp. Ther. 318:173-185
BINA+LY341495 (3 mg/kg)	mGluR2 potentiator	Stress-induced hyperthermia	C57BL6/J (8-10-week-old)	32	ip, 60	(o)	Antagonism of the effects of BINA	Galici et al., 2006	J. Pharmacol. Exp. Ther. 318:173-185
BINA+LY341495 (3 mg/kg)	mGluR2 potentiator	Elevated plus-maze	C57BL6/J (8-10-week-old)	32	ip, 60	(o)	Antagonism of the effects of BINA	Galici et al., 2006	J. Pharmacol. Exp. Ther. 318:173-185
CBiPES	mGluR2 potentiator	Stress-induced hyperthermia	DBA/2 mice	100	sc, 0	+		Johnson et al., 2005	Psychopharmacology 179:271-283
CBiPES+sodium lactate	mGluR2 potentiator	Social interaction	Sprague-Dawley rats (300-350g)	30	ip, 30	+		Johnson et al., 2012	J. Psychopharmacol. doi: 10.1177/0269881112454230

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CGP 37849	NMDA antagonist	Vogel conflict test	Wistar rats (180-220g)	2.5	ip, 60	+	Electrick shocks of 0.4 mA were applied	Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61
CGP 37849	NMDA antagonist	Vogel conflict test	Wistar rats (180-220g)	2.5	ip, o.d. for 5 days	+	Electrick shocks of 0.4 mA were applied	Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61
CGP 37849	NMDA antagonist	Open-field	Wistar rats (180-220g)	2.5	ip, 60	o		Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61
CGP 37849	NMDA antagonist	Open-field	Wistar rats (180-220g)	2.5	ip, o.d. for 5 days	+		Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61
CGP 37849	NMDA antagonist	Vogel conflict test	Wistar rats (180-220g)	1-2.5	ip, 60	+	Electric shocks of 0.4 mA were applied	Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
CGP 37849	NMDA antagonist	Open-field	Wistar rats (180-220g)	0.01-1	ip, 60	+		Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
CGP 37849	NMDA antagonist	Elevated plus-maze	Swiss mice (25-30g)	0.625	ip, 30	+		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
CGP 37849+magnesium (10 mg/kg)	NMDA antagonist	Elevated plus-maze	Swiss mice (25-30g)	0.312	ip, 30	(+)		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
CGP 39551	NMDA antagonist	Vogel conflict test	Wistar rats (180-220g)	5-20	ip, 60	+	Electric shocks of 0.4 mA were applied	Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
CGP 39551	NMDA antagonist	Open-field	Wistar rats (180-220g)	0.1-5	ip, 60	o		Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
CGP 39551	NMDA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	3-10	ip, 120	+		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
CGS 19755	NMDA antagonist	Conflict test	White Carneau pigeons (500-600g)	0.63 and 2.5	im, 60	+	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CNQX	AMPA/kainate antagonist	Elevated plus-maze	Wistar rats (200-250g)	1-3 nmol/0.5 µl	dorsal PAG, 10	+		Matheus and Guimarães, 1997	Psychopharmacology 132:14-18
CNQX	AMPA/kainate antagonist	Stretched-attend posture	Female Wistar rats (200-250g)	2.5-5 nmol/0.4 µl/side	accumbens core, 0	o	The observation was made in a feeding test	da Cunha et al., 2008	Behav. Brain Res. 193:243-247
CNQX	AMPA/kainate antagonist	Stretched-attend posture	Female Wistar rats (200-250g)	5 nmol/0.4 µl/side	accumbens shell, 0	+	The observation was made in a feeding test	da Cunha et al., 2008	Behav. Brain Res. 193:243-247
CNQX	AMPA/kainate antagonist	Social interaction	Sprague-Dawley rats (300-350g)	250 pmol/100 nl	bed nucleus of the stria terminalis, 30	o		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
CNQX+glycine (10 nmol/0.5 µl)	AMPA/kainate antagonist	Elevated plus-maze	Wistar rats (200-250g)	1-3 nmol/0.5 µl	dorsal PAG, 10	+	No blockade of the anxiolytic-like effects of CNQX	Matheus and Guimarães, 1997	Psychopharmacology 132:14-18
Compound 16	mGluR5 antagonist	Fear-potentiated startle reflex	Rats	ED50=1	po, 60	+		Roppe et al., 2004	Bioorg. Med. Chem. Lett. 14:3993-3996
Compound 17b	mGluR5 negative allosteric modulator	Geller-Seifter conflict test	Rats	10-30		+		Sharma et al., 2009	J. Med. Chem. 52:4103-4106
Compound 26	mGluR5 NAM	Four-plate test	Mice	1-3	ip, 60	+		Gilbert et al., 2011	Bioorg. Med. Chem. Lett. 21:195-199
Compound 26	mGluR5 NAM	Four-plate test	Mice	30	po, 60	+		Gilbert et al., 2011	Bioorg. Med. Chem. Lett. 21:195-199
Compound 26	mGluR5 NAM	Stress-induced hyperthermia	Mice	3-10	ip, 60	+		Gilbert et al., 2011	Bioorg. Med. Chem. Lett. 21:195-199
Compound 26	mGluR5 NAM	Stress-induced hyperthermia	Mice	17.8	po, 60	+		Gilbert et al., 2011	Bioorg. Med. Chem. Lett. 21:195-199
Compound 42	mGluR5 antagonist	Stress-induced hyperthermia	NMRI mice	10-30	po, 60	+		Ceccarelli et al., 2007	Bioorg. Med. Chem. Lett. 17:1302-1306
Compound 47	mGluR5 antagonist	Fear-potentiated startle reflex	Rats	ED50=5.4	po, 60	+		Roppe et al., 2004	J. Med. Chem. 47:4645-4648
Compound 47	mGluR5 antagonist	Fear-potentiated startle reflex	Rats	10	ip, o.d. for 5 days	o	Tolerance to the anxiolytic-like effects developed	Roppe et al., 2004	J. Med. Chem. 47:4645-4648
Compound 9	mGluR5 antagonist	Fear-potentiated startle reflex	Rats	ED50=1	ip, 30	+		Cosford et al., 2003	J. Med. Chem. 46:204-206

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CPCCOEt	Group 1 mGluR antagonist	Vogel conflict test	Wistar rats (230-270g)	5-15 µg/1 µl	dorsal hippocampus, 10	+		Tatarczyńska et al., 2001	Psychopharmacology 158:94-99
CPCCOEt	mGluR1 antagonist	Vogel conflict test	Wistar rats (230-250g)	12.5 nmol/0.5 µl	basolateral amygdala, 10	o	Shocks of 0.5 mA were applied	Stachowicz et al., 2004	Eur. J. Pharmacol. 498:153-156
CPP	NMDA antagonist	Conflict test	White Carneau pigeons (500-600g)	2.5-5	im, 60	+	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
CPP	NMDA antagonist	Social interaction	Wistar rats (200-300g)	3-10	ip, 30	+		Corbett and Dunn, 1993	Neuropharmacology 32:461-466
CPP	NMDA antagonist	Elevated plus-maze	Wistar rats (200-250g)	3-10	ip, 30	+		Corbett and Dunn, 1993	Neuropharmacology 32:461-466
CPP	NMDA antagonist	Conflict test	Wistar rats (200-250g)	10	ip, 30	+	VI-30/FR-10 schedule was used	Corbett and Dunn, 1993	Neuropharmacology 32:461-466
CPP	NMDA antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	2.5	sc, 30	+		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
CPP	NMDA antagonist	Conflict test	Squirrel monkeys (*Saimiri sciureus*, 600-800g)	1-17	im, 60	o	A multiple schedule of reinforcement with 2 components was used	Mansbach et al., 1991	Pharmacol. Biochem. Behav. 39:977-981
CPP	NMDA antagonist	Elevated plus-maze	Wistar rats (225-250g)	1-2.5	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
CPP	NMDA antagonist	Social interaction	Wistar rats (225-250g)	5-10	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
CPP	NMDA antagonist	Fear-potentiated startle reflex	CD rats (250-450g)	3	ip, 30	+		Anthony and Nevins, 1993	Eur. J. Pharmacol. 250:317-324
CPP	NMDA antagonist	Conflict test	Wistar rats (300-350g)	10	ip, 30	+	VI-30/FR-5 schedule was used	Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
CPP	NMDA antagonist	Social interaction	Wistar rats (250-300g)	3-10	ip, 30	+		Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
CPP	NMDA antagonist	Elevated plus-maze	Wistar rats (200-250g)	3-10	ip, 30	+		Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
CPP	NMDA antagonist	Elevated plus-maze	Long Evans rats (166+.8g)	10	ip, 30	+	Rats were exposed to a cat 8-9 days prior to testing	Adamec et al., 2005	Physiol. Behav. 86:75-91

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CPP	NMDA antagonist	Holeboard	Long Evans rats (166+.8g)	10	ip, 30	o	Rats were exposed to a cat 8-9 days prior to testing	Adamec et al., 2005	Physiol. Behav. 86:75-91
CPP	NMDA antagonist	Acoustic startle reflex	Long Evans rats (166+.8g)	10	ip, 30	+	Rats were exposed to a cat 8-9 days prior to testing	Adamec et al., 2005	Physiol. Behav. 86:75-91
CPP	NMDA antagonist	Elevated plus-maze	Long Evans rats (166+.8g)	10	ip, 30	+	Rats were exposed to a cat 8-9 days prior to testing	Blundell et al., 2005	Physiol. Behav. 86:233-243
CPP	NMDA antagonist	Light/dark test	Long Evans rats (166+.8g)	10	ip, 30	+	Rats were exposed to a cat 8-9 days prior to testing	Blundell et al., 2005	Physiol. Behav. 86:233-243
CPP	NMDA antagonist	Social interaction	Long Evans rats (166+.8g)	0,1-10	ip, 30	o	Rats were exposed to a cat 8-9 days prior to testing	Blundell et al., 2005	Physiol. Behav. 86:233-243
CPP	NMDA antagonist	Social avoidance test	Long Evans rats (166+.8g)	0,1-10	ip, 30	o	Rats were exposed to a cat 8-9 days prior to testing	Blundell et al., 2005	Physiol. Behav. 86:233-243
CPP	NMDA antagonist	Acoustic startle reflex	Long Evans rats (166+.8g)	1-10	ip, 30	+	Rats were exposed to a cat 8-9 days prior to testing	Blundell et al., 2005	Physiol. Behav. 86:233-243
CPPG	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (200-250g)	7.5-75 nmol/0.5 µl/site	hippocampus, 20	o	The shock intensity was 0.5 mA	Pałucha et al., 2004	Neuropharmacology 46:151-159
CPPG	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (200-250g)	75 nmol/0.5 µl/site	basolateral amygdala, 20	+	The shock intensity was 0.5 mA	Stachowicz et al., 2006	Neuropharmacology 52:306-312
CPPG	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (230-270g)	75 nmol/0.5 µl/site	hippocampus, 10	o	The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
CPPG+ACPT-I (7,5 nmol/0,5 µl)	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (200-250g)	75 nmol/0.5 µl/site	basolateral amygdala, 20	(o)	(1) Antagonism of the effects of CPPG; (2) The shock intensity was 0.5 mA	Stachowicz et al., 2006	Neuropharmacology 52:306-312
CPPG+flumazenil (10 mg/kg)	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (200-250g)	75 nmol/0.5 µl/site	basolateral amygdala, 20	+	(1) No interaction; (2) The shock intensity was 0.5 mA	Stachowicz et al., 2006	Neuropharmacology 52:306-312
CPPG+metergoline (2 mg/kg)	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (200-250g)	75 nmol/0.5 µl/site	basolateral amygdala, 20	(o)	(1) Antagonism of the effects of CPPG; (2) The shock intensity	Stachowicz et al., 2006	Neuropharmacology 52:306-312

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							was 0.5 mA		
CPPG+ritanserin (0,5 mg/kg)	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (200-250g)	75 nmol/0.5 µl/site	basolateral amygdala, 20	(o)	(1) Antagonism of the effects of CPPG; (2) The shock intensity was 0.5 mA	Stachowicz et al., 2006	Neuropharmacology 52:306-312
CTEP	mGluR5 inhibitor	Stress-induced hyperthermia	NMRI mice (25g)	0.1-0.3	po, 60	+		Lindemann et al., 2011	J. Pharmacol. Exp. Ther. 339:474-486
CTEP	mGluR5 inhibitor	Vogel conflict test	Sprague-Dawley rats (180-210g)	0.3-1	po, 60	+	Shocks of 0.5 mA/250 ms were applied	Lindemann et al., 2011	J. Pharmacol. Exp. Ther. 339:474-486
CX546	AMPA potentiator	Stress-induced hyperthermia	ICR mice (25-34g)	3-30	sc, 60	o		Iijima et al., 2007	Psychopharmacology 190:233-239
DCPG	mGluR8 agonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	30-60	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
DCPG	mGluR8 agonist	Elevated zero-maze	C57BL/6J mice (2-month-old)	3	ip, 30	+		Duvoisin et al., 2010	Behav. Brain Res. 212:168-173
DCPG	mGluR8 agonist	Acoustic startle reflex	C57BL/6J mice (2-month-old)	3-30	ip, 30	o		Duvoisin et al., 2010	Behav. Brain Res. 212:168-173
DCPG	mGluR8 agonist	Elevated zero-maze	Apoe$^{-/-}$ mice (2-month-old)	10-30	ip, 30	+		Duvoisin et al., 2010	Behav. Brain Res. 212:168-173
DCPG	mGluR8 agonist	Acoustic startle reflex	Apoe$^{-/-}$ mice (2-month-old)	3-30	ip, 30	o		Duvoisin et al., 2010	Behav. Brain Res. 212:168-173
D-Cycloserine	NMDA glycine-B partial agonist	Fear-potentiated startle reflex	CD rats (250-450g)	30-300	ip, 30	+		Anthony and Nevins, 1993	Eur. J. Pharmacol. 250:317-324
D-Cycloserine	NMDA glycine-B partial agonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	10-300	ip, 30	+		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
D-Cycloserine	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (242-248g)	10-30	ip, 30	-	Animals were selected for the low plus-maze anxiety scores the day before	Ho et al., 2005	Brain Res. 1043:179-185
D-Cycloserine	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (242-248g)	5-30	ip, 30	o	Animals were selected for the high plus-maze anxiety scores the day	Ho et al., 2005	Brain Res. 1043:179-185

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							before		
D-Cycloserine	NMDA glycine-B partial agonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	3-30	ip, 60	o	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	Sprague-Dawley rats (300-350g)	15	po, for 6 days, o.d.	+	(1) The drug reduced the expression of Conditioned fear stress extinction, an effect lasting up to 12 days; (2) Shocks of 0.8 mA/4 s were applied	Yamamoto et al., 2008	Neuropsychopharmacology 33:2108-2116
D-Cycloserine	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (242±4g)	30	ip, 30	-	Experiment was performed in maze-experienced rats with low open arm time during the first trial	Wu et al., 2007	Behav. Brain Res. 187:246-253
D-Cycloserine	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (242±4g)	30	ip, 30	o	Experiment was performed in maze-experienced rats with high open arm time during the first trial	Wu et al., 2007	Behav. Brain Res. 187:246-253
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	Sprague-Dawley rats (250g)	30	ip, following fear conditiong on Day 1	+	(1) The drug reduced freezing during extinction session 1; (2) Shocks of 0.75 mA/0.5 s were applied during conditioning; (3) Rats were REM sleep-deprived	Silvestri and Root, 2008	Physiol. Behav. 93:274-281
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	Sprague-Dawley rats (250g)	30	ip, prior to extinction session on Day 2	+	(1) The drug reduced freezing during extinction session 1; (2) Shocks of 0.75 mA/0.5 s were applied during conditioning; (3) Rats were REM sleep-deprived	Silvestri and Root, 2008	Physiol. Behav. 93:274-281

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	Sprague-Dawley rats (35-day-old)	15	sc, 10	+	The drug improved extinction retention when it was given after extinction training	McCallum et al., 2010	Neuropsychopharmacology 35:2134-2142
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	Sprague-Dawley rats (35-day-old)	15	sc, 180	+	The drug improved extinction retention when it was given after extinction training	McCallum et al., 2010	Neuropsychopharmacology 35:2134-2142
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	Sprague-Dawley rats (35-day-old)	5-15	sc, 10	+	Extinction 30 pairings	McCallum et al., 2010	Neuropsychopharmacology 35:2134-2142
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	C57BL/6J mice (10-12-week-old)	30	ip, 30	-	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before re-exposure	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	C57BL/6J mice (10-12-week-old)	0.2 µl/side	amygdala, 15	-	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before re-exposure	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	C57BL/6J mice (10-12-week-old)	30	ip, 30	+	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before extinction training 1	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	C57BL/6J mice (10-12-week-old)	30	ip, 30	o	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before extinction training 2	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	129S1/SvImJ (8-week-old)	5-30	ip, 30	o	Shocks of 0.6 mA/2 s were delivered	Hefner et al., 2008	J. Neurosci. 28:8074-8085
D-Cycloserine	NMDA glycine-B partial agonist	Elevated plus-maze	Swiss mice (25-30g)	5	ip, 30	+		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
D-Cycloserine	NMDA glycine-B partial agonist	Signal attenuation model of OCD	Sprague-Dawley rats (3-4-month-old)	15	ip, 30	+		Albelda et al., 2010	Psychopharmacology 210:13-24

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	Wistar rats (180-200g)	15	ip, 30	+	(1) Shocks of 0.7 mA/1 s were applied; (2) The drug inhibited expression of CFS	Lehner et al., 2010	Neurobiol. Learn. Mem. 94:468-480
D-Cycloserine	NMDA glycine-B partial agonist	Conditioned fear	129S1/SvImJ (3-5-month-old)	15	po, 0	+	(1) Drug was given immediately after extinction training; (2) Shocks of 0.5 mA/1 s were applied	Whittle et al., 2013	Neuropharmacology 64:414-423
D-Cycloserine+magnesium (10 mg/kg)	NMDA glycine-B partial agonist	Elevated plus-maze	Swiss mice (25-30g)	2.5	ip, 30	(+)		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
D-Cycloserine+propranolol (10 mg/kg)	NMDA glycine-B partial agonist	Conditioned fear	C57BL/6J mice (10-12-week-old)	30	ip, 30	(o)	(1) Footshocks of 0.8 mA/2 s were applied; (2) DCS was given before re-exposure	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
Dextromethorphan	NMDA NR2A antagonist	Elevated plus-maze	C57BL/6 mice (23.95-24.83g)	10-30	ip, 30	+/-	Anxiolytic-like at 10, anxiogenic-like at 30 mg/kg	Dere et al., 2003	Behav. Pharmacol. 14:245-249
DHPG	Group 1 mGluR agonist	Elevated plus-maze	Sprague-Dawley rats (220-280g)	0,1-1 µM/0.5 µl/side	basolateral amygdala, 5	o		De Jesus-Burgos et al., 2012	Pharmacol. Biochem. Behav. 101:369-378
DHPG	Group 1 mGluR agonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (220-280g)	1 µM/0.5 µl/side	basolateral amygdala, 5	+	Rats received estradiol replacement	De Jesus-Burgos et al., 2012	Pharmacol. Biochem. Behav. 101:369-378
DHPG	Group 1 mGluR agonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (220-280g)	0,1-1 µM/0.5 µl/side	basolateral amygdala, 5	o		De Jesus-Burgos et al., 2012	Pharmacol. Biochem. Behav. 101:369-378
DHPG+AIDA (50 µM/0.5µl/side)	Group 1 mGluR agonist	Elevated plus-maze	Ovariectomized female Sprague-Dawley rats (220-280g)	0,1µM	basolateral amygdala, 5	(o)	Rats received estradiol replacement	De Jesus-Burgos et al., 2012	Pharmacol. Biochem. Behav. 101:369-378
DNQX	AMPA/kainate antagonist	Stretched-attend posture	Female Wistar rats (200-250g)	330-660 nmol/0.4 µl/side	accumbens core, 0	o		da Cunha et al., 2008	Behav. Brain Res. 188:91-99

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
DNQX	AMPA/kainate antagonist	Stretched-attend posture	Female Wistar rats (200-250g)	330-660 nmol/0.4 µl/side	accumbens shell, 0	+		da Cunha et al., 2008	Behav. Brain Res. 188:91-99
DNQX	AMPA/kainate antagonist	Stretched-attend posture	Female Wistar rats (200-250g)	330-660 nmol/0.4 µl/side	accumbens core, 24 h	-	Testing was performed in maze-experienced animals	da Cunha et al., 2008	Behav. Brain Res. 188:91-99
DNQX	AMPA/kainate antagonist	Stretched-attend posture	Female Wistar rats (200-250g)	330-660 nmol/0.4 µl/side	accumbens shell, 24 h	-		da Cunha et al., 2008	Behav. Brain Res. 188:91-99
DNQX	AMPA/kainate antagonist	Social interaction	Sprague-Dawley rats (300-350g)	250 pmol/100 nl	bed nucleus of the stria terminalis, 30	o		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
D-Serine	NMDA glycine-B agonist	Elevated plus-maze	Rats	160 nmol/0.3 µl	caudal dorsal PAG, 10	-		Carobrez et al., 2001	Neurosci. Biobehav. Rev. 25:697-709
D-Serine	NMDA glycine-B agonist	Elevated plus-maze	Rats	160 nmol/0.3 µl	rostrodorsal PAG, 10	o		Carobrez et al., 2001	Neurosci. Biobehav. Rev. 25:697-709
D-Serine	Endogenous glycine-B agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (4-month-old, 260-320g)	320 nmol/0.3 µl	dorsal PAG, 10	+	The drug impaired inhibitory avoidance	Santos et al., 2006	Neuropharmacology 51:203-212
D-serine	Endogenous glycine-B agonist	Elevated plus-maze	C57BL/6J (8-12-week-old)	600	ip, 20	-		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
D-serine	Endogenous glycine-B agonist	Open-field	C57BL/6J (8-12-week-old)	600	ip, 20	o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
D-serine	Endogenous glycine-B agonist	Novel object	C57BL/6J (8-12-week-old)	600	ip, 20	o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
D-serine	Endogenous glycine-B agonist	Elevated plus-maze	Swiss mice (25-30g)	100	ip, 30	o		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
D-serine+magnesium (20 mg/kg)	Endogenous glycine-B agonist	Elevated plus-maze	Swiss mice (25-30g)	100	ip, 30	(o)	Blockade of the anxiolytic-like effects of magnesium	Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
EGIS-10608	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.01-1	po, 60	+		Kapus et al., 2008	Psychopharmacology 198:231-241

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
EGIS-10608	AMPA antagonist	Light/dark test	NMRI mice (33g)	1-10	ip, 30	o		Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-10608	AMPA antagonist	Vogel conflict test	Wistar rats (220-280g)	2.5	ip, 30	+	Shocks of 0,6 mA/600 ms were applied	Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-10608+mCPP (0.5 mg/kg)	AMPA antagonist	Light/dark test	Wistar rats (180-220g)	0.3-3	ip, 20	-	The drug did not reverse anxiogenic-like effects of mCPP	Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-8332	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.1-1	po, 60	+		Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-8332	AMPA antagonist	Light/dark test	NMRI mice (33g)	10	ip, 30	+		Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-8332	AMPA antagonist	Vogel conflict test	Wistar rats (220-280g)	2.5-10	ip, 30	o	Shocks of 0,6 mA/600 ms were applied	Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-8332+mCPP (0.5 mg/kg)	AMPA antagonist	Light/dark test	Wistar rats (180-220g)	1-10	ip, 20	-	The drug did not reverse anxiogenic-like effects of mCPP	Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-9637	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.1-1	po, 60	+		Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-9637	AMPA antagonist	Light/dark test	NMRI mice (33g)	0.3-3	ip, 30	o		Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-9637	AMPA antagonist	Vogel conflict test	Wistar rats (220-280g)	10	ip, 30	+	Shocks of 0,6 mA/600 ms were applied	Kapus et al., 2008	Psychopharmacology 198:231-241
EGIS-9637+mCPP (0.5 mg/kg)	AMPA antagonist	Light/dark test	Wistar rats (180-220g)	3	ip, 20	(o)	The drug reversed anxiogenic-like effects of mCPP	Kapus et al., 2008	Psychopharmacology 198:231-241
EGLU	mGluR antagonist	Dark/light preference tank test	Zebrafish (*D. rerio*)	0.00054-0.01	immersion, 0	-		Del Valle-Mojica and Ortiz, 2012	Planta Med. Doi:10.1055/s-0032-1315240
EGLU+valerenic acid	mGluR antagonist	Dark/light preference tank test	Zebrafish (*D. rerio*)	0.00054-0.01	immersion, 0	(o)	Antagonism of the effects of valerenic acid	Del Valle-Mojica and Ortiz, 2012	Planta Med. Doi:10.1055/s-0032-1315240
EMQMCM	mGluR1 antagonist	Elevated plus-maze	Sprague-Dawley rats (240-280g)	0.6-5	ip, 30	o		Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34
EMQMCM	mGluR1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats	5	ip, 30	+		Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			(240-280g)						
EMQMCM	mGluR1 antagonist	Conditioned fear	Wistar rats (12-week-old)	0.6-5	ip, 15	+	Shocks of 0.8 mA/1s were applied	Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34
EMQMCM	mGluR1 antagonist	Geller-Seifter conflict test	Wistar rats (350-400g)	0.3-3	ip, 30	o	FR20 (food only), FR20 (food and shock) was used	Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34
EMQMCM	mGluR1 antagonist	Elevated plus-maze	Wistar rats (200-250g)	5	ip, 30	+		Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
EMQMCM	mGluR1 antagonist	Elevated plus-maze	Wistar rats (200-250g)	2.5-5	ip, 30	+	Anxiety was increased by withdrawal from ethanol	Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
Fenobam	Noncompetitive mGluR5 antagonist	Vogel conflict test	Sprague-Dawley rats (about 200g)	30	po, 60	+	Shocks of 0.5 mA/250 ms were applied	Porter et al., 2005	J. Pharmacol. Exp. Ther. 315:711-721
Fenobam	Noncompetitive mGluR5 antagonist	Stress-induced hyperthermia	NMRI mice	10-30	po, 60	+		Porter et al., 2005	J. Pharmacol. Exp. Ther. 315:711-721
Fenobam	Noncompetitive mGluR5 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (about 200g)	10-100	po, 60	+	(1) FR10 was used; (2) Shocks of 0.6 mA/0.5 s were applied	Porter et al., 2005	J. Pharmacol. Exp. Ther. 315:711-721
Fenobam	Noncompetitive mGluR5 antagonist	Conditioned emotional response	Sprague-Dawley rats (about 200g)	10-30	po, 60	+		Porter et al., 2005	J. Pharmacol. Exp. Ther. 315:711-721
Fenobam	Noncompetitive mGluR5 antagonist	Elevated plus-maze	Sprague-Dawley rats (240-280g)	0.1-30	po, 60	o		Jacob et al., 2009	Neuropharmacology 57:97-108
Fenobam	Noncompetitive mGluR5 antagonist	Conditioned fear	Sprague-Dawley rats (240-280g)	30	po, 60	+	Footshocks of 0.45 mA/1 s were applied	Jacob et al., 2009	Neuropharmacology 57:97-108
Fenobam	Noncompetitive mGluR5 antagonist	Passive-avoidance	Sprague-Dawley rats (240-280g)	10-30	po, 60	+	Footshocks of 1 mA/1 s were applied	Jacob et al., 2009	Neuropharmacology 57:97-108
Fenobam	Noncompetitive mGluR5 antagonist	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	10	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
FTIDC	mGluR1 allosteric antagonist	Elevated plus-maze	C57BL/6J mice	10-30	ip, 30	o		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
FTIDC	mGluR1 allosteric antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups	3-30	ip, 30	+		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
FTIDC	mGluR1 allosteric antagonist	Stress-induced hyperthermia	ICR mice	30	ip, 60	+		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
GDEE	Non-selective glutamate antagonist	Elevated plus-maze	Wistar rats (200-250g)	160 nmol/0.5 µl	dorsal PAG, 10	+		Matheus and Guimarães, 1997	Psychopharmacology 132:14-18
GDEE	Non-selective glutamate antagonist	Light/dark test	Wistar rats (100-110g)	160 nmol/0.2 µl	dorsal PAG, 10	+	The drug reduced anxiogenic-like effects of diazepam withdrawal	Souza-Pinto et al., 2007	Pharmacol. Biochem. Behav. 87:250-257
Glutamate	Endogenous ligand	Elevated plus-maze	Rats	20 nmol/0.3 µl	caudal dorsal PAG, 10	-		Carobrez et al., 2001	Neurosci. Biobehav. Rev. 25:697-709
Glutamate	Endogenous ligand	Elevated plus-maze	Rats	20 nmol/0.3 µl	rostrodorsal PAG, 10	o		Carobrez et al., 2001	Neurosci. Biobehav. Rev. 25:697-709
Glutamate	Endogenous ligand	Defensive behaviors	Wistar rats (240-270g)	5 nmol/0.2 µl	dorsal PAG, 0	-	The drug produced freezing or flight accompanied by an increase in BP	Krieger and Graeff, 1985	Braz. J. Med. Biol. Res. 18:61-67
Glycine	Endogenous ligand	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	50-200	sc, 30	o		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
Glycine	Endogenous ligand	Elevated plus-maze	Rats	120 nmol/0.3 µl	caudal dorsal PAG, 10	-		Carobrez et al., 2001	Neurosci. Biobehav. Rev. 25:697-709
Glycine	Endogenous ligand	Elevated plus-maze	Rats	120 nmol/0.3 µl	rostrodorsal PAG, 10	o		Carobrez et al., 2001	Neurosci. Biobehav. Rev. 25:697-709
Glycine	Endogenous ligand	Elevated plus-maze	Wistar rats (300-400g)	80-240 nmol/0.3 µl	rostrodorsal PAG, 5	o		Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203
Glycine	Endogenous ligand	Elevated plus-maze	Wistar rats (300-400g)	80-240 nmol/0.3 µl	intermediate dorsal PAG, 5	+		Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203
Glycine	Endogenous ligand	Elevated plus-maze	Wistar rats (300-400g)	80-240 nmol/0.3 µl	caudal dorsal PAG, 5	-		Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Glycine	Endogenous ligand	Elevated plus-maze	Wistar rats (200-250g)	10 nmol/0.5 µl	dorsal PAG, 10	o		Matheus and Guimarães, 1997	Psychopharmacology 132:14-18
Glycine	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (4-month-old, 260-320g)	1, 10 and 120 nmol/0.3 µl	dorsal PAG, 10	+	The drug impaired inhibitory avoidance	Santos et al., 2006	Neuropharmacology 51:203-212
Glycine	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (4-month-old, 260-320g)	1, 10 and 120 nmol/0.3 µl	superior colliculus, 10	+	The drug impaired inhibitory avoidance	Santos et al., 2006	Neuropharmacology 51:203-212
Glycine	Endogenous ligand	Elevated plus-maze	Swiss mice (10-12-week-old)	750-1250	ip, 30	-		Dolu, 2007	J. Basic Clin. Physiol. Pharmacol. 18:141-147
Glycine+7-chlorokynurenic acid (8 nmol/0.3 µl)	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (4-month-old, 260-320g)	120 nmol/0.3 µl	dorsal PAG, 10	(o)	Antagonism of the anxiolytic-like effects of glycine	Santos et al., 2006	Neuropharmacology 51:203-212
GRN-529	mGluR5 NAM	Stress-induced hyperthermia	C57BL/6 (17-22g)	0.6	po, 60	+		Hughes et al., 2013	Neuropharmacology 66:202-214
GRN-529	mGluR5 NAM	Four-plate test	Swiss Webster mice (17-22g)	0.3-1	po, 60	+		Hughes et al., 2013	Neuropharmacology 66:202-214
GRN-529	mGluR5 NAM	Stress-induced hyperthermia	C57BL/6 (17-22g)	1-3	po, for 7 days	+		Hughes et al., 2013	Neuropharmacology 66:202-214
GYKI 52466	Non-competitive AMPA antagonist	Elevated plus-maze	Rats	MED=0.003		+		Kapus et al., 2003	Eur. Neuropsychopharmacology 13 (Suppl. 4):S362
GYKI 52466	Non-competitive AMPA antagonist	Light/dark test	Mice	MED=0.3		+		Kapus et al., 2003	Eur. Neuropsychopharmacology 13 (Suppl. 4):S362
GYKI 52466	Non-competitive AMPA antagonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	10-20	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
GYKI 52466	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.01-0.03	po, 60	+		Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 52466	AMPA antagonist	Light/dark test	NMRI mice (33g)	0.3-3	ip, 30	o		Kapus et al., 2008	Psychopharmacology 198:231-241

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
GYKI 52466	AMPA antagonist	Vogel conflict test	Wistar rats (220-280g)	2.5-10	ip, 30	o	Shocks of 0,6 mA/600 ms were applied	Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 52466	AMPA antagonist	Conditioned fear	Wistar rats (200-300g)	10	ip, for 5 days	+	Shocks of 0.8 mA/10 ms were applied	Jain and Zelena, 2011	Endocr. Regul. 45:13-21
GYKI 52466	AMPA antagonist	Conditioned fear	Female Wistar rats (200-300g)	10	ip, for 5 days	+	Shocks of 0.8 mA/10 ms were applied	Jain and Zelena, 2011	Endocr. Regul. 45:13-21
GYKI 52466+mCPP	Non-competitive AMPA antagonist	Light/dark test	Mice	MED=3		(o)	Blockade of the anxiogenic-like effects of mCPP	Kapus et al., 2003	Eur. Neuropsychopharmacology 13 (Suppl. 4):S362
GYKI 52466+mCPP (0.5 mg/kg)	AMPA antagonist	Light/dark test	Wistar rats (180-220g)	3	ip, 20	(o)	The drug reversed anxiogenic-like effects of mCPP	Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53405	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	3	po, 60	+		Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53405	AMPA antagonist	Light/dark test	NMRI mice (33g)	0.3-3	ip, 30	o		Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53405	AMPA antagonist	Vogel conflict test	Wistar rats (220-280g)	2.5-10	ip, 30	o	Shocks of 0,6 mA/600 ms were applied	Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53405+mCPP (0.5 mg/kg)	AMPA antagonist	Light/dark test	Wistar rats (180-220g)	3	ip, 20	(o)	The drug reversed anxiogenic-like effects of mCPP	Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53655	AMPA antagonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	3-60	ip, 30	o	Electric shocks of 0.5 mA/100 ms were applied	Alt et al., 2007	Neuropharmacology 52:1482-1487
GYKI 53655	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1-3	po, 60	+		Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53655	AMPA antagonist	Light/dark test	NMRI mice (33g)	0.3-3	ip, 30	o		Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53655	AMPA antagonist	Vogel conflict test	Wistar rats (220-280g)	2.5-10	ip, 30	o	Shocks of 0,6 mA/600 ms were applied	Kapus et al., 2008	Psychopharmacology 198:231-241
GYKI 53655+mCPP (0.5 mg/kg)	AMPA antagonist	Light/dark test	Wistar rats (180-220g)	3	ip, 20	(o)	The drug reversed anxiogenic-like effects of mCPP	Kapus et al., 2008	Psychopharmacology 198:231-241
HA-966	NMDA glycine-B	Elevated plus-maze	Wistar rats (250-300g)	3	ip, 30	+		Bertoglio et al., 2003	Psychopharmacology 170:335-342

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	partial agonist								
HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (250-300g)	1.5-3	ip, 30	o	Maze-experienced rats were used	Bertoglio et al., 2003	Psychopharmacology 170:335-342
HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (200-250g)	3-10	ip, 30	+		Dunn et al., 1992	Eur. J. Pharmacol. 214:207-214
HA-966	NMDA glycine-B partial agonist	Social interaction	Wistar rats (250-300g)	3-10	ip, 30	+		Dunn et al., 1992	Eur. J. Pharmacol. 214:207-214
HA-966	NMDA glycine-B partial agonist	Conflict test	Wistar rats (300-350g)	30-52	ip, 30	+	VI-30/FR-10 schedule was used	Dunn et al., 1992	Eur. J. Pharmacol. 214:207-214
HA-966	NMDA glycine-B partial agonist	Fear-potentiated startle reflex	CD rats (250-450g)	10-30	ip, 30	+		Anthony and Nevins, 1993	Eur. J. Pharmacol. 250:317-324
HA-966	NMDA glycine-B partial agonist	Conflict test	Wistar rats (300-350g)	1-3	ip, 30	+	VI-30/FR-5 schedule was used	Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
HA-966	NMDA glycine-B partial agonist	Social interaction	Wistar rats (250-300g)	3-10	ip, 30	+		Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (200-250g)	3-10	ip, 30	+		Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (300-400g)	30-100 nmol/0.3 µl	rostrodorsal PAG, 5	+		Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203
HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (300-400g)	30-100 nmol/0.3 µl	intermediate dorsal PAG, 5	+		Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203
HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (300-400g)	30-100 nmol/0.3 µl	caudal dorsal PAG, 5	+		Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203
HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1-10	ip, 30	+		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
HA-966+glycine (120 nmol/0.3 µl)	NMDA glycine-B	Elevated plus-maze	Wistar rats (300-400g)	30-100 nmol/0.3 µl	rostrodorsal PAG, 5	(o)	The anxiolytic-like effects of HA966 were	Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
	partial agonist						blocked by glycine		
HA-966+glycine (120 nmol/0.3 µl)	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (300-400g)	30-100 nmol/0.3 µl	intermediate dorsal PAG, 5	+	No interaction	Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203
HA-966+glycine (120 nmol/0.3 µl)	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (300-400g)	30-100 nmol/0.3 µl	caudal dorsal PAG, 5	(+)	HA966 blocked the anxiogenic-like effects of glycine	Teixeira and Carobrez, 1999	Behav. Neurosci. 113:196-203
HomoAMPA	mGluR6 agonist	Vogel conflict test	Wistar rats (200-250g)	125-500 nmol/0.5 µl/site	hippocampus, 10	+	The shock intensity was 0.5 mA	Pałucha et al., 2004	Neuropharmacology 46:151-159
HomoAMPA+CPPG (75 nmol/rat)	mGluR6 agonist	Vogel conflict test	Wistar rats (200-250g)	250 nmol/0.5 µl/site	hippocampus, 10	(o)	(1) Blockade of the anxiolytic-like effects; (2) The shock intensity was 0.5 mA	Pałucha et al., 2004	Neuropharmacology 46:151-159
Ifenprodil	NMDA NR2B antagonist	Conflict test	White Carneau pigeons (500-600g)	5-20	im, 5	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
Ifenprodil	NMDA NR2B antagonist	Elevated plus-maze	C57BL/6 mice (23.95-24.83g)	1-5	ip, 30	o		Dere et al., 2003	Behav. Pharmacol. 14:245-249
Ifenprodil	NMDA NR2B antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	6	sc, 30	+		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
Ifenprodil	NMDA NR2B antagonist	Elevated plus-maze	MF1 mice (25-30g)	0.0195	ip, 30	+		Fraser et al., 1996	Eur. Neuropsychopharmacology 6:311-316
Ifenprodil	NMDA NR2B antagonist	Social interaction	Sprague-Dawley rats (160-180g)	2.5-10	ip, 30	o	The drug did not reverse anxiogenic-like effects of ethanol withdrawal	Knapp et al., 2004	Alcohol 32:101-111
Ifenprodil	NMDA NR2B antagonist	Elevated plus-maze	Sprague-Dawley rats (160-180g)	5	ip, 30	o	The drug did not reverse anxiogenic-like effects of ethanol withdrawal	Knapp et al., 2004	Alcohol 32:101-111
Ifenprodil	NMDA NR2B antagonist	Elevated plus-maze	Wistar rats (300-350g, 12-15-week-old)	0.5-1 nmol/0.3 µl	dorsal PAG, 10	+		Kincheski and Carobrez, 2009	Behav. Brain Res. 206:120-126.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ifenprodil	NMDA NR2B antagonist	Elevated plus-maze	Wistar rats (300-350g, 12-15-week-old)	0.5-1 nmol/0.3 µl	dorsal PAG, 10	+	Maze-experienced rats were used	Kincheski and Carobrez, 2009	Behav. Brain Res. 206:120-126.
Ifenprodil	NMDA NR2B antagonist	Step-down inhibitory avoidance	Wistar rats (300-350g, 12-15-week-old)	1 nmol/0.3 µl	dorsal PAG, 10	+	Shocks of 0.4 mA/2 s were applied	Kincheski and Carobrez, 2009	Behav. Brain Res. 206:120-126.
Ifenprodil+CPA (0.05 mg/kg)	NMDA NR2B antagonist	Elevated plus-maze	MF1 mice (25-30g)	0.0195	ip, 30	(o)	Antagonism of the anxiolytic-like effects of ifenprodil	Fraser et al., 1996	Eur. Neuropsychopharmacology 6:311-316
Ifenprodil+CPX (0.05 mg/kg)	NMDA NR2B antagonist	Elevated plus-maze	MF1 mice (25-30g)	0.0195	ip, 30	(o)	Antagonism of the anxiolytic-like effects of ifenprodil	Fraser et al., 1996	Eur. Neuropsychopharmacology 6:311-316
Ifenprodil+CPX (0.05 mg/kg)+CPA (0.05 mg/kg)	NMDA NR2B antagonist	Elevated plus-maze	MF1 mice (25-30g)	0.0195	ip, 30	+	No interaction	Fraser et al., 1996	Eur. Neuropsychopharmacology 6:311-316
Ifenprodil+MK801 (0.1 mg/kg)	NMDA NR2B antagonist	Elevated plus-maze	MF1 mice (25-30g)	0.0195	ip, 30	(o)	The combination led to a loss of the anxiolytic-like effects of both compounds	Fraser et al., 1996	Eur. Neuropsychopharmacology 6:311-316
JNJ16259685	$mGluR_1$ antagonist	Vogel conflict test	Wistar rats (250-300g)	2.5-10	ip, 30	+	Shocks of 0.5 mA/500 ms were applied	Steckler et al., 2005	Psychopharmacology 179:198-206
JNJ16259685	$mGluR_1$ antagonist	Elevated plus-maze	Sprague-Dawley rats (212-288g)	2.5-10	ip, 30	o		Steckler et al., 2005	Psychopharmacology 179:198-206
JNJ16259685	$mGluR_1$ antagonist	Vogel conflict test	Wistar rats (250-300g)	5	ip, b.i.d. for 14 days	+	Shocks of 0.5 mA/500 ms were applied	Steckler et al., 2005	Psychopharmacology 179:198-206
JNJ16259685+MPEP (1 mg/kg)	$mGluR_1$ antagonist	Vogel conflict test	Wistar rats (250-300g)	0.63-1	ip, 30	+	(1) Additive effects; (2) Shocks of 0.5 mA/500 ms were applied	Steckler et al., 2005	Psychopharmacology 179:198-206
Kainic acid	Glutamate agonist	Escape behavior in the elevated T-maze	Wistar rats (220-250g)	60 pmol/0.2 µl	dorsal PAG, 10	o		Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321
Kainic acid	Glutamate agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (220-250g)	60 pmol/0.2 µl	dorsal PAG, 10	o		Pobbe and Zangrossi, 2005	Psychopharmacology 183:314-321

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Kainic acid	Glutamate agonist	Escape behavior in the elevated T-maze	Wistar rats (200-220g)	0,03 nmol/0.2 µl	median raphe nucleus, 10	+	The drug increased escape latency, but also affected locomotion	Dos Santos et al., 2008	Eur. Neuropsychopharmacology 18:286-294
Kainic acid	Glutamate agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-220g)	0,03 nmol/0.2 µl	median raphe nucleus, 10	-	The drug facilitated inhibitory avoidance, but also affected locomotion	Dos Santos et al., 2008	Eur. Neuropsychopharmacology 18:286-294
Kainic acid	Glutamate agonist	Elevated T-maze	Wistar rats (220-250g)	60 pmol	lateral habenula	-		Pobbe et al., 2010	Neuroscience 479:87-91
Kainic acid+WAY 100635 (0,37 nmol in DH)	Glutamate agonist	Escape behavior in the elevated T-maze	Wistar rats (200-220g)	0,03 nmol/0.2 µl	median raphe nucleus, 10	+	(1) No interesction; (2) The drug increased escape latency, but also affected locomotion	Dos Santos et al., 2008	Eur. Neuropsychopharmacology 18:286-294
Kainic acid+WAY 100635 (0,37 nmol in DH)	Glutamate agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (200-220g)	0,03 nmol/0.2 µl	median raphe nucleus, 10	-	(1) No interaction; (2) The drug facilitated inhibitory avoidance, but also affected locomotion	Dos Santos et al., 2008	Eur. Neuropsychopharmacology 18:286-294
Ketamine	NMDA channel blocker	Conflict test	White Carneau pigeons (500-600g)	1.25-10	im, 5	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
Ketamine	NMDA channel blocker	Holeboard	Wistar rats (377-453g)	7	ip, 30	o		Silvestre et al., 1997	Depress. Anxiety 5:29-33
Ketamine	NMDA channel blocker	Social interaction	Wistar rats (377-453g)	7	ip, 30	-		Silvestre et al., 1997	Depress. Anxiety 5:29-33
Ketamine	NMDA channel blocker	Elevated plus-maze	Wistar rats (377-453g)	7	ip, 30	-		Silvestre et al., 1997	Depress. Anxiety 5:29-33
Ketamine	NMDA channel blocker	Open-field	Wistar rats (360-470g)	4-12	ip, 30	o		Pallarés et al., 1995	Physiol. Behav. 57:389-392
Ketamine	NMDA channel blocker	Elevated plus-maze	Sprague-Dawley rats (180-360g)	50	ip, 30	+		Engin et al., 2009	Neuroscience 161:359-369
Ketamine	NMDA channel blocker	Conditioned fear	Sprague-Dawley rats (225-250g)	16	sc, 30	+	(1) Shocks of 1.5 mA were applied; (2) Ketamine was given before FC; (3) Behavior was measured after test session	Pietersen et al., 2007	PLoS ONE 12:e1360

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ketamine	NMDA channel blocker	Conditioned fear	Sprague-Dawley rats (225-250g)	16	sc, 30	+	(1) Shocks of 1.5 mA were applied; (2) Ketamine was given before FC; (3) Behavior was measured during test trial	Pietersen et al., 2007	PLoS ONE 12:e1360
Ketamine	NMDA channel blocker	Distress vocalizations	Cockerel chicks (*Gallus gallus*, 1-day posthatch)	10	im, 15	+		Sufka et al., 2009	Behav. Pharmacol. 20:146-154.
Ketamine	NMDA channel blocker	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	30	ip, 30	+		Iijima et al., 2012	Behav. Brain Res. 235:287-292
Ketamine+clozapine (5 mg/kg)	NMDA channel blocker	Conditioned fear	Sprague-Dawley rats (225-250g)	16	sc, 30	+	(1) Shocks of 1.5 mA were applied; (2) Ketamine was given before FC; (3) Behavior was measured after test session; (4) No interaction	Pietersen et al., 2007	PLoS ONE 12:e1360
Ketamine+clozapine (5 mg/kg)	NMDA channel blocker	Conditioned fear	Sprague-Dawley rats (225-250g)	16	sc, 30	+	(1) Shocks of 1.5 mA were applied; (2) Ketamine was given before FC; (3) Behavior was measured during test trial; (4) No interaction	Pietersen et al., 2007	PLoS ONE 12:e1360
Ketamine+LY379268 (3 mg/kg)	NMDA channel blocker	Conditioned fear	Sprague-Dawley rats (225-250g)	16	sc, 30	(o)	(1) Shocks of 1.5 mA were applied; (2) Ketamine was given before FC	Pietersen et al., 2007	PLoS ONE 12:e1360
Ketamine+rapamycin (0.2 nmol/2 µl)	NMDA channel blocker	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	30	ip, 30	+	No interaction	Iijima et al., 2012	Behav. Brain Res. 235:287-292
Ketamine+rapamycin (0.2 nmol/2 µl)	NMDA channel blocker	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	30	ip, 24 h	(o)		Iijima et al., 2012	Behav. Brain Res. 235:287-292

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Kynurenic acid	NMDA Glycine antagonist	Conflict test	White Carneau pigeons (500-600g)	160-640	im, 60	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
L-701,324	NMDA glycine-B antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	3-10	ip, 30	+		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
L-701,324	NMDA glycine-B antagonist	Vogel conflict test	Wistar rats (200-220g)	0.1-10	ip, 30	o	Shocks of 0.4 mA were applied	Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
L-701,324	NMDA glycine-B antagonist	Elevated plus-maze	Sprague-Dawley rats (280-300g)	5	po, 30	+		Karcz-Kubicha and Lijequist, 1998	Psychopharmacology 135:175-181
L-701,324	NMDA glycine-B antagonist	Vogel conflict test	Sprague-Dawley rats (280-300g)	5	po, 30	+	Shocks of 0.2 mA were applied	Karcz-Kubicha and Lijequist, 1998	Psychopharmacology 135:175-181
L-701,324	NMDA antagonist	Elevated plus-maze	Swiss mice (25-30g)	4	ip, 30	+		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
L-701,324+magnesium (10 mg/kg)	NMDA glycine-B antagonist	Elevated plus-maze	Swiss mice (25-30g)	2	ip, 30	(+)		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
L-AP3	mGluR antagonist	Dark/light preference tank test	Zebrafish (*D. rerio*)	0.0005	immersion, 0	o		Del Valle-Mojica and Ortiz, 2012	Planta Med. Doi:10.1055/s-0032-1315240
L-AP3+valerenic acid	mGluR antagonist	Dark/light preference tank test	Zebrafish (*D. rerio*)	0.0005	immersion, 0	(o)	Antagonism of the effects of valerenic acid	Del Valle-Mojica and Ortiz, 2012	Planta Med. Doi:10.1055/s-0032-1315240
L-CCG-I	mGluR2/3 agonist	Vogel conflict test	Wistar rats (230-270g)	10 µg/1 µl	dorsal hippocampus, 10	+		Tatarczyńska et al., 2001	Psychopharmacology 158:94-99
L-CCG-I	mGluR2/3 agonist	Elevated plus-maze	Wistar rats (200-230g)	10 µg/0.5 µl/site	amygdala, 30	+		Wierońska et al., 2005	Pharmacol. Rep. 57:734-743
L-CCG-I+BIBO 3304 (128 ng/0.5 µl/site)	mGluR2/3 agonist	Elevated plus-maze	Wistar rats (200-230g)	10 µg/0.5 µl/site	amygdala, 30	(o)	Antagonism of the effects of L-CCG-I	Wierońska et al., 2005	Pharmacol. Rep. 57:734-743
L-SOP	Group 3 mGluR agonist	Vogel conflict test	Wistar rats (230-270g)	100 µg/1 µl	dorsal hippocampus, 10	+		Tatarczyńska et al., 2001	Psychopharmacology 158:94-99
LSP1-211	mGluR4 agonist	Elevated plus-maze	C57BL/6J (5-6-week-old, 20-22g)	2-5	ip, 45	+		Wierońska et al., 2010	Neuropharmacology 59:627-634

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LSP1-211	mGluR4 agonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	2-5	ip, 45	+		Wierońska et al., 2010	Neuropharmacology 59:627-634
LSP1-211+flumazenil (10 mg/kg)	mGluR4 agonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	5	ip, 45	(o)		Wierońska et al., 2010	Neuropharmacology 59:627-634
LSP1-211+PCPA (300 mg/kg)	mGluR4 agonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	5	ip, 45	(o)		Wierońska et al., 2010	Neuropharmacology 59:627-634
LSP1-211+ritanserin (0.5 mg/kg)	mGluR4 agonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	5	ip, 45	+	No interaction	Wierońska et al., 2010	Neuropharmacology 59:627-634
LSP1-211+WAY100635 (0.1 mg/kg)	mGluR4 agonist	Stress-induced hyperthermia	Swiss mice (5-6-week-old, 20-22g)	5	ip, 45	(o)		Wierońska et al., 2010	Neuropharmacology 59:627-634
Lu AF21934	mGluR4 PAM	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	2-10	sc, 60	+		Sławińska et al., 2012	Neuropharmacology 66:225-235
Lu AF21934	mGluR4 PAM	Four-plate test	Swiss mice (26-30g, 5-6-week-old)	15	sc, 60	+		Sławińska et al., 2012	Neuropharmacology 66:225-235
Lu AF21934	mGluR4 PAM	Marble burying	Swiss mice (26-30g, 5-6-week-old)	8-12	sc, 60	+		Sławińska et al., 2012	Neuropharmacology 66:225-235
Lu AF21934	mGluR4 PAM	Vogel conflict test	Wistar rats (200-220g)	2-15	sc, 60	o	Shocks of 0.4 mA/1 s were applied	Sławińska et al., 2012	Neuropharmacology 66:225-235
Lu AF21934+flumazenil (10 mg/kg)	mGluR4 PAM	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	5	sc, 60	(o)		Sławińska et al., 2012	Neuropharmacology 66:225-235
Lu AF21934+PCPA (300 mg/kg for 3 days)	mGluR4 PAM	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	5	sc, 60	+	No interaction	Sławińska et al., 2012	Neuropharmacology 66:225-235
Lu AF21934+ritanserin (0.5 mg/kg)	mGluR4 PAM	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	5	sc, 60	+	No interaction	Sławińska et al., 2012	Neuropharmacology 66:225-235
Lu AF21934+WAY100635 (0.1 mg/kg)	mGluR4 PAM	Stress-induced hyperthermia	Swiss mice (26-30g, 5-6-week-old)	5	sc, 60	+	No interaction	Sławińska et al., 2012	Neuropharmacology 66:225-235
LY215490	AMPA antagonist	Conflict test	Pigeon			+		Benvenga et al., 1993	Soc. Neurosci. Abstr. 19:293

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY235959	NMDA antagonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	1	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
LY293558	AMPA/GLU_{K5} antagonist	Conflict test	Fischer 344 rats	10	ip, 30	+	(1) Unpunished responding was also decreased; (2) VI-30 schedule was used	Alt et al., 2006	Psychopharmacology 185:240-247
LY314582	mGluR2/3 agonist	Stress-induced hyperthermia	OF1/IC mice (18-20 g)	10	po, 60	+		Spooren et al., 2002	Eur. J. Pharmacol. 435:161-170
LY326325	AMPA antagonist	Elevated plus-maze	C57BL/6 mice (22-27g)	0.25-5	ip, 30	-		Karcz-Kubicha and Lijequist, 1995	Eur. J. Pharmacol. 279:171-177
LY326325	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (250g)	1	ip, 30	+	The drug produced only weak anxiolytic-like effects	Kotlinska and Liljequist, 1998	Pharmacol. Biochem. Behav. 60:119-124
LY326325	AMPA antagonist	Conflict test	Sprague-Dawley rats (250g)	2.5-5	ip, 30	+		Kotlinska and Liljequist, 1998	Pharmacol. Biochem. Behav. 60:119-124
LY341495	mGluR2/3 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (325-400g)	1	sc, 60	o		Tizzano et al., 2002	Pharmacol. Biochem. Behav. 73:367-374
LY341495	mGluR2/3 antagonist	Marble burying	ICR mice (25-35g)	1-10	ip, 60	+		Shimazaki et al., 2004	Eur. J. Pharmacol. 501:121-125
LY341495	mGluR2/3 antagonist	Elevated plus-maze	ICR (CD1) mice (5-7-week-old)	1	ip, 60	o		Linden et al., 2005	Psychopharmacology 179:284-291
LY341495	mGluR2/3 antagonist	Stress-induced hyperthermia	C57BL6/J (8-10-week-old)	3	ip, 60	o		Galici et al., 2006	J. Pharmacol. Exp. Ther. 318:173-185
LY341495	mGluR2/3 antagonist	Stress-induced hyperthermia	ICR mice (25-34g)	1	ip, 60	+		Iijima et al., 2007	Psychopharmacology 190:233-239
LY341495	mGluR2/3 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (200-350g)	1	sc, 60	o		Rorick-Kehn et al., 2007	Psychoparmacology 193:121-136
LY341495	mGluR2/3 antagonist	Marble burying	NMRI mice (6-7-week-old)	1-3	ip, 30	+		Bespalov et al., 2008	Eur. J. Pharmacol. 592:96-102
LY341495	mGluR2/3 antagonist	Light/dark test	NMRI mice (6-7-week-old)	0.3-3	ip, 30	o		Bespalov et al., 2008	Eur. J. Pharmacol. 592:96-102

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY341495	mGluR2/3 antagonist	Elevated plus-maze	NMRI mice (6-7-week-old)	0.3-3	ip, 30	o		Bespalov et al., 2008	Eur. J. Pharmacol. 592:96-102
LY341495	mGluR2/3 antagonist	Stress-induced hyperthermia	NMRI mice (6-7-week-old)	0.3-3	ip, 60	o		Bespalov et al., 2008	Eur. J. Pharmacol. 592:96-102
LY341495	mGluR2/3 antagonist	Stress-induced hyperthermia	Wistar rats (240-260g)	0.3-3	ip, 30	o	A FR20 (food)/FR20 (food+shock) was in use	Bespalov et al., 2008	Eur. J. Pharmacol. 592:96-102
LY341495	mGluR2/3 antagonist	Distress vocalizations	CFW mouse pups (7-day-old)	3-40	sc, 30-45	o		Takahashi et al., 2009	Psychopharmacology 204:61-71
LY341495+diazepam (0.6 mg/kg)	mGluR2/3 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (325-400g)	1	sc, 60	(+)	No blockade of the anxiolytic-like effects of diazepam	Tizzano et al., 2002	Pharmacol. Biochem. Behav. 73:367-374
LY354740	mGluR2/3 agonist	Conditioned fear	Sprague-Dawley rats (325-400g)	0.003-3	ip, 30	o		Tizzano et al., 2002	Pharmacol. Biochem. Behav. 73:367-374
LY354740	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (325-400g)	0.3-3	ip, 30	+		Tizzano et al., 2002	Pharmacol. Biochem. Behav. 73:367-374
LY354740	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (350-450g)	0.3-1 µg/side	amygdala, 0	+		Walker et al., 2002	Behav. Neurosci. 116:1075-1083
LY354740	mGluR2/3 agonist	Conditioned fear	Sprague-Dawley rats (350-450g)	0.3 µg/side	amygdala, 0	+	(1) The drug disrupted acquisition; (2) Assessed with a fear-potentiated test	Walker et al., 2002	Behav. Neurosci. 116:1075-1083
LY354740	mGluR2/3 agonist	Fear-potentiated startle reflex	Long Evans rats (180-400g)	0.1-1	ip, 30	+		Helton et al., 1998	J. Pharmacol. Exp. Ther. 284:651-660
LY354740	mGluR2/3 agonist	Fear-potentiated startle reflex	Long Evans rats (180-400g)	3	ip, 2 to 6 h	+		Helton et al., 1998	J. Pharmacol. Exp. Ther. 284:651-660
LY354740	mGluR2/3 agonist	Elevated plus-maze	NIH Swiss mice (18-35g)	0.1-10	po, 60	+		Helton et al., 1998	J. Pharmacol. Exp. Ther. 284:651-660
LY354740	mGluR2/3 agonist	Elevated plus-maze	NIH Swiss mice (18-35g)	3	po, 1 to 6 h	+		Helton et al., 1998	J. Pharmacol. Exp. Ther. 284:651-660
LY354740	mGluR2/3 agonist	Elevated plus-maze	ICR:CD1 mice (5-week-old)	20	sc, 30	+		Linden et al., 2004	Neuropsychopharmacology 29:502-513

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY354740	mGluR2/3 agonist	Elevated plus-maze	Sprague-Dawley rats (250g)	10	ip, 30	+		Ferris et al., 2001	J. Psychopharmacol. 15:76-82
LY354740	mGluR2/3 agonist	Social interaction	Sprague-Dawley rats (300-350g)	0.6	ip, 60	+	Rats with chronic inhibition of GABA synthesis were infused with sodium lactate prior to testing	Shekhar and Keim, 2000	Neuropharmacology 39:1139-1146
LY354740	mGluR2/3 agonist	Elevated plus-maze	NIH Swiss mice (20-35g)	1-10	po, 30	+		Monn et al., 1997	J. Med. Chem. 40:528-537
LY354740	mGluR2/3 agonist	Vogel conflict test	Wistar rats (230-270g)	1 µg/1 µl	dorsal hippocampus, 10	+		Tatarczyńska et al., 2001	Psychopharmacology 158:94-99
LY354740	mGluR2/3 agonist	Four-plate test	Swiss mice (22-25g)	4-8	ip, 30	+		Kłodzińska et al., 1999	Neuropharmacology 38:1831-1839
LY354740	mGluR2/3 agonist	Vogel conflict test	Wistar rats (200-250g)	0.5-1	ip, 30	+	Shocks of 0.5 mA were applied	Kłodzińska et al., 1999	Neuropharmacology 38:1831-1839
LY354740	mGluR2/3 agonist	Marble burying	ICR mice (25-35g)	0.3-3	ip, 30	o		Shimazaki et al., 2004	Eur. J. Pharmacol. 501:121-125
LY354740	mGluR2/3 agonist	Elevated plus-maze	ICR (CD1) mice (5-7-week-old)	10-20	sc, 30	+		Linden et al., 2005	Psychopharmacology 179:284-291
LY354740	mGluR2/3 agonist	Elevated plus-maze	mGluR2-/- C57/Bl/6/ICR (CD1) mice (5-7-week-old)	20	sc, 30	(o)	Anxiolytic-like activity was not seen in knockout mice	Linden et al., 2005	Psychopharmacology 179:284-291
LY354740	mGluR2/3 agonist	Elevated plus-maze	mGluR3-/- C57/Bl/6/ICR (CD1) mice (5-7-week-old)	20	sc, 30	(o)	Anxiolytic-like activity was not seen in knockout mice	Linden et al., 2005	Psychopharmacology 179:284-291
LY354740	mGluR2/3 agonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	30	po, 60	+		Rorick-Kehn et al., 2006	J. Pharmacol. Exp. Ther. 316:905-913
LY354740	mGluR2/3 agonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	10	sc, 30	+		Rorick-Kehn et al., 2006	J. Pharmacol. Exp. Ther. 316:905-913
LY354740	mGluR2/3 agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	10-30	po, 60	o		Rorick-Kehn et al., 2006	J. Pharmacol. Exp. Ther. 316:905-913

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY354740	mGluR2/3 agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	10-20	sc, 30	+		Rorick-Kehn et al., 2006	J. Pharmacol. Exp. Ther. 316:905-913
LY354740	mGluR2/3 agonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	3-10	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
LY354740	mGluR2/3 agonist	Ultrasound-induced defensive behaviors	Lister hooded rats (220-250g)	10	ip, 30	+	The drug reduced escape-like behavior, but not freezing	Nicolas et al., 2007	Psychopharmacology 194:243-252
LY354740	mGluR2/3 agonist	Elevated plus-maze	Sprague-Dawley rats (280g)	3-10	ip, 30	+		Schlumberger et al., 2009	Behav. Pharmacol. 20:56-66
LY354740	mGluR2/3 agonist	Dark/light preference tank test	Zebrafish (*D. rerio*)	0.00054	immersion, 0	o		Del Valle-Mojica and Ortiz, 2012	Planta Med. Doi:10.1055/s-0032-1315240
LY354740+flumazenil (15 mg/kg)	mGluR2/3 agonist	Elevated plus-maze	Sprague-Dawley rats (250g)	10	ip, 30	o	Antagonism of the anxiolytic-like effects of LY354740	Ferris et al., 2001	J. Psychopharmacol. 15:76-82
LY354740+flumazenil (2 mg/kg)	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (325-400g)	0.3	ip, 30	(+)	No blockade of the anxiolytic-like effects of LY354740	Tizzano et al., 2002	Pharmacol. Biochem. Behav. 73:367-374
LY354740+LY341495 (0.3 µg/side)	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (350-450g)	0.3 µg/side	amygdala, 0	(o)	Blockade of the anxiolytic-like effects of LY354740	Walker et al., 2002	Behav. Neurosci. 116:1075-1083
LY354740+LY341495 (1 mg/kg)	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (325-400g)	0.3	ip, 30	(o)	Blockade of the anxiolytic-like effects of LY354740	Tizzano et al., 2002	Pharmacol. Biochem. Behav. 73:367-374
LY354740+LY341495 (1 mg/kg)	mGluR2/3 agonist	Elevated plus-maze	ICR (CD1) mice (5-7-week-old)	20	sc, 30	(o)	Antagonism of the anxiolytic-like effects of LY354740	Linden et al., 2005	Psychopharmacology 179:284-291
LY354740+naloxone (10 mg/kg)	mGluR2/3 agonist	Elevated plus-maze	Sprague-Dawley rats (250g)	10	ip, 30	+	No antagonism of the anxiolytic-like effects of LY354740	Ferris et al., 2001	J. Psychopharmacol. 15:76-82
LY379268	mGluR2/3 agonist	Open-field	Wistar rats (200-250g)	1	ip, 30	+	The drug reduced exploratory behavior	Imre et al., 2006	Pharmacol. Biochem. Behav. 84:392-399
LY379268	mGluR2/3 agonist	Acoustic startle reflex	Wistar rats (200-250g)	3	ip, 30	-		Imre et al., 2006	Pharmacol. Biochem. Behav. 84:392-399

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY379268	mGluR2/3 agonist	Shock-probe burying test	Wistar rats (200-250g)	3	sc, 30	+	Electric shocks of 0.5 mA were applied	Aulja et al., 2008	Neuropsychopharmacology 33:1818-1826
LY379268	mGluR2/3 agonist	Shock-probe burying test	Wistar rats (200-250g)	1-3	sc, 30	+	(1) Rats were trained to self-administer cocaine under different conditions; (2) Electric shocks of 0.5 mA were applied	Aulja et al., 2008	Neuropsychopharmacology 33:1818-1826
LY379268	mGluR2/3 agonist	Elevated plus-maze	C57BL/6J mice	1-3	ip, 30	o		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
LY379268	mGluR2/3 agonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups	0.3-3	ip, 30	+		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
LY379268	mGluR2/3 agonist	Stress-induced hyperthermia	ICR mice	1-3	ip, 60	+		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
LY379268	mGluR2/3 agonist	Stress-induced hyperthermia	ICR mice	30	ip, 60	+		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
LY379268	mGluR2/3 antagonist	Distress vocalizations	CFW mouse pups (7-day-old)	0.3-1	sc, 30-45	+	The drug suppressed locomotion	Takahashi et al., 2009	Psychopharmacology 204:61-71
LY379268	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	1-5	ip, 60	+		Wierońska et al., 2012	Neuropharmacology 62:322-331
LY379268+CGP55845 (10 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	5	ip, 60	+	No interaction	Wierońska et al., 2012	Neuropharmacology 62:322-331
LY379268+flumazenil (10 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	5	ip, 60	+	No interaction	Wierońska et al., 2012	Neuropharmacology 62:322-331
LY379268+flumazenil (10 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	(+)		Wierońska et al., 2012	Neuropharmacology 62:322-331
LY379268+ritanserin (0.5 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	5	ip, 60	+	No interaction	Wierońska et al., 2012	Neuropharmacology 62:322-331
LY379268+ritanserin (0.5 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	(+)		Wierońska et al., 2012	Neuropharmacology 62:322-331
LY379268+WAY100365 (0.1 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	(+)		Wierońska et al., 2012	Neuropharmacology 62:322-331
LY379268+WAY100365 (0.1-1 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	Swiss mice (28-32g)	5	ip, 60	+	No interaction	Wierońska et al., 2012	Neuropharmacology 62:322-331

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY382884	iGlu5 kainate antagonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	10-30	ip, 60	o	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
LY382884	iGlu5 kainate antagonist	Vogel conflict test	Sprague-Dawley rats (200-300g)	100	ip, 30	+	Electric shocks of 0.5 mA/100 ms were applied	Alt et al., 2007	Neuropharmacology 52:1482-1487
LY382884	iGlu5 kainate antagonist	Elevated plus-maze	C57BL/6 mice (6-10-week-old)	4 µg/µl	amygdala, 20	-		Wu et al., 2007	PLoS ONE 2:e167
LY404039	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (200-350g)	0.003-0.03	po, 30	+		Rorick-Kehn et al., 2007	Psychoparmacology 193:121-136
LY404039	mGluR2/3 agonist	Marble burying	NIH Swiss mice (28-32g)	3-10	ip, 30	+		Rorick-Kehn et al., 2007	Psychoparmacology 193:121-136
LY404039+LY341495 (1 mg/kg)	mGluR2/3 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (200-350g)	0.03	po, 30	(o)	Antagonism of the effects of LY404039	Rorick-Kehn et al., 2007	Psychoparmacology 193:121-136
LY451646	AMPA potentiator	Stress-induced hyperthermia	DBA/2 mice (25-35g)	1-3	ip, 60	o	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
LY456236	mGluR1 antagonist	Vogel conflict test	CD rats (225-250g)	10	ip	+	Shocks of 0.4 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 179:207-217
LY456236	mGluR1 antagonist	Conflict test	CD rats (225-250g)	30	ip	+	Shocks of 0.7 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 179:207-217
LY456236	mGluR1 antagonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	10-30	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
LY487379	mGluR2 potentiator	Stress-induced hyperthermia	Swiss mice (28-32g)	1-5	ip, 60	+		Wierońska et al., 2012	Neuropharmacology 62:322-331
LY487379+CGP55845 (10 mg/kg)	mGluR2 potentiator	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	+	No interaction	Wierońska et al., 2012	Neuropharmacology 62:322-331
LY487379+flumazenil (10 mg/kg)	mGluR2 potentiator	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	(+)		Wierońska et al., 2012	Neuropharmacology 62:322-331
LY487379+ritanserin (0.5 mg/kg)	mGluR2 potentiator	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	(+)		Wierońska et al., 2012	Neuropharmacology 62:322-331
LY487379+WAY100365 (0.1 mg/kg)	mGluR2 potentiator	Stress-induced hyperthermia	Swiss mice (28-32g)	0.5	ip, 60	(+)		Wierońska et al., 2012	Neuropharmacology 62:322-331

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY544344	mGluR2/3 agonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	30	po, 60	+	Prodrug of LY354740	Rorick-Kehn et al., 2006	J. Pharmacol. Exp. Ther. 316:905-913
LY544344	mGluR2/3 agonist	Conditioned fear	Sprague-Dawley rats (250-350g)	10-30	po, 60	+	Prodrug of LY354740	Rorick-Kehn et al., 2006	J. Pharmacol. Exp. Ther. 316:905-913
LY566332	mGluR2 potentiator	Stress-induced hyperthermia	DBA/2 mice (25-35g)	30 and 100	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
MDL 100,453	NMDA antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day old)	ED50=8.07	ip, 30	+	The drug had muscle relaxant side effects	Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
MDL 105,519	NMDA receptor glycine antagonist	Ultrasonic distress vocalizations	CD rat pups	ED50=39.6	ip	+	The drug had muscle relaxant side effects	Baron et al., 1997	Eur. J. Pharmacol. 323:181-192
Memantine	NMDA channel blocker	Elevated plus-maze	Wistar rats (250-300g)	8	ip, 30	+		Bertoglio et al., 2003	Psychopharmacology 170:335-342
Memantine	NMDA channel blocker	Elevated plus-maze	Wistar rats (250-300g)	8	ip, 48 h and 30 min	+		Bertoglio et al., 2003	Psychopharmacology 170:335-342
Memantine	NMDA channel blocker	Elevated plus-maze	Wistar rats (250-300g)	4-8	ip, 30	o	Maze-experienced rats were used	Bertoglio et al., 2003	Psychopharmacology 170:335-342
Memantine	NMDA channel blocker	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.3-10	ip, 30	o		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
Memantine	NMDA channel blocker	Vogel conflict test	Wistar rats (200-220g)	0.05-10	ip, 30	o	Shocks of 0.4 mA were applied	Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
Memantine	NMDA channel blocker	Conditioned emotional response	Lister hooded rats (250-300g)	1.25-5	sc, 40	o		Mirza et al., 2005	Psychopharmacology 180:159-168
Memantine	NMDA channel blocker	Elevated plus-maze	C57BL/6J mice (8-month-old)	100	po, for 7 weeks, o.d.	+		Minkeviciene et al., 2008	Neuropharmacology 54:1079-1085
Memantine	NMDA channel blocker	Open-field	C57BL/6J mice (8-month-old)	10-100	po, for 7 weeks, o.d.	o		Minkeviciene et al., 2008	Neuropharmacology 54:1079-1085
Memantine	NMDA channel blocker	Distress vocalizations	CFW mouse pups (7-day-old)	5.6-30	sc, 30-45	+/-	The drug produced a biphasic effect and increased locomotion	Takahashi et al., 2009	Psychopharmacology 204:61-71

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Memantine	NMDA channel blocker	Elevated plus-maze	Wistar rats (200-250g)	8-12	ip, 30	o		Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
Memantine	NMDA channel blocker	Elevated plus-maze	Wistar rats (200-250g)	8-12	ip, 30	o	Anxiety was increased by withdrawal from ethanol	Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
Memantine	NMDA channel blocker	Distress vocalizations	Cockerel chicks (*Gallus gallus*, 1-day posthatch)	5 and 20	im, 15	-		Sufka et al., 2009	Behav. Pharmacol. 20:146-154.
MGS0008	mGluR2/3 agonist	Stress-induced hyperthermia	ICR mice (25-34g)	0.3-3	ip, 60	o		Iijima et al., 2007	Psychopharmacology 190:233-239
MGS0039	mGluR2/3 antagonist	Marble burying	ICR mice (25-35g)	3-10	ip, 60	+		Shimazaki et al., 2004	Eur. J. Pharmacol. 501:121-125
MGS0039	mGluR2/3 antagonist	Conditioned fear	Sprague-Dawley rats (250-280g)	2	ip, 60	+	Electric shocks of 1 mA, 30 s were applied	Yoshimizu et al., 2006	Psychopharmacology 186:587-593
MGS0039	mGluR2/3 antagonist	Stress-induced hyperthermia	ICR mice (25-34g)	1-3	ip, 60	+		Iijima et al., 2007	Psychopharmacology 190:233-239
MGS0039	mGluR2/3 antagonist	Vogel conflict test	Wistar rats (250-300g)	1-2	ip, 60	+	Shocks of 0.1 to 0.5 mA were applied	Stachowicz et al., 2011	Pharmacol. Rep. 63:880-887
MGS0039+flumazenil (10 mg/kg)	mGluR2/3 antagonist	Vogel conflict test	Wistar rats (250-300g)	2	ip, 60	(o)	Shocks of 0.1 to 0.5 mA were applied	Stachowicz et al., 2011	Pharmacol. Rep. 63:880-887
MGS0039+LY354740 (0.3-3 mg/kg)	mGluR2/3 antagonist	Marble burying	ICR mice (25-35g)	3	ip, 60	(o)	LY354740 antagonized the effects of MGS0039	Shimazaki et al., 2004	Eur. J. Pharmacol. 501:121-125
MGS0039+ritanserin (0.5 mg/kg)	mGluR2/3 antagonist	Vogel conflict test	Wistar rats (250-300g)	2	ip, 60	(o)	Shocks of 0.1 to 0.5 mA were applied	Stachowicz et al., 2011	Pharmacol. Rep. 63:880-887
MGS0039+WAY 100635 (1-3 mg/kg)	mGluR2/3 antagonist	Stress-induced hyperthermia	ICR mice (25-34g)	3	ip, 60	(o)	Antagonism of the effects of MGS0039	Iijima et al., 2007	Psychopharmacology 190:233-239
MGS0039+WAY100635 (0.1 mg/kg)	mGluR2/3 antagonist	Vogel conflict test	Wistar rats (250-300g)	2	ip, 60	(o)	Shocks of 0.1 to 0.5 mA were applied	Stachowicz et al., 2011	Pharmacol. Rep. 63:880-887
MK-801	NMDA channel blocker	Vogel conflict test	Wistar rats (180-220g)	0.0025	ip, 30	+	Electrick shocks of 0.4 mA were applied	Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MK-801	NMDA channel blocker	Vogel conflict test	Wistar rats (180-220g)	0.0025	ip, o.d. for 5 days	o	Electrick shocks of 0.4 mA were applied	Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61
MK-801	NMDA channel blocker	Open-field	Wistar rats (180-220g)	0.1	ip, 30	+		Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61
MK-801	NMDA channel blocker	Open-field	Wistar rats (180-220g)	0.1	ip, o.d. for 5 days	+		Jessa et al., 1996	Eur. Neuropsychopharmacology 6:55-61
MK-801	NMDA channel blocker	Conditioned fear	C57BL/6 mice (at least 6-week-old)	0.05-0.3	sc, 20	+	Electrick shocks of 1 mA was applied on day 1	Bardgett et al., 2003	Brain Res. Bull. 60:131-142
MK-801	NMDA channel blocker	Light/dark test	C57BL/6 mice (at least 6-week-old)	0.1-0.3	sc, 20	o		Bardgett et al., 2003	Brain Res. Bull. 60:131-142
MK-801	NMDA channel blocker	Vogel conflict test	Wistar rats (180-220g)	0.005-0.01	ip, 30	+	Electric shocks of 0.4 mA were applied	Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
MK-801	NMDA channel blocker	Open-field	Wistar rats (180-220g)	0.2	ip, 30	+		Plaznik et al., 1994	Eur. Neuropsychopharmacology 4:503-512
MK-801	NMDA channel blocker	Conflict test	White Carneau pigeons (500-600g)	0.02-0.16	im, 5	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
MK-801	NMDA channel blocker	Social interaction	Wistar rats (200-300g)	0.1	ip, 30	+		Corbett and Dunn, 1993	Neuropharmacology 32:461-466
MK-801	NMDA channel blocker	Elevated plus-maze	Wistar rats (200-250g)	30-100	ip, 30	+		Corbett and Dunn, 1993	Neuropharmacology 32:461-466
MK-801	NMDA channel blocker	Conflict test	Wistar rats (200-250g)	0.03	ip, 30	+	VI-30/FR-10 schedule was used	Corbett and Dunn, 1993	Neuropharmacology 32:461-466
MK-801	NMDA channel blocker	Taming	Cynomolgus monkeys (*Macaca fascicularis*) 5.5-8 kg	0.05-0.1	sc, 30	+		Rupniak et al., 1993	Pharmacol. Biochem. Behav. 44:153-156

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MK-801	NMDA channel blocker	Elevated plus-maze	Wistar rats (250-300g)	0.06	ip, 30	+		Bertoglio et al., 2003	Psychopharmacology 170:335-342
MK-801	NMDA channel blocker	Elevated plus-maze	Wistar rats (250-300g)	0.03-0.06	ip, 30	o	Maze-experienced rats were used	Bertoglio et al., 2003	Psychopharmacology 170:335-342
MK-801	NMDA channel blocker	Conflict test	Female Sprague-Dawley rats	0.04-0.4	ip, 24 h	+	The shock intensities used were 0.5 and 0.25 mA	Xie and Commissaris, 1992	Pharmacol. Biochem. Behav. 43:471-477
MK-801	NMDA channel blocker	Conflict test	Female Sprague-Dawley rats	0.004-0.4	ip, 10 min, 4 or 48 h	o	The shock intensities used were 0.5 and 0.25 mA	Xie and Commissaris, 1992	Pharmacol. Biochem. Behav. 43:471-477
MK-801	NMDA channel blocker	Conflict test	Sprague-Dawley rats (250-288g)	0.01-0.1	ip	+	A multiple FI90/FI90 (punishment) schedule was used	McMillan et al., 1991	J. Pharmacol. Exp. Ther. 258:1015-1018
MK-801	NMDA channel blocker	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	6	sc, 30	+		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
MK-801	NMDA channel blocker	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (10-day old)	0.5-1	ip, 30	+	The drug had muscle relaxant side effects	Kehne et al., 1991	Eur. J. Pharmacol. 193:283-292
MK-801	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.025-0.2	ip, 90	+	Electric shocks of 0.16 mA, 2s	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801	NMDA channel blocker	Elevated plus-maze	Wistar rats (225-250g)	0.1	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
MK-801	NMDA channel blocker	Social interaction	Wistar rats (225-250g)	0.05	ip, 30	+		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
MK-801	NMDA channel blocker	Ultrasonic distress vocalizations	Wistar rats (200g	ED50=3.5	ip, 15	+	2 mA scrambled shocks of 2 s were applied	De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
MK-801	NMDA channel blocker	Conflict test	Wistar rats (300-350g)	0.03	ip, 30	+	VI-30/FR-5 schedule was used	Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
MK-801	NMDA channel blocker	Social interaction	Wistar rats (250-300g)	0.1	ip, 30	+		Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205
MK-801	NMDA channel blocker	Elevated plus-maze	Wistar rats (200-250g)	0.1	ip, 30	+		Corbett and Dunn, 1991	Drug Dev. Res. 24:201-205

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MK-801	NMDA channel blocker	Elevated plus-maze	MF1 mice (25-30g)	0.1	ip, 30	+		Fraser et al., 1996	Eur. Neuropsychopharmacology 6:311-316
MK-801	NMDA channel blocker	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.1-0.3	ip, 30	o		Criswell et al., 1994	Alcohol. Clin. Exp. Res. 18:596-601
MK-801	NMDA channel blocker	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.1-0.15	ip, 30	+		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
MK-801	NMDA channel blocker	Conditioned emotional response	Lister hooded rats (250-300g)	0.0125-0.075	sc, 10	o		Mirza et al., 2005	Psychopharmacology 180:159-168
MK-801	NMDA channel blocker	Conflict test	Fischer 344 rats	0.03-0.1	sc, 30	+	VI-30 schedule was used	Alt et al., 2006	Psychopharmacology 185:240-247
MK-801	NMDA channel blocker	Conditioned fear	Wistar rats (220-260g)	0.01-0.1	ip	+	(1) The drug was administered after training on day 1; (2) Similar effects between context and tone; (3) Shock of 0.6 mA/1 s	Camera et al., 2007	Psychopharmacology 192:457-464
MK-801	NMDA channel blocker	Distress vocalizations	CFW mouse pups (7-day-old)	0.18-0.56	sc, 30-45	+	The drug increased locomotion	Takahashi et al., 2009	Psychopharmacology 204:61-71
MK-801	NMDA channel blocker	Elevated plus-maze	Sprague-Dawley rats (180-360g)	0.02-0.06	ip, 30	+	Effects may have been contaminated by stimulatory activity of the drug	Engin et al., 2009	Neuroscience 161:359-369
MK-801	NMDA channel blocker	Elevated plus-maze	Swiss mice (25-30g)	0.1	ip, 30	+		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
MK-801	NMDA channel blocker	Signal attenuation model of OCD	Sprague-Dawley rats (3-4-month-old)	0.025-0.1	ip, 30	o		Albelda et al., 2010	Psychopharmacology 210:13-24
MK-801	NMDA channel blocker	Elevated plus-maze	Wistar rats (200-220g)	1-2 µg/1 µl	dorsal hippocampus, 5	+		Zarrindast et al., 2011	Neurosci. Lett. 505:65-70
MK-801	NMDA channel blocker	Conditioned fear	Wistar rats (200-300g)	0.2	ip, for 5 days	+	Shocks of 0.8 mA/10 ms were applied	Jain and Zelena, 2011	Endocr. Regul. 45:13-21
MK-801	NMDA channel blocker	Conditioned fear	Female Wistar rats (200-300g)	0.2	ip, for 5 days	+	Shocks of 0.8 mA/10 ms were applied	Jain and Zelena, 2011	Endocr. Regul. 45:13-21

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MK-801	NMDA channel blocker	Elevated plus-maze	Wistar rats (220-270g)	1-2 µg/1 µl	dorsal hippocampus, 5	+		Zarrindast et al., 2012	Pharmacol. Biochem. Behav. 103:102-110
MK-801+benserazide (25 mg/kg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	+	No antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+benserazide (25 mg/kg)+L-5-HTTP (50 mg/kg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	(o)	Antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+bicuculline (1-2 mg/kg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	+	No antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+GYKI 52466 (10 mg/kg)	NMDA channel blocker	Conditioned fear	Wistar rats (200-300g)	0.2	ip, for 5 days	+	Shocks of 0.8 mA/10 ms were applied	Jain and Zelena, 2011	Endocr. Regul. 45:13-21
MK-801+GYKI 52466 (10 mg/kg)	NMDA channel blocker	Conditioned fear	Female Wistar rats (200-300g)	0.2	ip, for 5 days	+	Shocks of 0.8 mA/10 ms were applied	Jain and Zelena, 2011	Endocr. Regul. 45:13-21
MK-801+magnesium (10 mg/kg)	NMDA antagonist	Elevated plus-maze	Swiss mice (25-30g)	0.05	ip, 30	(+)		Poleszak et al., 2008	Pharmacol. Rep. 60:655-663
MK-801+mecamylamine (0.5 µg/1 µl)	NMDA channel blocker	Elevated plus-maze	Wistar rats (200-220g)	0.5 µg/1 µl	dorsal hippocampus, 5	(+)		Zarrindast et al., 2011	Neurosci. Lett. 505:65-70
MK-801+NMDA (0.125 µg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	(o)	Antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+Picrotoxin (1 mg/kg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	+	No antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+prazosine (0.5 mg/kg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	+	No antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+prazosine (0.5 mg/kg)+propranolol (8 mg/kg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	+	No antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+propranolol (8 mg/kg)	NMDA channel blocker	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.05	ip, 90	+	No antagonism of the anticonflict effects of MK-801	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
MK-801+SCH23390 (0.5 µg/1 µl)	NMDA channel blocker	Elevated plus-maze	Wistar rats (220-270g)	0.5 µg/1 µl	dorsal hippocampus,	(+)		Zarrindast et al., 2012	Pharmacol. Biochem. Behav. 103:102-110

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
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MK-801+scopolamine (3 µg/1 µl)	NMDA channel blocker	Elevated plus-maze	Wistar rats (200-220g)	0.5 µg/1 µl	dorsal hippocampus, 5	o	No interaction	Zarrindast et al., 2011	Neurosci. Lett. 505:65-70
MK-801+sulpiride (0.25-0.75 µg/1 µl)	NMDA channel blocker	Elevated plus-maze	Wistar rats (220-270g)	2 µg/1 µl	dorsal hippocampus, 5	(o)		Zarrindast et al., 2012	Pharmacol. Biochem. Behav. 103:102-110
MPEP	mGluR5 antagonist	Fear-potentiated startle reflex	Wistar rats (225-300g)	10-30	ip, 60	+		Brodkin et al., 2002	Pharmacol. Biochem. Behav. 73:359-366
MPEP	mGluR5 antagonist	Ultrasonic distress vocalizations	Wistar rats (225-300g)	10-30	ip, 60	+	Shocks of 1mA/4s were applied	Brodkin et al., 2002	Pharmacol. Biochem. Behav. 73:359-366
MPEP	mGluR5 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (290-330g)	3-30	ip, 60	+	An FR-30 was in use	Brodkin et al., 2002	Pharmacol. Biochem. Behav. 73:359-366
MPEP	mGluR5 antagonist	Vogel conflict test	Wistar rats (200-250g)	1	ip, 45	+	Electrick shocks of 0.5 mA were applied	Pilc et al., 2002	Neuropharmacology 43:181-187
MPEP	mGluR5 antagonist	Vogel conflict test	Wistar rats (200-250g)	1	ip, o.d. for 6 days	+	Electrick shocks of 0.5 mA were applied	Pilc et al., 2002	Neuropharmacology 43:181-187
MPEP	mGluR5 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (210-300g)	3-30	po, 60	+		Schulz et al., 2001	Neuropharmacology 41:1-7
MPEP	mGluR5 antagonist	Social interaction	Sprague-Dawley rats (350-400g)	0.3-1	po, 60	+		Spooren et al., 2000	J. Pharmacol. Exp. Ther. 295:1267-1275
MPEP	mGluR5 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-220g)	0.1-10	po, 60	+		Spooren et al., 2000	J. Pharmacol. Exp. Ther. 295:1267-1275
MPEP	mGluR5 antagonist	Stress-induced hyperthermia	OF1/IC mice (18-20g)	15-30	po, 60	+		Spooren et al., 2000	J. Pharmacol. Exp. Ther. 295:1267-1275
MPEP	mGluR5 antagonist	Marble burying	OF1/IC mice (18-20g)	7.5 and 30	po, 60	+		Spooren et al., 2000	J. Pharmacol. Exp. Ther. 295:1267-1275
MPEP	mGluR5 antagonist	Geller-Seifter conflict test	Wistar rats (180-240g)	10-100	po, 60	o	The shock intensity was 0.5 mA/0.5 s	Spooren et al., 2000	J. Pharmacol. Exp. Ther. 295:1267-1275
MPEP	$mGluR_5$ antagonist	Vogel conflict test	Wistar rats (250-300g)	2.5-5	ip, 30	+	Shocks of 0.5 mA/500 ms were applied	Steckler et al., 2005	Psychopharmacology 179:198-206

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MPEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-230g)	10	ip, 60	+		Wieronska et al., 2004	Neuropsychopharmacology 29:514-521
MPEP	mGluR5 antagonist	Vogel conflict test	Wistar rats (200-250g)	1-10	ip, 60	+	Shocks of 0.5 mA were applied	Tatarczyńska et al., 2001	Br. J. Pharmacol. 132:1423-1430
MPEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-250g)	3-10	ip, 60	+		Tatarczyńska et al., 2001	Br. J. Pharmacol. 132:1423-1430
MPEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-250g)	30	po, 60	+		Tatarczyńska et al., 2001	Br. J. Pharmacol. 132:1423-1430
MPEP	mGluR5 antagonist	Four-plate test	Swiss mice (22-26g)	30	ip, 60	+		Tatarczyńska et al., 2001	Br. J. Pharmacol. 132:1423-1430
MPEP	mGluR5 antagonist	Fear-potentiated startle reflex	Rats	ED50=5	ip, 30	+		Cosford et al., 2003	J. Med. Chem. 46:204-206
MPEP	mGluR5 antagonist	Stress-induced hyperthermia	OF1/IC mice (18-20 g)	1-30	po, 60	+		Spooren et al., 2002	Eur. J. Pharmacol. 435:161-170
MPEP	mGluR5 antagonist	Vogel conflict test	CD rats (225-250g)	3-10	ip	+	Shocks of 0.4 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 179:207-217
MPEP	mGluR5 antagonist	Conflict test	CD rats (225-250g)	30	ip	+	Shocks of 0.7 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 179:207-217
MPEP	mGluR5 antagonist	Vogel conflict test	Sprague-Dawley rats (around 200g)	10-30	po, 60	+	Shocks of 0.5 mA/250 ms were applied	Ballard et al., 2005	Psychopharmacology 179:218-229
MPEP	mGluR5 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (around 400g)	10-30	po, 60	+	(1) FR10 was used; (2) Shocks of 0.6 mA/0.5 s were applied	Ballard et al., 2005	Psychopharmacology 179:218-229
MPEP	mGluR5 antagonist	Conditioned emotional response	Sprague-Dawley rats (around 400g)	10-30	po, 60	+		Ballard et al., 2005	Psychopharmacology 179:218-229
MPEP	mGluR5 antagonist	Ultrasonic distress vocalizations	Female and male Sprague-Dawley rat pups (9- to 11-day-old, 21-30g)	1-10	ip, 30	+		Lijima and Chaki, 2005	Pharmacol. Biochem. Behav. 82:652-657
MPEP	mGluR5 antagonist	Stress-induced hyperthermia	DBA/2 mice (25-35g)	10-30	ip, 60	+	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MPEP	mGluR5 antagonist	Light/dark test	Wistar rats (250-270g)	2 nmol/0.25 µl	amygdala, 20	+		Pérez de la Mora et al., 2006	Eur. J. Neurosci. 17:2749-2759
MPEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (250-270g)	8 nmol/0.25 µl	amygdala, 20	+		Pérez de la Mora et al., 2006	Eur. J. Neurosci. 17:2749-2759
MPEP	mGluR5 antagonist	Shock-probe burying test	Wistar rats (250-270g)	8 nmol/0.25 µl	amygdala, 20	+	The probe delivered an electric shock of 0.3 mA	Pérez de la Mora et al., 2006	Eur. J. Neurosci. 17:2749-2759
MPEP	mGluR5 antagonist	Stress-induced hyperthermia	NMRI mice (20-24g)	10-30	po, 60	+		Nordquist et al., 2007	Eur. J. Pharmacol. 568:199-202
MPEP	mGluR5 antagonist	Stress-induced hyperthermia	NMRI mice (20-24g)	30	po, for 5 days, o.d.	+		Nordquist et al., 2007	Eur. J. Pharmacol. 568:199-202
MPEP	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	1-6	ip, 30	+	Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
MPEP	mGluR5 antagonist	Flight behavior	Wistar rats (220-240g)	50 nmol/0.2 µl	dorsolateral PAG, 5	o		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
MPEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (220-240g)	50 nmol/0.2 µl	dorsolateral PAG, 10	+		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
MPEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (220-240g)	50 nmol/0.2 µl	superior colliculus, 10	o		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
MPEP	mGluR5 antagonist	Vogel conflict test	Wistar rats (220-240g)	50 nmol/0.2 µl	dorsolateral PAG, 10	+	Shocks of 0,5 mA/2 s were applied	Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
MPEP	mGluR5 antagonist	Elevated plus-maze	C57BL/6J mice	3-30	ip, 30	+		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
MPEP	mGluR5 antagonist	Ultrasonic distress vocalizations	Sprague-Dawley rat pups	30	ip, 30	+		Satow et al., 2008	J. Pharmacol. Exp. Ther. 326:577-586
MPEP	mGluR5 antagonist	Light/dark test	Wistar rats (25-day-old)	10-40	ip, at P12 and 18	+		Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139
MPEP	mGluR5 antagonist	Light/dark test	Wistar rats (25-day-old)	10-40	ip, at P12, 18 and 25	+		Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MPEP	mGluR5 antagonist	Light/dark test	Wistar rats (25-day-old)	10-40	ip, at P12 and 18	+	Light-dark experienced animals	Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139
MPEP	mGluR5 antagonist	Light/dark test	Wistar rats (25-day-old)	10-40	ip, at P12, 18 and 25	+	Light-dark experienced animals	Mikulecká and Mareš, 2009	Behav. Brain Res. 204:133-139
MPEP	mGluR5 antagonist	Conditioned fear	Hooded Lister rats (250-300g)	30	ip, 30	+		George et al., 2009	Psychopharmacology 204:499-509
MPEP	mGluR5 antagonist	Conditioned fear	Hooded Lister rats (250-300g)	30	ip, 30	+	Pavlovian-to-instrumental transfer paradigm was used	George et al., 2009	Psychopharmacology 204:499-509
MPEP	mGluR5 antagonist	Conditioned fear	Sprague-Dawley rats (300g)	10	ip, 30	+	(1) Shocks of 0.43 mA/0.5 s were applied; (2) Drug was given prior to extinction training	Fontanez-Nuin et al., 2011	Cereb. Cortex 21:727-735
MPEP	mGluR5 antagonist	Conditioned fear	Sprague-Dawley rats (300g)	1.5 µg/0.5 µl	infralimbic region, 30	+	(1) Shocks of 0.43 mA/0.5 s were applied; (2) Drug was given prior to extinction training	Fontanez-Nuin et al., 2011	Cereb. Cortex 21:727-735
MPEP	mGluR5 antagonist	Elevated plus-maze	Sprague-Dawley rats (230-250g)	3	ip, for 14 days	+	Animals had 6-OHDA lesion	Chen et al., 2011	Brain Res. Bull. 84:215-223
MPEP	mGluR5 antagonist	Social interaction	Sprague-Dawley rats (230-250g)	3	ip, for 14 days	+	Animals had 6-OHDA lesion	Chen et al., 2011	Brain Res. Bull. 84:215-223
MPEP	mGluR5 antagonist	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	10	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
MPEP	mGluR5 antagonist	Open-field	BALB/c mice	3-30	ip, 30	o		Salomons et al., 2012	Behav. Brain Funct. 8:30
MPEP	mGluR5 antagonist	Open-field	129P3 mice	3-30	ip, 30	o		Salomons et al., 2012	Behav. Brain Funct. 8:30
MPEP	mGluR5 antagonist	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	3	ip, 60	+		Iijima et al., 2012	Behav. Brain Res. 235:287-292
MPEP	mGluR5 antagonist	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	3	ip, 24 h	+		Iijima et al., 2012	Behav. Brain Res. 235:287-292

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MPEP+anisomycin (100 mg/kg)	mGluR5 antagonist	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	3	ip, 60	+	No interaction	Iijima et al., 2012	Behav. Brain Res. 235:287-292
MPEP+anisomycin (100 mg/kg)	mGluR5 antagonist	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	3	ip, 24 h	(o)		Iijima et al., 2012	Behav. Brain Res. 235:287-292
MPEP+BIBO 3304 (200 pmol/site, amygdala)	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-230g)	10	ip, 60	(o)	The Y1 antagonist blocked the anxiolytic-like effects of MPEP	Wieronska et al., 2004	Neuropsychopharmacology 29:514-521
MPEP+flumazenil (10 mg/kg)	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-230g)	10	ip, 60	+	No blockade of the anxiolytic-like effects of MPEP	Wieronska et al., 2004	Neuropsychopharmacology 29:514-521
MPEP+K252a (2 nmol/2 µl)	mGluR5 antagonist	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	3	ip, 24 h	+	No interaction	Iijima et al., 2012	Behav. Brain Res. 235:287-292
MPEP+metergoline (2 mg/kg)	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	1	ip, 30	(o)	(1) Antagonism of the anxiolytic-like effects of MTEP; (2) Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
MPEP+rapamycin (0.2 nmol/2 µl)	mGluR5 antagonist	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	3	ip, 60	+	No interaction	Iijima et al., 2012	Behav. Brain Res. 235:287-292
MPEP+rapamycin (0.2 nmol/2 µl)	mGluR5 antagonist	Novelty-suppressed feeding	C57BL/6J mice (9-week-old)	3	ip, 24 h	(o)		Iijima et al., 2012	Behav. Brain Res. 235:287-292
MPEP+ritanserin (0.5 mg/kg)	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	1	ip, 30	(o)	(1) Antagonism of the anxiolytic-like effects of MTEP; (2) Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
MPEP+ritanserin (1 mg/kg)	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	6	ip, 30	(o)	(1) Antagonism of the anxiolytic-like effects of MTEP; (2) Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
MPEP+tADA (10 nmol/0,2 µl)	mGluR5 antagonist	Flight behavior	Wistar rats (220-240g)	50 nmol/0.2 µl	dorsolateral PAG, 5	(o)	Blockade of the effects of tACPD	Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MPEP+WAY 100635 (0.1 mg/kg)	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	1	ip, 30	+	(1) No interaction; (2) Electric shocks of 0.5 mA were applied	Stachowicz et al., 2007	Neuropharmacology 53:741-748
Mrz 2/570	NMDA glycine-B full antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1-10	ip, 15	o		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
Mrz 2/571	NMDA glycine-B full antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1-10	ip, 15	o		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
Mrz 2/576	NMDA glycine-B full antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1-10	ip, 15	o		Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
Mrz 2/576	NMDA glycine-B full antagonist	Vogel conflict test	Wistar rats (200-220g)	2.5-10	ip, 30	o	Shocks of 0.4 mA were applied	Karcz-Kubicha et al., 1997	Neuropharmacology 36:1355-1367
MRZ-8676	mGluR5 NAM	Conditioned fear	Sprague-Dawley rats (200-350g)	25-75	po, 180	+	Shocks of 0.4 mA/1 s were applied	Dekundy et al., 2011	J. Neural Transm. 118:1703-1716
MRZ-8676	mGluR5 NAM	Conditioned fear	Sprague-Dawley rats (200-350g)	75-150	po, 180	+	(1) Shocks of 0.4 mA/1 s were applied; (2) Drug was given before acquision	Dekundy et al., 2011	J. Neural Transm. 118:1703-1716
MRZ-8676	mGluR5 NAM	Elevated plus-maze	Sprague-Dawley rats (200-350g)	25	po, 180	+		Dekundy et al., 2011	J. Neural Transm. 118:1703-1716
MS-153	Glutamate uptake enhancer	Conditioned fear	Sprague-Dawley rats (290-310g)	10-30	ip, 30	+	The drug reduced both acquisition and expression of freezing behavior	Li et al., 2004	Eur. J. Pharmacol. 505:145-149
MS-275	AMPA potentiator	Conditioned fear	129S1/SvImJ (3-5-month-old)	5-10	po, 2 h	o	(1) Drug was given prior to extinction training; (2) Shocks of 0.5 mA/1 s were applied	Whittle et al., 2013	Neuropharmacology 64:414-423
MS-275	AMPA potentiator	Conditioned fear	129S1/SvImJ (3-5-month-old)	10	po, 0	+	(1) Drug was given immediately after extinction training; (2) Shocks of 0.5 mA/1 s were applied	Whittle et al., 2013	Neuropharmacology 64:414-423

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MSOP	Group 3 mGluR antagonist	Vogel conflict test	Wistar rats (230-270g)	30.1 nmol/1 µl site	hippocampus, 10	+	The shock intensity was 0.5 mA	Chojnacka-Wójcik et al., 1997	Eur. J. Pharmacol. 319:153-156
MSOPPE	Group 2 mGluR antagonist	Vogel conflict test	Wistar rats (230-270g)	12.5-30.1 nmol/1 µl site	hippocampus, 10	o	The shock intensity was 0.5 mA	Chojnacka-Wójcik et al., 1997	Eur. J. Pharmacol. 319:153-156
MTEP	mGluR5 antagonist	Stress-induced hyperthermia	B6/129 background mice (25-35g)	16	sc, 60	+	The stressor was an injection	Brodkin et al., 2002	Eur. J. Neurosci. 16:2241-2244
MTEP	mGluR5 antagonist	Fear-potentiated startle reflex	Wistar rats (225-300g)	1-3	ip, 60	+		Busse et al., 2004	Neuropsychopharmacology 29:1971-1979
MTEP	mGluR5 antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (290-300g)	3-10	ip, 60	+	FR30 schedule was used	Busse et al., 2004	Neuropsychopharmacology 29:1971-1979
MTEP	mGluR5 antagonist	Fear-potentiated startle reflex	Wistar rats (225-300g)	3	ip, o.d. for 5 days	o	Tolerance to the anxiolytic-like effects developed	Busse et al., 2004	Neuropsychopharmacology 29:1971-1979
MTEP	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	0.1-3	ip, 60	+	Shocks of 0.5 mA were applied	Kłodzińska et al., 2004	Neuropharmacology 47:342-350
MTEP	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	1	ip, o.d. for 7 days	+	Shocks of 0.5 mA were applied	Kłodzińska et al., 2004	Neuropharmacology 47:342-350
MTEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (230-270g)	0.3-3	ip, 60	+		Kłodzińska et al., 2004	Neuropharmacology 47:342-350
MTEP	mGluR5 antagonist	Four-plate test	Swiss mice (23-26g)	20	ip, 60	+		Kłodzińska et al., 2004	Neuropharmacology 47:342-350
MTEP	mGluR5 antagonist	Vogel conflict test	CD rats (225-250g)	3-10	ip	+	Shocks of 0.4 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 179:207-217
MTEP	mGluR5 antagonist	Conflict test	CD rats (225-250g)	3-10	ip	+	Shocks of 0.7 mA/500 ms were applied	Varty et al., 2005	Psychopharmacology 179:207-217
MTEP	mGluR5 antagonist	Elevated plus-maze	Sprague-Dawley rats (240-280g)	0.6-5	ip, 30	o		Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34
MTEP	mGluR5 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (240-280g)	2.5-5	ip, 30	+		Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34
MTEP	mGluR5 antagonist	Conditioned fear	Wistar rats (12-week-old)	2.5-5	ip, 30	+	Shocks of 0.8 mA/1s were applied	Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MTEP	mGluR5 antagonist	Geller-Seifter conflict test	Wistar rats (350-400g)	1-3	ip, 30	+	FR20 (food only), FR20 (food and shock) was used	Pietraszek et al., 2005	Eur. J. Pharmacol. 514:25-34
MTEP	mGluR5 antagonist	Elevated plus-maze	Fawn-Hooded rats	2	ip, o.d. daily for 11 days	o		Cowen et al., 2005	J. Pharmacol. Exp. Ther. 315:590-600
MTEP	mGluR5 antagonist	Conflict test	Female Wistar rats (250-300g)	3-6	ip	+	(1) Rats were tested in late proestrus; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Pharmacol. Biochem. Behav. 84:385-391
MTEP	mGluR5 antagonist	Conflict test	Female Wistar rats (250-300g)	6	ip	+	(1) Rats were tested during metestrus-diestrus; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Pharmacol. Biochem. Behav. 84:385-391
MTEP	mGluR5 antagonist	Conflict test	Female Wistar rats (250-300g)	5-10 µg/side	lateral septum	+	(1) Rats were tested in late proestrus; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Pharmacol. Biochem. Behav. 84:385-391
MTEP	mGluR5 antagonist	Conflict test	Female Wistar rats (250-300g)	10 µg/side	lateral septum	+	(1) Rats were tested during metestrus-diestrus; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Pharmacol. Biochem. Behav. 84:385-391
MTEP	mGluR5 antagonist	Conflict test	Female Wistar rats (250-300g)	2,5-10 µg/side	medial septum	o	(1) Rats were tested in late proestrus; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Pharmacol. Biochem. Behav. 84:385-391
MTEP	mGluR5 antagonist	Conflict test	Female Wistar rats (250-300g)	2,5-10 µg/side	medial septum	o	(1) Rats were tested during metestrus-diestrus; (2) Shocks of 0,4 mA/45 ms were used	Molina-Hernández et al., 2006	Pharmacol. Biochem. Behav. 84:385-391
MTEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-300g)	5-10 µg/µl	lateral septum, 3	+		Molina-Hernández et al., 2006	Prog. Neuropsychopharmacol. Biol. Psychiatry 30:1129-1135
MTEP	mGluR5 antagonist	Ultrasound-induced defensive behaviors	Lister hooded rats (220-250g)	10-30	po, 60	+	The drug reduced escape-like behavior, but not freezing	Nicolas et al., 2007	Psychopharmacology 194:243-252

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MTEP	mGluR5 antagonist	Distress vocalizations	Female and male CD rat pups (8-10-day-old, 17-30g)	1-30	ip, 30	+		Hodgson et al., 2008	Pharmacol. Biochem. Behav. 88:341-348
MTEP	mGluR5 antagonist	Conditioned fear	Sprague-Dawley rats (220-250g)	5	ip, 30	+	(1) Shocks of 0.45 mA/1 s were delivered; (2) The drug was given on training day	Gravius et al., 2008	J. Neural Transm. 115:1609-1619
MTEP	mGluR5 antagonist	Conditioned fear	Sprague-Dawley rats (220-250g)	5	ip, 30	+	(1) Shocks of 0.45 mA/1 s were delivered; (2) The drug was given on test day	Gravius et al., 2008	J. Neural Transm. 115:1609-1619
MTEP	mGluR5 antagonist	Conditioned fear	Sprague-Dawley rats (220-250g)	5	ip, for 4 days	+	(1) Shocks of 0.45 mA/1 s were delivered; (2) The drug was given on training day	Gravius et al., 2008	J. Neural Transm. 115:1609-1619
MTEP	mGluR5 antagonist	Conditioned fear	Sprague-Dawley rats (220-250g)	5	ip, for 4 days	+	(1) Shocks of 0.45 mA/1 s were delivered; (2) The drug was given on test day	Gravius et al., 2008	J. Neural Transm. 115:1609-1619
MTEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-250g)	2.5-5	ip, 30	+		Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
MTEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (200-250g)	2.5-5	ip, 30	+	Anxiety was increased by withdrawal from ethanol	Kotlinska and Bochenski, 2008	Eur. J. Pharmacol. 598:57-63
MTEP	mGluR5 antagonist	Conflict test	Sprague-Dawley rats (225-249g)	3-10	ip, 45	+	The shock intensity was individually adjusted (0.25-0.5 mA)	Rodriguez et al., 2010	Mol. Pharmacol. 78:1105-1123
MTEP	mGluR5 antagonist	Marble burying	CD1 mice (30-35g)	10-15	ip, 15	+		Rodriguez et al., 2010	Mol. Pharmacol. 78:1105-1123
MTEP	mGluR5 antagonist	Elevated plus-maze	Mice			+		Mareš et al., 2010	Epilepsia 51 (Supppl. 3):24-26
MTEP	mGluR5 antagonist	Elevated plus-maze	Wistar rats (12-25-day-old)	20-40	ip, 60	+	Animals were exposed to the test 15 min, 60 min and 24 h after administration	Tichá et al., 2011	Pharmacol. Biochem. Behav. 99:619-625

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MTEP	mGluR5 antagonist	Open-field	Wistar rats (12-25-day-old)	20-40	ip, 60	+	Animals were exposed to the test 20 and 65 min after administration	Tichá et al., 2011	Pharmacol. Biochem. Behav. 99:619-625
MTEP	mGluR5 antagonist	Elevated plus-maze	Syrian hamsters (*M. auratus*, 3-6-month-old)	10	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain Res. 218:8-14
MTEP	mGluR5 antagonist	Marble burying	Harlan CD1 mice (30-35g)	15	ip, 15	+		Mueller et al., 2012	ChemMedChem. 7:406-414
MTEP	mGluR5 antagonist	Ultrasonic distress vocalizations	Wistar rats (175-200g)	6-24	ip, 30	+	Shocks of 0.5 mA/1 s were applied	Varga et al., 2012	Pharmacol. Biochem. Behav. 103:425-430
MTEP+diazepam (0.6 mg/kg)	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	0.025	ip, 60	(+)	(1) Synergistic action; (2) Shocks of 0.5 mA were applied	Kłodzińska et al., 2004	Neuropharmacology 47:342-350
MTEP+flumazenil (10 mg/kg)	mGluR5 antagonist	Vogel conflict test	Wistar rats (230-270g)	1	ip, 60	+	(1) No antagonism; (2) Shocks of 0.5 mA were applied	Kłodzińska et al., 2004	Neuropharmacology 47:342-350
MTEP+mGluR5 KO mice	mGluR5 antagonist	Stress-induced hyperthermia	B6/129 background mice (25-35g)	16	sc, 60	o	(1) The anxiolytic-like activity of MTEP was lost; (2) The stressor was an injection	Brodkin et al., 2002	Eur. J. Neurosci. 16:2241-2244
Mutant mice	mGluR5 deletion	Stress-induced hyperthermia	B6/129 background mice (25-35g)			+	(1) Mice displayed an anxiolytic-like phenotype; (2) the stressor was the rectal probing	Brodkin et al., 2002	Eur. J. Neurosci. 16:2241-2244
Mutant mice	mGluR5 deletion	Stress-induced hyperthermia	B6/129 background mice (25-35g)			+	(1) Mice displayed an anxiolytic-like phenotype; (2) the stressor was an intruder	Brodkin et al., 2002	Eur. J. Neurosci. 16:2241-2244
Mutant mice	mGluR5 deletion	Stress-induced hyperthermia	B6/129 background mice (25-35g)			+	(1) Mice displayed an anxiolytic-like phenotype; (2) the stressor was an injection	Brodkin et al., 2002	Eur. J. Neurosci. 16:2241-2244

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	mGluR5 deletion	Conditioned fear	129Sv/C57BL/6 background mice (8-12-week-old)			o	No difference between both genotypes	Ko et al., 2005	J. Neurosci. 25:977-984
Mutant mice	mGluR6 deletion	Conditioned fear	129Sv/C57BL/6 background mice (8-12-week-old)			+	Knockout mice showed reduced fear memory when tested 3, 7 or 14 days after training	Ko et al., 2005	J. Neurosci. 25:977-984
Mutant mice	mGluR8 deletion	Open-field	C57BL/6 background mice (6-month-old)			-	Knockout mice showed increased anxiety-like behavior	Duvoisin et al., 2005	Eur. J. Neurosci. 22:425-436
Mutant mice	mGluR8 deletion	Elevated plus-maze	C57BL/6 background mice (6-month-old)			-	Knockout mice showed increased anxiety-like behavior	Duvoisin et al., 2005	Eur. J. Neurosci. 22:425-436
Mutant mice	mGluR8 deletion	Elevated plus-maze	ICR background mice (12-week-old)			-	Knockout mice showed increased anxiety-like behavior	Linden et al., 2002	Neuropharmacology 43:251-259
Mutant mice	mGluR8 deletion	Elevated plus-maze	ICR background mice (24-week-old)			-	Knockout mice showed increased anxiety-like behavior	Linden et al., 2002	Neuropharmacology 43:251-259
Mutant mice	mGluR8 deletion	Elevated plus-maze	ICR background mice (12-week-old)			o	(1) No difference between both genotypes; (2) animals were tested under fluorescent light conditions	Linden et al., 2002	Neuropharmacology 43:251-259
Mutant mice	mGluR8 deletion	Elevated plus-maze	ICR background mice (12-week-old)			o	(1) No difference between both genotypes; (2) animals were submitted to restraint stress	Linden et al., 2002	Neuropharmacology 43:251-259
Mutant mice	mGluR7 deletion	Open-field	Female and male C57BL/6 background mice (8-10-week-old)			o	No difference between both genotypes	Callaerts-Vegh et al., 2006	J. Neurosci. 26:6573-6582
Mutant mice	mGluR7 deletion	Elevated plus-maze	Female and male C57BL/6 background mice (8-10-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Callaerts-Vegh et al., 2006	J. Neurosci. 26:6573-6582

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	mGluR7 deletion	Marble burying	Female and male C57BL/6 background mice (8-10-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Callaerts-Vegh et al., 2006	J. Neurosci. 26:6573-6582
Mutant mice	mGluR7 deletion	Passive-avoidance	Female and male C57BL/6 background mice (8-10-week-old)			+	(1) Knockout mice had a reduced latency to enter the unknown dark compartment; (2) Electric shocks of 0,2 mA/2 s were applied	Callaerts-Vegh et al., 2006	J. Neurosci. 26:6573-6582
Mutant mice	mGluR7 deletion	Conditioned emotional response	Female and male C57BL/6 background mice (8-10-week-old)			+	(1) KO animals had a higher resistance to extinction of fear-elicited response suppression; (2) A VI-30s schedule was used	Callaerts-Vegh et al., 2006	J. Neurosci. 26:6573-6582
Mutant mice	mGluR7 deletion	Elevated plus-maze	129/OlaxC57BL/6 background mice (10-14-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Cryan et al., 2003	Eur. J. Neurosci. 17:2409-2417
Mutant mice	mGluR7 deletion	Light/dark test	129/OlaxC57BL/6 background mice (10-14-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Cryan et al., 2003	Eur. J. Neurosci. 17:2409-2417
Mutant mice	mGluR7 deletion	Staircase test	129/OlaxC57BL/6 background mice (10-14-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Cryan et al., 2003	Eur. J. Neurosci. 17:2409-2417
Mutant mice	mGluR7 deletion	Stress-induced hyperthermia	129/OlaxC57BL/6 background mice (10-14-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Cryan et al., 2003	Eur. J. Neurosci. 17:2409-2417
Mutant mice	NR2A deletion	Elevated plus-maze	Female and male C57BL/6xCBA background mice (at least 10-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Boyce-Rustay and Holmes, 2006	Neuropsychopharmacology 2006
Mutant mice	NR2A deletion	Light/dark test	Female and male C57BL/6xCBA background mice (at least 10-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Boyce-Rustay and Holmes, 2006	Neuropsychopharmacology 2006

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	NR2A deletion	Open-field	Female and male C57BL/6xCBA background mice (at least 10-week-old)			+	Knockout mice showed decreased anxiety-like behavior	Boyce-Rustay and Holmes, 2006	Neuropsychopharmacology 2006
Mutant mice	mGluR8 knockout	Elevated plus-maze	Female and male 129/OlaHsdxC57Bl/6 mice (20-30g)			-	Knockout mice showed increased anxiety-like behavior	Robbins et al., 2007	Brain Res. 1152:215-227
Mutant mice	mGluR8 knockout	Open-field	Female and male 129/OlaHsdxC57Bl/6 mice (20-30g)			-	Knockout mice showed increased anxiety-like behavior	Robbins et al., 2007	Brain Res. 1152:215-227
Mutant mice	mGluR1 deletion	Conditioned fear	C57BL/6 background mice (10-12-month-old)			+	(1) KO mice exhibited a complete lack of cue- and context-induced fear behavior; (2) Shock of 0.4 mA/2 s was applied the day before	Humeau et al., 2007	J. Neurosci. 27:10947-10956
Mutant mice	mGluR3 deletion	Conditioned fear	C57BL/6 background mice (10-12-month-old)			o	(1) No phentopic difference on cue- and context-induced fear behavior; (2) Shock of 0.4 mA/2 s was applied the day before	Humeau et al., 2007	J. Neurosci. 27:10947-10956
Mutant mice	mGluR7 deletion	Stress-induced hyperthermia	C57Bl/6J background mice (18-23g)			o	No phenotype	Stachowicz et al., 2008	Behav. Pharmacol. 19:597-603
Mutant mice	GluD1 knockout	Open-field	129/SvEvxC57BL/6 background mice (8-week-old-old)			+		Yadav et al., 2012	PLoS ONE 7:e32969
Mutant mice	GluD1 knockout	Elevated plus-maze	129/SvEvxC57BL/6 background mice (8-week-old-old)			+		Yadav et al., 2012	PLoS ONE 7:e32969
Mutant mice	GluD1 knockout	Marble burying	129/SvEvxC57BL/6 background mice (8-week-old-old)			+		Yadav et al., 2012	PLoS ONE 7:e32969

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	GluA3 deletion	Elevated plus-maze	(129X1/SvJx129S1)xC57BL/6J mice (4-9-month-old)			o		Adamczyk et al., 2012	Behav. Brain Res. 229:265-272
Mutant mice	GluA3 deletion	Light/dark test	(129X1/SvJx129S1)xC57BL/6J mice (4-9-month-old)			o		Adamczyk et al., 2012	Behav. Brain Res. 229:265-272
Mutant mice	GluN2B knock-in	Elevated plus-maze	C57BL/6J mice (8-12-week-old)			-	KI mice express a Tyr-1472-Phe mutant of GluN2B	Delawary et al., 2010	Mol. Brain 3:37
Mutant mice	mGluR1 knockout	Light/dark test	C57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR1 knockout	Marble burying	C57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR1 knockout	Social interaction	C57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR1 knockout	Acoustic startle reflex	C57BL/6J mice (2-4-month-old)			-		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR1 knockout	Light/dark test	Fmr1 KOxC57BL/6J mice (2-4-month-old)			+		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR1 knockout	Marble burying	Fmr1 KOxC57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR1 knockout	Social interaction	Fmr1 KOxC57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR1 knockout	Acoustic startle reflex	Fmr1 KOxC57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR5 knockout	Light/dark test	C57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR5 knockout	Marble burying	C57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR5 knockout	Social interaction	C57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR5 knockout	Acoustic startle reflex	C57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	mGluR5 knockout	Light/dark test	Fmr1 KOxC57BL/6J mice (2-4-month-old)			+		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR5 knockout	Marble burying	Fmr1 KOxC57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR5 knockout	Social interaction	Fmr1 KOxC57BL/6J mice (2-4-month-old)			o		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR5 knockout	Acoustic startle reflex	Fmr1 KOxC57BL/6J mice (2-4-month-old)			+		Thomas et al., 2011	Behav. Brain Res. 223:310-321
Mutant mice	mGluR8 knockout	Elevated zero-maze	C57BL/6J mice (2-year-old)			-		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
Mutant mice	mGluR8 knockout	Social interaction	C57BL/6J mice (2-year-old)			+		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
Mutant mice	mGluR8 knockout	Acoustic startle reflex	C57BL/6J mice (2-year-old)			o		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
Mutant mice	GluK4 knockout	Elevated zero-maze	129Sv/C57BL/6 mice (>8-week-old)			+		Catches et al., 2012	Behav. Brain Res. 228:406-414
Mutant mice	GluK4 knockout	Marble burying	129Sv/C57BL/6 mice (>8-week-old)			+		Catches et al., 2012	Behav. Brain Res. 228:406-414
Mutant mice	mGluR4 knockout	Open-field	Female and Male C57BL/6 mice (6-month-old)			+	Phenotype only observed in Females	Davis et al., 2012	Behav. Brain Res. 229:21-28
Mutant mice	mGluR4 knockout	Elevated zero-maze	Female and Male C57BL/6 mice (6-month-old)			+	Phenotype only observed in Females	Davis et al., 2012	Behav. Brain Res. 229:21-28
Mutant mice	mGluR4 knockout	Open-field	Female and Male C57BL/6 mice (12-month-old)			-		Davis et al., 2012	Behav. Brain Res. 229:21-28
Mutant mice	mGluR4 knockout	Elevated zero-maze	Female and Male C57BL/6 mice (12-month-old)			-		Davis et al., 2012	Behav. Brain Res. 229:21-28
Mutant mice	NMDAR	Elevated plus-maze	Female and Male Grin1D481N (C57BL/6J, 8-12-week-old)			+		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	NMDAR	Open-field	Female and Male Grin1D481N (C57BL/6J, 8-12-week-old)			+		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Novel object	Female and Male Grin1D481N (C57BL/6J, 8-12-week-old)			+		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Elevated plus-maze	Female and Male Dao1G181R (C57BL/6J, 8-12-week-old)			-		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Open-field	Female and Male Dao1G181R (C57BL/6J, 8-12-week-old)			-		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Novel object	Female and Male Dao1G181R (C57BL/6J, 8-12-week-old)			o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Elevated plus-maze	Female and Male Dao1G181R (ddY, 8-12-week-old)			-		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Open-field	Female and Male Dao1G181R (ddY, 8-12-week-old)			-		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Elevated plus-maze	Grin1D481NxDao1G181R (C57BL/6J, 8-12-week-old)			o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Open-field	Grin1D481NxDao1G181R (C57BL/6J, 8-12-week-old)			o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	NMDAR	Novel object	Grin1D481NxDao1G181R (C57BL/6J, 8-12-week-old)			o		Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice	mGluR7 knock-in	Open-field	129/OLAxC57BL6/6J mice			o		Zhang et al., 2008	J. Neurosci. 28:8604-8614
Mutant mice	mGluR7 knock-in	Acoustic startle reflex	129/OLAxC57BL6/6J mice			o		Zhang et al., 2008	J. Neurosci. 28:8604-8614

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	mGluR7 knock-in	Elevated plus-maze	129/OLAxC57BL6/6J mice			o		Zhang et al., 2008	J. Neurosci. 28:8604-8614
Mutant mice	GluR5 knockout	Elevated plus-maze	129SvxC57BL/6 mice (6-10-week-old)			-		Wu et al., 2007	PLoS ONE 2:e167
Mutant mice	GluR5 knockout	Light/dark test	129SvxC57BL/6 mice (6-10-week-old)			-		Wu et al., 2007	PLoS ONE 2:e167
Mutant mice	mGluR5 knock-down	Elevated plus-maze	$mGluR5^{KD-D1}$ mice (8-16-week-old)			o	Mice had loss of mGluR5 from neurons expressing dopamine D1 receptor	Parkitna et al., 2012	Biol. Psychiatry 73:263-270
Mutant mice	mGluR5 knock-down	Light/dark test	$mGluR5^{KD-D1}$ mice (8-16-week-old)			o	Mice had loss of mGluR5 from neurons expressing dopamine D1 receptor	Parkitna et al., 2012	Biol. Psychiatry 73:263-270
Mutant mice+ALX-5407 (1 mg/kg)	NMDAR	Elevated plus-maze	Grin1D481N (C57BL/6J, 8-12-week-old)			(o)	Attenuation of anxiolytic-like phenotype	Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice+ALX-5407 (1 mg/kg)	NMDAR	Open-field	Grin1D481N (C57BL/6J, 8-12-week-old)			(o)	Attenuation of anxiolytic-like phenotype	Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice+ALX-5407 (1 mg/kg)	NMDAR	Novel object	Grin1D481N (C57BL/6J, 8-12-week-old)			(o)	Attenuation of anxiolytic-like phenotype	Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice+d-serine (600 mg/kg)	NMDAR	Elevated plus-maze	Grin1D481N (C57BL/6J, 8-12-week-old)			(o)	Attenuation of anxiolytic-like phenotype	Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice+d-serine (600 mg/kg)	NMDAR	Open-field	Grin1D481N (C57BL/6J, 8-12-week-old)			(o)	Attenuation of anxiolytic-like phenotype	Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant mice+d-serine (600 mg/kg)	NMDAR	Novel object	Grin1D481N (C57BL/6J, 8-12-week-old)			(o)	Attenuation of anxiolytic-like phenotype	Labrie et al., 2009	Pharmacol. Biochem. Behav. 91:610-620
Mutant rats	mGluR2 knockdown	Open-field	Wistar rats (6-week-old)			-		Ceolin et al., 2011	J. Neurosci. 31:6721-6731
Mutant rats	mGluR2 knockdown	Elevated plus-maze	Wistar rats (6-week-old)			-		Ceolin et al., 2011	J. Neurosci. 31:6721-6731
NBQX	AMPA antagonist	Elevated plus-maze	Rats	3		+		Kapus et al., 2003	Eur. Neuropsychopharmacology 13 (Suppl. 4):S362

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NBQX	AMPA antagonist	Elevated plus-maze	C57BL/6 mice (22-27g)	10	ip, 15	-		Karcz-Kubicha and Lijequist, 1995	Eur. J. Pharmacol. 279:171-177
NBQX	AMPA antagonist	Elevated plus-maze	Wistar rats (200-250g)	1-10 nmol/0.25 µl	dorso medial hypothalamus, 10	o	The drug also decreased exploration behavior	Jardim and Guimarães, 2004	Pharmacol. Biochem. Behav. 79:541-546
NBQX	AMPA antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	0.79-7.9 nmol/0.5 µl	deep layers of the superior colliculus/deep mesencephalic nucleus, 0	+	The drug reduced the expression, but not the acquisition of fear-potentiated startle	Zhao and Davis, 2004	J. Neurosci. 24:10326-10334
NBQX	AMPA antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	0.79 nmol/0.5 µl	dorsal/lateral PAG, 0	o	The drug failed to modify both the expression and the acquisition of fear-potentiated startle	Zhao and Davis, 2004	J. Neurosci. 24:10326-10334
NBQX	AMPA antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	0.79 nmol/0.5 µl	mesencephalic reticular formation, 0	o		Zhao and Davis, 2004	J. Neurosci. 24:10326-10334
NBQX	AMPA antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	7.9 nmol/0.5 µl	superficial layers, 0	o		Zhao and Davis, 2004	J. Neurosci. 24:10326-10334
NBQX	AMPA antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	3	po, 60	+		Kapus et al., 2008	Psychopharmacology 198:231-241
NBQX	AMPA antagonist	Light/dark test	NMRI mice (33g)	3-30	ip, 30	o		Kapus et al., 2008	Psychopharmacology 198:231-241
NBQX	AMPA antagonist	Vogel conflict test	Wistar rats (220-280g)	1-10	ip, 30	o	Shocks of 0,6 mA/600 ms were applied	Kapus et al., 2008	Psychopharmacology 198:231-241
NBQX	AMPA antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	0.79 nmol/0.5 µl	dorsolateral PAG, 5	o		Zhao et al., 2008	Neuropsychopharmacology doi:10.1038/npp.2008.55
NBQX	AMPA antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (400-450g)	0.79 nmol/0.5 µl	superior colliculus, 5	+		Zhao et al., 2008	Neuropsychopharmacology doi:10.1038/npp.2008.55
NBQX+mCPP (0.5 mg/kg)	AMPA antagonist	Light/dark test	Wistar rats (180-220g)	3-30	ip, 20	-	The drug did not reverse anxiogenic-like effects of mCPP	Kapus et al., 2008	Psychopharmacology 198:231-241

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NBQX+SIN-1 (300 nmol)	AMPA antagonist	Flight behavior	Wistar rats (220-240g)	100 nmol/0.2 µl	dorsal PAG, 10	(o)	The drug blocked flight behavior induced by the nitric oxide donor SIN-1	Moreira et al., 2004	Psychopharmacology 171:199-203
Neramexane	NMDA channel blocker	Distress vocalizations	CFW mouse pups (7-day-old)	10-30	sc, 30-45	+/-	The drug produced a biphasic effect and increased locomotion	Takahashi et al., 2009	Psychopharmacology 204:61-71
NMDA	Endogenous ligand	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (9-11-day old, 20-25g)	2.5-5	sc, 30	+		Winslow et al., 1990	Eur. J. Pharmacol. 190:11-21
NMDA	Endogenous ligand	Vogel conflict test	Sprague-Dawley rats (250-350g)	0.125-0.5 µg/5 µl	icv, 7	o	Electric shocks of 0.16 mA, 2s	Söderpalm et al., 1995	Pharmacol. Toxicol. 76:122-127
NMDA	Endogenous ligand	Elevated plus-maze	Wistar rats (225-250g)	15-30	ip, 30	-		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
NMDA	Endogenous ligand	Social interaction	Wistar rats (225-250g)	30	ip, 30	-		Dunn et al., 1989	Eur. J. Pharmacol. 169:1-10
NMDA	Endogenous ligand	Flight behavior	Wistar rats (220-240g)	0.1 nmol/0.2 µl	dorsal PAG, 0	-		Aguiar et al., 2006	Pharmacol. Biochem. Behav. 83:296-301
NMDA	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	-	The drug increased inhibitory avoidance	Bertoglio et al., 2006	Life Sci. 79:2238-2244
NMDA	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio et al., 2006	Life Sci. 79:2238-2244
NMDA	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	-	The drug increased inhibitory avoidance	Bertoglio and Zangrossi, 2006	Behav. Pharmacol. 17:589-596
NMDA	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o		Bertoglio and Zangrossi, 2006	Behav. Pharmacol. 17:589-596
NMDA	Endogenous ligand	Elevated plus-maze	Swiss mice (25-35g)	0.02 nmol/0.1 µl	PAG, 8-10	-		Tadeu Miguel et al., 2009	Brain Res. 1240:39-46
NMDA	Endogenous ligand	Rat exposure test	Swiss mice (25-35g)	0.04 nmol/0.1 µl	dorsal PAG, 10	-		Carvalho-Netto et al, 2009	Psychopharmacology 204:617-625
NMDA	Endogenous ligand	Elevated plus-maze	Wistar rats (280-330g, 12-16-week-old)	25 pmol/0.3 µl	dorsal PAG, 5	-		Moraes et al., 2008	Behav. Brain Res. 194:181-186

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NMDA+AP-7 (1 nmol/,2 µl)	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	(o)	Antagonism of the anxiogenic-like effects of NMDA	Bertoglio and Zangrossi, 2006	Behav. Pharmacol. 17:589-596
NMDA+AP-7 (1 nmol/,2 µl)	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o	No interaction	Bertoglio and Zangrossi, 2006	Behav. Pharmacol. 17:589-596
NMDA+carboxy-PTIO (1-3 nmol/0.2 µl)	Endogenous ligand	Flight behavior	Wistar rats (220-240g)	0.1 nmol/0.2 µl	dorsal PAG, 0	-	No interaction with the NO scavenger	Aguiar et al., 2006	Pharmacol. Biochem. Behav. 83:296-301
NMDA+L-NAME (100-200 nmol/0.2 µl)	Endogenous ligand	Flight behavior	Wistar rats (220-240g)	0.1 nmol/0.2 µl	dorsal PAG, 0	-	No interaction with the NOS inhibitor	Aguiar et al., 2006	Pharmacol. Biochem. Behav. 83:296-301
NMDA+LY225910 (0,05 nmol/0,2 µl)	Endogenous ligand	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o	No interaction	Bertoglio et al., 2006	Life Sci. 79:2238-2244
NMDA+LY225910 (0,05 nmol/0,2 µl)	Endogenous ligand	Escape behavior in the elevated T-maze	Wistar rats (250-270g)	50 pmol/0,2 µl	dorsolateral PAG, 10	o	No interaction	Bertoglio et al., 2006	Life Sci. 79:2238-2244
NMDA+NPLA (0,1-0.4 nmol/0.1 µl)	Endogenous ligand	Rat exposure test	Swiss mice (25-35g)	0.04 nmol/0.1 µl	dorsal PAG, 10	(o)	Antagonism of the effects of NMDA	Carvalho-Netto et al, 2009	Psychopharmacology 204:617-625
NMDA+NPLA (0.4 nmol/0.1 µl)	Endogenous ligand	Elevated plus-maze	Swiss mice (25-35g)	0.02 nmol/0.1 µl	PAG, 8-10	(o)	Antagonism of the effects of NMDA	Tadeu Miguel et al., 2009	Brain Res. 1240:39-46
NMDA+ODQ (1-3 nmol/0.2 µl)	Endogenous ligand	Flight behavior	Wistar rats (220-240g)	0.1 nmol/0.2 µl	dorsal PAG, 0	-	No interaction with the guanylate cyclase inhibitor	Aguiar et al., 2006	Pharmacol. Biochem. Behav. 83:296-301
NPC 12626	NMDA antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-360g)	10-30	ip, 60	+	VI-30 schedule was used	Willetts et al., 1993	J. Pharmacol. Exp. Ther. 265:1055-1061
NPC 12626	NMDA antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (260-320g)	30-56	ip, 30	+	Shock levels ranged from 0.2 to 1.0 mA	Wiley et al., 1992	Life Sci. 50:1519-1528
NPC 12626	NMDA antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (260-320g)	30	ip, o.d. for 6 days	+	(1) Anticonflict effects for all but the first and fifth days; (2) Shock levels ranged from 0.2 to 1.0 mA	Wiley et al., 1992	Life Sci. 50:1519-1528
NPC 12626	NMDA antagonist	Conflict test	Squirrel monkeys (*Saimiri sciureus*, 600-800g)	3-30	im, 30	o	A multiple schedule of reinforcement with 2 components was used	Mansbach et al., 1991	Pharmacol. Biochem. Behav. 39:977-981

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
NPC 12626	NMDA antagonist	Conflict test	Squirrel monkeys (*Saimiri sciureus*, 600-800g)	17	im, o.d. for 4 days	o	A multiple schedule of reinforcement with 2 components was used	Mansbach et al., 1991	Pharmacol. Biochem. Behav. 39:977-981
NPC 17742	NMDA antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-360g)	3	ip, 60	+	VI-30 schedule was used	Willetts et al., 1993	J. Pharmacol. Exp. Ther. 265:1055-1061
NPC 17742	NMDA antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-360g)	3	ip, 10 min to 4 h	+	VI-30 schedule was used	Willetts et al., 1993	J. Pharmacol. Exp. Ther. 265:1055-1061
NPC 17742	NMDA antagonist	Geller-Seifter conflict test	Sprague-Dawley rats (330-360g)	3	ip, o.d. for 5 days	+	VI-30 schedule was used	Willetts et al., 1993	J. Pharmacol. Exp. Ther. 265:1055-1061
NPC 17742	NMDA antagonist	Elevated plus-maze	ICR mice (15-20g)	17.6	ip, 30	+		Wiley et al., 1995	Eur. J. Pharmacol. 294:101-107
NPLA	nNOS inhibitor	Elevated plus-maze	Swiss mice (25-35g)	0.2-0.8 nmol/0.1 µl	PAG, 8-10	o		Tadeu Miguel et al., 2009	Brain Res. 1240:39-46
NPLA	nNOS inhibitor	Rat exposure test	Swiss mice (25-35g)	0.4 nmol/0.1 µl	dorsal PAG, 10	+		Carvalho-Netto et al, 2009	Psychopharmacology 204:617-625
ORG-24461	GlyT1 inhibitor	Stress-induced hyperthermia	DBA/2 mice (25-35g)	0.1-3	ip, 60	o	Mice were exposed to cat feces to produce hyperthermia	Rorick-Kehn et al., 2005	Psychopharmacology 183:226-240
PCP	NMDA channel blocker	Conflict test	White Carneau pigeons (500-600g)	0.16-0.63	im, 5	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
PCP	NMDA channel blocker	Geller-Seifter conflict test	Sprague-Dawley rats (260-320g)	3	ip, 15	+	Shock levels ranged from 0.2 to 1.0 mA	Wiley et al., 1992	Life Sci. 50:1519-1528
PCP	NMDA channel blocker	Geller-Seifter conflict test	Sprague-Dawley rats (260-320g)	2	ip, o.d. for 6 days	+	(1) Anticonflict effects only at day 2; (2) Shock levels ranged from 0.2 to 1.0 mA	Wiley et al., 1992	Life Sci. 50:1519-1528
PCP	NMDA channel blocker	Conflict test	Sprague-Dawley rats (250-288g)	1-2	ip	+	A multiple FI90/FI90 (punishment) schedule was used	McMillan et al., 1991	J. Pharmacol. Exp. Ther. 258:1015-1018
PCP	NMDA channel blocker	Conflict test	Squirrel monkeys (*Saimiri sciureus*, 600-	0.03-0.3	im, 10	o	A multiple schedule of reinforcement with 2 components was used	Mansbach et al., 1991	Pharmacol. Biochem. Behav. 39:977-981

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			800g)						
PCP	NMDA channel blocker	Ultrasonic distress vocalizations	Wistar rats (200g	ED50=0.3	ip, 15	+	2 mA scrambled shocks of 2 s were applied	De Vry et al., 1993	Eur. J. Pharmacol. 249:331-339
PCP	NMDA channel blocker	Elevated plus-maze	ICR mice (15-20g)	3-2.2	ip, 10	+	Positive effects on open arm entries only	Wiley et al., 1995	Eur. J. Pharmacol. 294:101-107
PCP	NMDA channel blocker	Elevated plus-maze	Female hooded-Lister rats (200-250g)	2	ip, twice daily for 7 days	o		Mc Lean and Neill, 2010	J. Psychopharmacol. 24:787-90
PCP	NMDA channel blocker	Open-field	Female hooded-Lister rats (200-250g)	2	ip, twice daily for 7 days	o		McLean et al., 2010	J. Psychopharmacol. 24:787-790
PCP	NMDA channel blocker	Elevated plus-maze	Male Wistar rats (200-225g)	5	ip, for 7 days	+		Seiller and Giuffrida, 2011	Pharmacol. Biochem. Behav. 98:583-586
PCP	NMDA channel blocker	Ultrasonic distress vocalizations	Juvenile Sprague-Dawley rats (100g)	5	ip, for 14 days	-	Calls were induced by acoustic startle	Tunstall et al., 2009	Behav. Brain Res. 202:184-191
PCP+AM251 (1 mg/kg)	NMDA channel blocker	Elevated plus-maze	Male Wistar rats (200-225g)	5	ip, for 7 days	(o)		Seiller and Giuffrida, 2011	Pharmacol. Biochem. Behav. 98:583-586
PCP+AM251 (1 mg/kg)+URB597 (0.3 mg/kg)	NMDA channel blocker	Elevated plus-maze	Male Wistar rats (200-225g)	5	ip, for 7 days	(o)		Seiller and Giuffrida, 2011	Pharmacol. Biochem. Behav. 98:583-586
PCP+midazolam (0.03-3 mg/kg)	NMDA channel blocker	Conflict test	Squirrel monkeys (*Saimiri sciureus*, 600-800g)	0.03	im, 10	+	(1) There was no interaction with the BZ; (2) A multiple schedule of reinforcement with 2 components was used	Mansbach et al., 1991	Pharmacol. Biochem. Behav. 39:977-981
PCP+URB597 (0.3 mg/kg)	NMDA channel blocker	Elevated plus-maze	Male Wistar rats (200-225g)	5	ip, for 7 days	(o)		Seiller and Giuffrida, 2011	Pharmacol. Biochem. Behav. 98:583-586
PEPA	AMPA potentiator	Conditioned fear	C57BL/6J mice (10-12-week-old)	30	ip, 15 or 30	o	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before re-exposure	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
PEPA	AMPA potentiator	Conditioned fear	C57BL/6J mice (10-12-week-old)	0.2 µl/side	amygdala, 15	o	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before re-exposure	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
PEPA	AMPA potentiator	Conditioned fear	C57BL/6J mice (10-12-week-old)	30	ip, 15 or 30	+	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before extinction training 1	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
PEPA	AMPA potentiator	Conditioned fear	C57BL/6J mice (10-12-week-old)	30	ip, 15 or 30	o	(1) Footshocks of 0.8 mA/2 s were applied; (2) Drug was given before extinction training 2	Yamada et al., 2009	Neuropsychopharmacology 34:2574-2584
PEPA	AMPA potentiator	Conditioned fear	129S1/SvImJ (3-5-month-old)	10-30	po, 15	o	(1) Drug was given prior to extinction training; (2) Shocks of 0.5 mA/1 s were applied	Whittle et al., 2013	Neuropharmacology 64:414-423
PHCCC	mGluR4 allosteric modulator	Vogel conflict test	Wistar rats (230-250g)	12.5 nmol/0.5 µl	basolateral amygdala, 10	+	Shocks of 0.5 mA were applied	Stachowicz et al., 2004	Eur. J. Pharmacol. 498:153-156
PHCCC	mGluR4 allosteric modulator	Vogel conflict test	Wistar rats (230-270g)	12 nmol/0.5 µl	hippocampus, 10	+	The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
PHCCC+ACPT-I (3,75 nmol/0,5 µl)	mGluR4 allosteric modulator	Vogel conflict test	Wistar rats (230-270g)	6 nmol/0.5 µl	hippocampus, 10	o	(1) No interaction; (2) The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
PHCCC+CPPG (75 nmol/0,5 µl)	mGluR4 allosteric modulator	Vogel conflict test	Wistar rats (230-270g)	12 nmol/0.5 µl	hippocampus, 10	(o)	(1) Antagonism of the effects of PHCCC; (2) The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
PHCCC+flumazenil (10 mg/kg)	mGluR4 allosteric modulator	Vogel conflict test	Wistar rats (230-270g)	12 nmol/0.5 µl	hippocampus, 10	(o)	(1) Antagonism of the effects of PHCCC; (2) The shock intensity was 0.5 mA	Stachowicz et al., 2006	Pharmacol. Rep. 58:820-826
Quisqualic acid	AMPA agonist	Dark/light preference tank test	Zebrafish (*D. rerio*)	0.00054	immersion, 0	+		Del Valle-Mojica and Ortiz, 2012	Planta Med. Doi:10.1055/s-0032-1315240

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Riluzole	Glutamate channel blocker	Conflict test	White Carneau pigeons (500-600g)	2.5-20	im, 5	o	Multiple FR30:FR30 schedule was used	Koek and Colpaert, 1991	Life Sci. 49:PL37-PL42
Ro 25-6981	NMDA NR2B antagonist	Conditioned fear	C57BL/6J (2-4-month-old)	3-10	ip, 30	+	(1) Shocks of 0.6 mA/2 s were delivered; (2) Multi-trial Conditioned fear stress was used	Mathur et al., 2009	Pharmacol. Biochem. Behav. 91:453-460
Ro 25-6981	NMDA NR2B antagonist	Conditioned fear	C57BL/6J (2-4-month-old)	10	ip, 30	+	(1) Shocks of 0.6 mA/2 s were delivered; (2) One-trial Conditioned fear stress was used	Mathur et al., 2009	Pharmacol. Biochem. Behav. 91:453-460
Ro 25-6981	NMDA NR2B antagonist	Conditioned fear	C57BL/6J (2-4-month-old)	10	ip, 30	+	Multi-trial low-shock (0.3 mA/2 s) Conditioned fear stress was used	Mathur et al., 2009	Pharmacol. Biochem. Behav. 91:453-460
Ro 25-6981	NMDA NR2B antagonist	Conditioned fear	C57BL/6J (12-month-old)	1-10	ip, 30	o	Shocks of 0.6 mA/2 s were delivered	Mathur et al., 2009	Pharmacol. Biochem. Behav. 91:453-460
Ro 25-6981	NMDA NR2B antagonist	Elevated plus-maze	C57BL/6J (2-4-month-old)	1-10	ip, 30	o		Mathur et al., 2009	Pharmacol. Biochem. Behav. 91:453-460
Ro 25-6981	NMDA NR2B antagonist	Open-field	C57BL/6J (2-4-month-old)	1-10	ip, 30	-		Mathur et al., 2009	Pharmacol. Biochem. Behav. 91:453-460
Ro 25-6981	NMDA NR2B antagonist	Acoustic startle reflex	C57BL/6J (2-4-month-old)	1-10	ip, 30	o		Mathur et al., 2009	Pharmacol. Biochem. Behav. 91:453-460
RS-PPG	mGluR8 agonist	Vogel conflict test	Wistar rats (200-250g)	12.5-50 nmol/0.5 µl/site	hippocampus, 10	o	The shock intensity was 0.5 mA	Pałucha et al., 2004	Neuropharmacology 46:151-159
S-(-)-HA-966	NMDA glycine-B partial agonist	Elevated plus-maze	Wistar rats (200-250g)	3-10	ip, 30	o		Dunn et al., 1992	Eur. J. Pharmacol. 214:207-214
S-(-)-HA-966	NMDA glycine-B partial agonist	Social interaction	Wistar rats (250-300g)	3-10	ip, 30	o		Dunn et al., 1992	Eur. J. Pharmacol. 214:207-214
S-(-)-HA-966	NMDA glycine-B partial agonist	Conflict test	Wistar rats (300-350g)	1-10	ip, 30	o	VI-30/FR-10 schedule was used	Dunn et al., 1992	Eur. J. Pharmacol. 214:207-214
S-4C3H-PG	Group 1 mGluR antagonist	Vogel conflict test	Wistar rats (230-270g)	30.1 nmol/1 µl site	hippocampus, 10	+	The shock intensity was 0.5 mA	Chojnacka-Wójcik et al., 1997	Eur. J. Pharmacol. 319:153-156

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Spermidine	NMDA receptor polyamine-binding site agonist	Conditioned fear	Wistar rats (230-250g)	0.02 nmol/0.5 µl/side	amygdala	-	(1) The drug was administered before training on day 1; (2) Similar effects between context and tone	Rubin et al., 2004	J. Neurosci. 24:2328-2334
Spermidine	NMDA receptor polyamine-binding site agonist	Conditioned fear	Wistar rats (230-250g)	0.2-2 nmol/0.5 µl/side	amygdala	-	(1) The drug was administered after training on day 1; (2) Similar effects between context and tone	Rubin et al., 2004	J. Neurosci. 24:2328-2334
Spermidine	NMDA receptor polyamine-binding site agonist	Conditioned fear	Wistar rats (220-260g)	10-100	ip	-	(1) The drug was administered after training on day 1; (2) Similar effects between context and tone; (3) Shock of 0.6 mA/1 s	Camera et al., 2007	Psychopharmacology 192:457-464
Spermidine+arcaine (0.002 nmol)	NMDA receptor polyamine-binding site agonist	Conditioned fear	Wistar rats (230-250g)	0.02 nmol/0.5 µl/side	amygdala	(o)	The drug was administered before training on day 1	Rubin et al., 2004	J. Neurosci. 24:2328-2334
Spermidine+arcaine (0.002 nmol)	NMDA receptor polyamine-binding site agonist	Conditioned fear	Wistar rats (230-250g)	0.02 nmol/0.5 µl/side	amygdala	(o)	The drug was administered after training on day 1	Rubin et al., 2004	J. Neurosci. 24:2328-2334
Spermidine+arcaine (0.1 mg/kg)	NMDA receptor polyamine-binding site agonist	Conditioned fear	Wistar rats (220-260g)	100	ip	(o)	(1) Blockade of the effects of spemidine; (2) The drug was administered after training on day 1; (3) Similar effects between context and tone; (4) Shock of 0.6 mA/1 s	Camera et al., 2007	Psychopharmacology 192:457-464
Spermidine+MK-801 (0.001 mg/kg)	NMDA receptor polyamine-binding site agonist	Conditioned fear	Wistar rats (220-260g)	100	ip	(o)	(1) Blockade of the effects of spemidine; (2) The drug was administered after training on day 1; (3) Similar effects between	Camera et al., 2007	Psychopharmacology 192:457-464

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							context and tone; (4) Shock of 0.6 mA/1 s		
SSR504734	GlyT1 inhibitor	Ultrasonic distress vocalizations	Sprague-Dawley rat pups (3-4-day-old)	1-10	sc, 30	+		Depoortère et al., 2005	Neuropsychopharmacology 30:1963-1985
tACPD	Group 1 and 2 mGluR agonist	Flight behavior	Wistar rats (220-240g)	30 nmol/0.2 µl	dorsolateral PAG, 0	-		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
tACPD	Group 1 mGluR agonist	Flight behavior	Wistar rats (220-240g)	10 nmol/0.2 µl	dorsolateral PAG, 0	-		Lima et al., 2008	Prog. Neuropsychopharmacol. Biol. Psychiatry 32:178-185
TCP	NMDA channel blocker	Conflict test	Sprague-Dawley rats (250-288g)	3	ip	+	A multiple FI90/FI90 (punishment) schedule was used	McMillan et al., 1991	J. Pharmacol. Exp. Ther. 258:1015-1018
THIIC	mGluR2 potentiator	Stress-induced hyperthermia	Fisher F-344 rats (275-350g)	3-30	po, 4 hrs	+		Fell et al., 2011	J. Pharmacol. Exp. Ther. 336:165-177
THIIC	mGluR2 potentiator	Marble burying	CD1 mice	10-30	ip, 30	+		Fell et al., 2011	J. Pharmacol. Exp. Ther. 336:165-177
THIIC+sodium lactate	mGluR2 potentiator	Social interaction	Sprague-Dawley rats (300-350g)	10-20	ip, 30	+		Johnson et al., 2012	J. Psychopharmacol. doi: 10.1177/0269881112454230
UBP302	GluR5 antagonist	Open-field	Sprague-Dawley rats (200-220g)	20 nmol/1 µl	basolateral amygdala, 0	+		Aroniadou-Anderjaska et al., 2012	Neuroscience 221:157-169
UBP302	GluR5 antagonist	Acoustic startle reflex	Sprague-Dawley rats (200-220g)	20 nmol/1 µl	basolateral amygdala, 0	+		Aroniadou-Anderjaska et al., 2012	Neuroscience 221:157-169
VU 0155041	mGluR4 PAM	Elevated zero-maze	C57BL/6J mice (2-year-old)	5	ip, 120	+		Duvoisin et al., 2011	Behav. Brain Res. 221:50-54
VU 02285683	mGluR5 PAM	Conflict test	Sprague-Dawley rats (225-249g)	3-10	ip, 45	+	The shock intensity was individually adjusted (0.25-0.5 mA)	Rodriguez et al., 2010	Mol. Pharmacol. 78:1105-1123

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
VU 02285683	mGluR5 PAM	Marble burying	CD1 mice (30-35g)	10	ip, 30	+		Rodriguez et al., 2010	Mol. Pharmacol. 78:1105-1123
VU 0366058	mGluR5 NAM	Marble burying	Harlan CD1 mice (30-35g)	56.6	ip, 15	+		Mueller et al., 2012	ChemMedChem. 7:406-414

Melanocortin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
HS014	MC4 antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	0.5-5 nM/1 µl	amygdala, 15	o		Kokare et al., 2005	Brain Res. 1043:107-114
HS014	MC4 antagonist	Elevated plus-maze	Wistar rats (250-300g)	2 µg/1µl	icv, 60	o		Cragnolini et al., 2006	Peptides 27:1451-1456
HS014+[Leu^{31}, Pro^{34}]-NPY (5 nM)	MC4 antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1 nM/1 µl	amygdala, 15	(+)	The combination produced anxiolytic-like effects	Kokare et al., 2005	Brain Res. 1043:107-114
HS014+IL-1β (30 ng/1 µl)	MC4 antagonist	Elevated plus-maze	Wistar rats (250-300g)	2 µg/1µl	icv, 60	-	No blockade of the anxiogenic-like effects of IL-1β	Cragnolini et al., 2006	Peptides 27:1451-1456
HS014+NPY (5 nM)	MC4 antagonist	Elevated plus-maze	Sprague-Dawley rats (220-250g)	1 nM/1 µl	amygdala, 15	(+)	The combination produced anxiolytic-like effects	Kokare et al., 2005	Brain Res. 1043:107-114
MCL0042	MC4 antagonist/5-HT reuptake inhibitor	Vogel conflict test	Sprague-Dawley rats (220-240g)	10	sc, 30	+	Electric shocks of 0.4 mA/2 s were delivered	Chaki et al., 2005	Pharmacol. Biochem. Behav. 82:621-626
MCL0042	MC4 antagonist/5-HT reuptake inhibitor	Elevated plus-maze	Sprague-Dawley rats (220-240g)	3	sc, 30	+	Rats were exposed to swim stress prior to testing	Chaki et al., 2005	Pharmacol. Biochem. Behav. 82:621-626
MCL0129	MC4 antagonist	Social interaction	Sprague-Dawley rats (300g)	1-3	po, 60	o		Shimazaki and Chaki, 2005	Pharmacol. Biochem. Behav. 80:395-400
MCL0129	MC4 antagonist	Social interaction	Sprague-Dawley rats (300g)	3-10	po, thrice at 2-day interval for 1 week	+		Shimazaki and Chaki, 2005	Pharmacol. Biochem. Behav. 80:395-400
MT II	MC4 agonist	Social interaction	Sprague-Dawley rats (300g)	0.3-1 µg/rat	icv, 30	-		Shimazaki and Chaki, 2005	Pharmacol. Biochem. Behav. 80:395-400
SHU9119	MC4 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.05-0.5 nmol/2 µl	icv, 30	o		Liu et al., 2007	Endocrinology 148:5531-5540
SHU9119	MC4 antagonist	Elevated plus-maze	Sprague-Dawley rats	0.5 nmol/2 µl	icv, 30	+	Animals were subjected to restraint stress	Liu et al., 2007	Endocrinology 148:5531-5540

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			(250-300g)						
SHU9119	MC4 antagonist	Elevated plus-maze	Sprague-Dawley rats (250-300g)	0.5 nmol/2 µl	icv, 30	+	Animals were subjected to swim stress	Liu et al., 2007	Endocrinology 148:5531-5540
α-MSH	MC3/4 agonist	Elevated plus-maze	Wistar rats (250-300g)	0.2 µg/1µl	icv, 60	o		Cragnolini et al., 2006	Peptides 27:1451-1456
α-MSH+HS014(2 µg/1 µl)+IL-1β (30 ng/1 µl)	MC3/4 agonist	Elevated plus-maze	Wistar rats (250-300g)	0.2 µg/1µl	icv, 60	-	No interaction	Cragnolini et al., 2006	Peptides 27:1451-1456
α-MSH+IL-1β (30 ng/1 µl)	MC3/4 agonist	Elevated plus-maze	Wistar rats (250-300g)	0.2 µg/1µl	icv, 60	(o)	Antagonism of the anxiogenic-like effects of IL-1β	Cragnolini et al., 2006	Peptides 27:1451-1456
γ-MSH	MC3 agonist	Elevated plus-maze	Wistar rats (250-300g)	2 µg/1µl	icv, 60	-		Cragnolini et al., 2006	Peptides 27:1451-1456

MCH

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
ATC0065	MCH1 antagonist	Elevated plus-maze	Sprague-Dawley rats (190-250g)	10	po, 3 h	+	The drug reversed the anxiogenic effects of swim stress	Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
ATC0175	MCH1 antagonist	Elevated plus-maze	Sprague-Dawley rats (190-250g)	1-10	po, 2 h	+	The drug reversed the anxiogenic effects of swim stress	Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
ATC0065	MCH1 antagonist	Stress-induced hyperthermia	ICR mice (24-33g)	30	po, 60	+		Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
ATC0175	MCH1 antagonist	Stress-induced hyperthermia	ICR mice (24-33g)	30	po, 60	+		Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
ATC0175	MCH1 antagonist	Social interaction	Sprague-Dawley rats (250-330g)	0.3-10	po, 2 h	+	HLU conditions were used	Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
ATC0175	MCH1 antagonist	Distress vocalizations	Guinea pig pups (7-day-old)	3-10	ip, 60	+		Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
ATC0065	MCH1 antagonist	Marble burying	ICR mice (24-33g)	3-30	po, 3 h	o		Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
ATC0175	MCH1 antagonist	Marble burying	ICR mice (24-33g)	3-30	po, 2 h	o		Chaki et al., 2005	J. Pharmacol. Exp. Ther. 313:831-839
GW3430	MCH1 antagonist	Elevated plus-maze	C57Bl/6NTac mice (25-35g)	30-100	ip, 2 h	+		Smith et al., 2006	Neuropsychopharmacology 31:1135-1145
MCH	Endogenous peptide	Elevated plus-maze	C57Bl/6NTac mice (25-35g)	3	icv, 30	-		Smith et al., 2006	Neuropsychopharmacology 31:1135-1145
MCH+GW3430 (30 mg/kg)	Endogenous peptide	Elevated plus-maze	C57Bl/6NTac mice (25-35g)	3	icv, 30	(o)	Antagonism of the effects of MCH	Smith et al., 2006	Neuropsychopharmacology 31:1135-1145
Mutant mice	MCH1 knockout	Elevated plus-maze	129SvJxC57Bl/6 background mice (25-35g)			o	No phenotypic differences	Smith et al., 2006	Neuropsychopharmacology 31:1135-1145
GW3430	MCH1 antagonist	Elevated plus-maze	129SvJxC57Bl/6 MCH1 KO mice (25-35g)	60	ip, 2 h	(o)	Anxiolytic-like activity was lost in MCH1 KO mice	Smith et al., 2006	Neuropsychopharmacology 31:1135-1145
GW3430	MCH1 antagonist	Stress-induced hyperthermia	C57Bl/6NTac mice (25-35g)	60-100	ip, 2 h	+		Smith et al., 2006	Neuropsychopharmacology 31:1135-1145

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	MCH1 knockout	Elevated plus-maze	129SvJxC57Bl/6 background mice (25-35g)			+	KO mice showed attenuated stress response compared to WT animals	Smith et al., 2006	Neuropsychopharmacology 31:1135-1145
Mutant mice	MCH1 knockout	Elevated plus-maze	129SvJxC57Bl/6 background mice (3-10-month-old)			+	KO mice showed attenuated anxiety-like behaviors compared to WT animals	Roy et al., 2005	Neuropsychopharmacology 31:112-120
Mutant mice	MCH1 knockout	Open-field	129SvJxC57Bl/6 background mice (3-10-month-old)			+	KO mice showed attenuated anxiety-like behaviors compared to WT animals	Roy et al., 2005	Neuropsychopharmacology 31:112-120
Mutant mice	MCH1 knockout	Stress-induced hyperthermia	129SvJxC57Bl/6 background mice (3-10-month-old)			+	KO mice are protected against stress-induced hyperthermia	Roy et al., 2005	Neuropsychopharmacology 31:112-120
Mutant mice	MCH1 knockout	Social interaction	129SvJxC57Bl/6 background mice (3-10-month-old)			+	KO mice showed attenuated anxiety-like behaviors compared to WT animals	Roy et al., 2005	Neuropsychopharmacology 31:112-120
A-665798	MCH1 antagonist	Vogel conflict test	Wistar rats (250-350g)	3-30	po, 60	o	Electric shocks of 0.5 mA/1 s were applied	Basso et al., 2006	Eur. J. Pharmacol. 540:115-120
A-777903	MCH1 antagonist	Vogel conflict test	Wistar rats (250-350g)	3-30	po, 60	o	Electric shocks of 0.5 mA/1 s were applied	Basso et al., 2006	Eur. J. Pharmacol. 540:115-120
Mutant mice	MCH1 knockout	Open-field	Male and female 129SvEvBrdxC57Bl/6j background mice (3-4-month-old)			o	No phenotypic differences	Roy et al., 2006	Biol. Psychiatry 61:174-180
SNAP 94847	MCH1 antagonist	Novelty suppressed feeding	129S6/SvEvTac mice (7-8--wek-old, 23-35g)	20	po, 60	+		David et al., 2007	J. Pharmacol. Exp. Ther. 321:237-248
SNAP 94847	MCH1 antagonist	Light/dark test	BALB/c mice (7-8-week-old, 23-35g)	20	po, 60	+		David et al., 2007	J. Pharmacol. Exp. Ther. 321:237-248
SNAP 94847	MCH1 antagonist	Light/dark test	BALB/c mice (7-8-week-old, 23-35g)	20	po, o.d. for 28 days	+		David et al., 2007	J. Pharmacol. Exp. Ther. 321:237-248

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
MCH	Endogenous peptide	Stress-suppressed feeding	Wistar rats (240-260g)	1 µg/0.5 µl	hippocampus, 0	+	(1) Electric shocks of 0.4 mA/2 s were applied; (2) The drug attenuated increase in food intake induced by stress	Carlini et al., 2006	Peptides 27:2300-2306
MCH	Endogenous peptide	Conditioned fear	Wistar rats (240-260g)	1 µg/0.5 µl	amygdala, 0	+	(1) Electric shocks of 0.4 mA/2 s were applied; (2) The drug attenuated increase in food intake induced by stress	Carlini et al., 2006	Peptides 27:2300-2306
MCH	Endogenous peptide	Conditioned fear	Wistar rats (240-260g)	1 µg/0.5 µl	hippocampus, 0	+	(1) Electric shocks of 0.4 mA/2 s were applied; (2) The drug attenuated freezing	Carlini et al., 2006	Peptides 27:2300-2306
MCH	Endogenous peptide	Conditioned fear	Wistar rats (240-260g)	1 µg/0.5 µl	amygdala, 0	+	(1) Electric shocks of 0.4 mA/2 s were applied; (2) The drug attenuated freezing	Carlini et al., 2006	Peptides 27:2300-2306
Compound **16g**	MCH1 antagonist	Social interaction	Rats	MED=0.3	po, 60	+		Chen et al., 2007	J. Med. Chem. 50:3883-3890
SNAP 7941	MCH1 antagonist	Vogel conflict test	Wistar rats (225-250g)	40	ip, 30	+	Electric shocks of 0.3 mA/0.5 s were applied	Millan et al., 2008	Int. J. Neuropsychopharmacol. 11:1105-1122
GW3430	MCH1 antagonist	Vogel conflict test	Wistar rats (225-250g)	40-80	ip, 30	+	Electric shocks of 0.3 mA/0.5 s were applied	Millan et al., 2008	Int. J. Neuropsychopharmacol. 11:1105-1122
SNAP 7941	MCH1 antagonist	Ultrasonic distress vocalizations	Wistar rats (240-260g)	40	ip, 0	+	Electric shocks of 0.8 mA/8 s were applied	Millan et al., 2008	Int. J. Neuropsychopharmacol. 11:1105-1122
GW3430	MCH1 antagonist	Ultrasonic distress vocalizations	Wistar rats (240-260g)	10-40	ip, 0	+	Electric shocks of 0.8 mA/8 s were applied	Millan et al., 2008	Int. J. Neuropsychopharmacol. 11:1105-1122
SNAP 7941	MCH1 antagonist	Social interaction	Sprague-Dawley rats (240-260g)	0.16-10	ip, 30	o		Millan et al., 2008	Int. J. Neuropsychopharmacol. 11:1105-1122
GW3430	MCH1 antagonist	Social interaction	Sprague-Dawley rats (240-260g)	2.5-40	ip, 30	o		Millan et al., 2008	Int. J. Neuropsychopharmacol. 11:1105-1122
SNAP 7941	MCH1 antagonist	Marble burying	NMRI mice (20-25g)	40	ip, 30	+		Millan et al., 2008	Int. J. Neuropsychopharmacol.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
									11:1105-1122
GW3430	MCH1 antagonist	Marble burying	NMRI mice (20-25g)	80	ip, 30	+		Millan et al., 2008	Int. J. Neuropsychopharmacol. 11:1105-1122
SNAP 94847	MCH1 antagonist	Stress-induced hyperthermia	129S6/SvEvTac mice (20-25g)	2.5-20	po, 60	+		Smith et al., 2009	Behav. Brain Res.197:284-291
GW3430	MCH1 antagonist	Marble burying	NIH Swiss mice	10-30	po, 4 h	+		Gehlert et al., 2009	J. Pharmacol. Exp. Ther. 329:429-438
TPI 1361-17	MCH1 antagonist	Elevated plus-maze	C57BL/6 mice (23-25g)	1 nmol/2 µl	icv, 20	+		Lee et al., 2011	J. Mol. Neurosci. 43:132-137
TPI 1361-17	MCH1 antagonist	Light/dark test	C57BL/6 mice (23-25g)	1 nmol/2 µl	icv, 20	+		Lee et al., 2011	J. Mol. Neurosci. 43:132-137

Galanin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Galanin	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	0.5-1 nmol/0.5 µl	icv, 15	o		Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Galanin	Endogenous peptide	Light/dark test	C57BL/6J mice (7-8-week-old)	0.5-1 nmol/0.5 µl	icv, 15	o		Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Galanin	Endogenous peptide	Conditioned fear	C57BL/6J mice (7-8-week-old)	0.5 nmol/0.5 µl	icv, 15	+	(1) The drug reduced freezing to context; (2) The shock was 0.2 mA/2 s	Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Galanin	Endogenous peptide	Conditioned fear	C57BL/6J mice (7-8-week-old)	0.5-1 nmol/0.5 µl	icv, 15	o	(1) The drug did not reduce freezing to auditory cue; (2) The shock was 0.2 mA/2 s	Karlsson et al., 2005	Pharmacol. Biochem. Behav. 80:427-436
Galanin	Endogenous peptide	Shock-probe burying test	Sprague-Dawley rats (250-275g)	1 nmol/0.4 µl/side	lateral septum, 15	o	Shocks of 2 mA were delivered	Echevarria et al., 2005	Neuropeptides 39:445-451
Galanin	Endogenous peptide	Elevated zero-maze	BALB/c mice (18-24g, 8-12-week-old)	0.1 µg/2 µl	icv, 20	+		Rajarao et al., 2007	Neuropeptides 41:307-320
Galanin	Endogenous peptide	Four-plate test	Swiss Webster mice (18-24g, 8-12-week-old)	1 µg/2 µl	icv, 20	+		Rajarao et al., 2007	Neuropeptides 41:307-320
Galanin	Endogenous peptide	Open-field	Wistar rats (250-270g)	0.3	ip, 60	+	The effect lasted up to 48 h post-treatmenr	Klenerova et al., 2011	Neurosci. Lett. 502:147-151
Galanin	Endogenous peptide	Open-field	Wistar rats (250-270g)	0.3	ip, 60	+	(1) Animals were subjected to 3 days of restraint stress; (2) The effect lasted up to 14 days post-treatment	Klenerova et al., 2011	Neurosci. Lett. 502:147-151
Galanin+M35 (10 µg/2 µl)	Endogenous peptide	Four-plate test	Swiss Webster mice (18-24g, 8-12-week-old)	1 µg/2 µl	icv, 20	(o)	Antagonism of the anxiolytic-like effects of galanin	Rajarao et al., 2007	Neuropeptides 41:307-320
Galanin+M40 (0.3 mg/kg)	Endogenous peptide	Open-field	Wistar rats (250-270g)	0.3	ip, 60	(o)		Klenerova et al., 2011	Neurosci. Lett. 502:147-151

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Galanin+M40 (0.3 mg/kg)	Endogenous peptide	Open-field	Wistar rats (250-270g)	0.3	ip, 60	(o)	Animals were subjected to 3 days of restraint stress	Klenerova et al., 2011	Neurosci. Lett. 502:147-151
Galnon	Gal agonist	Elevated zero-maze	BALB/c mice (18-24g, 8-12-week-old)	0.3-3	ip, 30	+		Rajarao et al., 2007	Neuropeptides 41:307-320
Galnon	Gal agonist	Four-plate test	Swiss Webster mice (18-24g, 8-12-week-old)	0.1-1	ip, 30	+		Rajarao et al., 2007	Neuropeptides 41:307-320
Galnon	Gal agonist	Four-plate test	Swiss Webster mice (18-24g, 8-12-week-old)	3-30	ip, 30	+		Rajarao et al., 2007	Neuropeptides 41:307-320
Galnon	Gal agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.5	ip, 60	o		Kozlovsky et al., 2009	Biol. Psychiatry 65:383-391
Galnon	Gal agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	0.5	ip, 60	o	Animals were exposed to predator scent stress 30 min and 7 days before prior to testing	Kozlovsky et al., 2009	Biol. Psychiatry 65:383-391
Galnon	Gal agonist	Acoustic startle reflex	Sprague-Dawley rats (200-250g)	0.5	ip, 60	o		Kozlovsky et al., 2009	Biol. Psychiatry 65:383-391
Galnon	Gal agonist	Acoustic startle reflex	Sprague-Dawley rats (200-250g)	0.5	ip, 60	o	Animals were exposed to predator scent stress 30 min and 7 days before prior to testing	Kozlovsky et al., 2009	Biol. Psychiatry 65:383-391
Galnon	Gal agonist	Conditioned fear	Sprague-Dawley rats (200-250g)	0.5	ip, 60	+	Animals were exposed to predator scent stress 30 min and 7 days before prior to testing	Kozlovsky et al., 2009	Biol. Psychiatry 65:383-391
Galnon+flumazenil (1 mg/kg)	Gal agonist	Four-plate test	Swiss Webster mice (18-24g, 8-12-week-old)	0.3	ip, 30	(o)	Antagonism of the anxiolytic-like effects of galanin	Rajarao et al., 2007	Neuropeptides 41:307-320

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Galnon+M35 (10 µg/2 µl)	Gal agonist	Four-plate test	Swiss Webster mice (18-24g, 8-12-week-old)	0.3	ip, 30	(o)	Antagonism of the anxiolytic-like effects of galanin	Rajarao et al., 2007	Neuropeptides 41:307-320
GalR3	Gal3 antagonist	Elevated plus-maze	C57BL/6 mice (22-27g)	10-50	ip, 30	o		Barr et al., 2006	Neurosci. Lett. 405:111-115
M40	Gal antagonist	Shock-probe burying test	Sprague-Dawley rats (250-275g)	0.2-2 nmol/0.4 µl/side	lateral septum, 15	+	Shocks of 2 mA were delivered	Echevarria et al., 2005	Neuropeptides 39:445-451
M40	Gal antagonist	Open-field	Wistar rats (250-270g)	0.3	ip, 60	o		Klenerova et al., 2011	Neurosci. Lett. 502:147-151
M40+galanin (1 nmol/0.4 µl/side)	Gal antagonist	Shock-probe burying test	Sprague-Dawley rats (250-275g)	2 nmol/0.4 µl/side	lateral septum, 15	+	(1) No drug interaction; (2) Shocks of 2 mA were delivered	Echevarria et al., 2005	Neuropeptides 39:445-451
Mutant mice	Gal2 knockout	Elevated plus-maze	C57BL/6x129/Sv background mice (3-5-month-old)			o	No phenotypic difference	Lu et al., 2008	Neuropeptides 42:387-397
Mutant mice	Gal2 knockout	Open-field	C57BL/6x129/Sv background mice (3-5-month-old)			o	No phenotypic difference	Lu et al., 2008	Neuropeptides 42:387-397
Mutant mice	Gal2 knockout	Light/dark test	C57BL/6x129/Sv background mice (3-5-month-old)			o	No phenotypic difference	Lu et al., 2008	Neuropeptides 42:387-397
Mutant mice	Gal1 knockout	Elevated plus-maze	C57BL/6x129/Sv background mice (8-10-week-old)			-		Holmes et al., 2003	Neuropsychopharmacology 28:1031-1044
Mutant mice	Gal1 knockout	Light/dark test	C57BL/6x129/Sv background mice (8-10-week-old)			o		Holmes et al., 2003	Neuropsychopharmacology 28:1031-1044
Mutant mice	Gal1 knockout	Open-field	C57BL/6x129/Sv background mice (8-10-week-old)			o		Holmes et al., 2003	Neuropsychopharmacology 28:1031-1044
SNAP 37889	Gal_3 antagonist	Social interaction	Sprague-Dawley rats	3-30	po, 60	+	HLU conditions were used	Swanson et al., 2005	Proc. Natl. Acad. Sci. U. S. A. 102:17489-17494

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SNAP 37889	Gal_3 antagonist	Social interaction	Sprague-Dawley rats	30	po, for 14 days, o.d.	+	HLU conditions were used	Swanson et al., 2005	Proc. Natl. Acad. Sci. U. S. A. 102:17489-17494
SNAP 37889	Gal_3 antagonist	Vogel conflict test	Sprague-Dawley rats	3-10	ip, 60	+		Swanson et al., 2005	Proc. Natl. Acad. Sci. U. S. A. 102:17489-17494
SNAP 37889	Gal_3 antagonist	Stress-induced hyperthermia	C57BL/6J mice	0.3-30	po, 60	+		Swanson et al., 2005	Proc. Natl. Acad. Sci. U. S. A. 102:17489-17494
SNAP 37889	Gal_3 antagonist	Distress vocalizations	Hartley guinea pig pups	3-30		+		Swanson et al., 2005	Proc. Natl. Acad. Sci. U. S. A. 102:17489-17494

Bombesin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
[Leu^{13}-(CH_2NH)Leu^{14}]-BN	BB_2 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (275-300g)	1.70 nmol/3 µl	icv, 15	o		Bédard et al., 2007	Behav. Brain Res. 179:133-140
[Leu^{13}-(CH_2NH)Leu^{14}]-BN	BB_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (275-300g)	1.70 nmol/3 µl	icv, 15	o		Bédard et al., 2007	Behav. Brain Res. 179:133-140
BIM 23127	BB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (275-300g)	1.70 nmol/3 µl	icv, 15	+		Bédard et al., 2007	Behav. Brain Res. 179:133-140
BIM 23127	BB_1 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (275-300g)	1.70 nmol/3 µl	icv, 15	+		Bédard et al., 2007	Behav. Brain Res. 179:133-140
Bombesin	Endogenous peptide	Suppression of snack consumption in home cage	Sprague-Dawley rats (400-550g)	0.5 µg/3 µl	icv, 20	o		Merali et al., 2004	Eur. J. Neurosci. 20:229-239
BW2258U89	BB_2 antagonist	Conditioned fear	Sprague-Dawley rats (275-300g)	50 ng/0.5 µl	prelimbic cortex, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2006	Psychopharmacology 189:287-296
BW2258U89	BB_2 antagonist	Conditioned fear	Sprague-Dawley rats (275-300g)	50 ng/0.5 µl	prelimbic cortex, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Cue task	Mountney et al., 2006	Psychopharmacology 189:287-296
BW2258U89	BB_2 antagonist	Conditioned fear	Sprague-Dawley rats (275-300g)	50 ng/0.5 µl	infralimbic cortex, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2006	Psychopharmacology 189:287-296
BW2258U89	BB_2 antagonist	Conditioned fear	Sprague-Dawley rats (275-300g)	50 ng/0.5 µl	infralimbic cortex, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Cue task	Mountney et al., 2006	Psychopharmacology 189:287-296
BW2258U89	BB_2 antagonist	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	central amygdala, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2006	Psychopharmacology 189:287-296
Gastrin-releasing peptide	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (275-300g)	0.3 nmol/3 µl	icv, 15	+		Bédard et al., 2007	Behav. Brain Res. 179:133-140
Gastrin-releasing peptide	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (275-300g)	0.3 nmol/3 µl	icv, 15	o		Bédard et al., 2007	Behav. Brain Res. 179:133-140
Gastrin-releasing peptide	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	prelimbic cortex, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2006	Psychopharmacology 189:287-296

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Gastrin-releasing peptide	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	prelimbic cortex, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Cue task	Mountney et al., 2006	Psychopharmacology 189:287-296
Gastrin-releasing peptide	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	infralimbic cortex, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2006	Psychopharmacology 189:287-296
Gastrin-releasing peptide	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	infralimbic cortex, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Cue task	Mountney et al., 2006	Psychopharmacology 189:287-296
Gastrin-releasing peptide	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	central amygdala, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2006	Psychopharmacology 189:287-296
Gastrin-releasing peptide	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300-600 ng/0.5 µl/site	basolateral amygdala, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2008	Psychopharmacology 200:51-58
Gastrin-releasing peptide	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	150-600 ng/0.5 µl/site	basolateral amygdala, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Cue task	Mountney et al., 2008	Psychopharmacology 200:51-58
Gastrin-releasing peptide+BW2258U89 (50 ng/0.5 µl)	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	infralimbic cortex, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2006	Psychopharmacology 189:287-296
Gastrin-releasing peptide+BW2258U89 (50 ng/0.5 µl)	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl	infralimbic cortex, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Cue task	Mountney et al., 2006	Psychopharmacology 189:287-296
Gastrin-releasing peptide+RC-3095 (500 ng/0.5 µl)	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl/site	basolateral amygdala, 15	(o)	(1) Antagonism of the effects of GRP; (2) Electric shocks of 1 mA/1 s were applied; (3) Contextual task	Mountney et al., 2008	Psychopharmacology 200:51-58
Gastrin-releasing peptide+RC-3095 (500 ng/0.5 µl)	Endogenous peptide	Conditioned fear	Sprague-Dawley rats (275-300g)	300 ng/0.5 µl/site	basolateral amygdala, 15	o	(1) No interaction; (2) Electric shocks of 1 mA/1 s were applied; (3) Contextual task	Mountney et al., 2008	Psychopharmacology 200:51-58
Neuromedin B	Endogenous peptide	Social interaction	Lister rats (300-375g)	50 ng/0,5 µl	dorsal raphe nucleus, 3	-	LLF conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396
Neuromedin B+SB 242084 (0,2 mg/kg)	Endogenous peptide	Social interaction	Lister rats (300-375g)	50 ng/0,5 µl	dorsal raphe nucleus, 3	(o)	(1) Antagonism of the anxiogenic-like effects of neuromedin B; (2) LLF conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Neuromedin B+WAY 100635 (0,2 mg/kg)	Endogenous peptide	Social interaction	Lister rats (300-375g)	50 ng/0,5 µl	dorsal raphe nucleus, 3	-	(1) No interaction; (2) LLF conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396
Neuromedin B-30	BB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (275-300g)	0.29 nmol/3 µl	icv, 15	o		Bédard et al., 2007	Behav. Brain Res. 179:133-140
Neuromedin B-30	BB_1 agonist	Fear-potentiated startle reflex	Sprague-Dawley rats (275-300g)	0.29 nmol/3 µl	icv, 15	+		Bédard et al., 2007	Behav. Brain Res. 179:133-140
PD 176252	BB_1/BB_2 antagonist	Social interaction	Lister rats (300-375g)	100-500 ng/0,5 µl	dorsal raphe nucleus, 3	+	HLU conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396
PD 176252	BB_1/BB_2 antagonist	Social interaction	Lister rats (300-375g)	3,75-7,5	ip, 60	+	HLU conditions were used	Merali et al., 2006	J. Neurosci. 26:10387-10396
PD 176252	BB_1/BB_2 antagonist	Distress vocalizations	Guinea pig pups (1-3-day-old)	10-30	ip, 30	+		Merali et al., 2006	J. Neurosci. 26:10387-10396
PD 176252	BB_1/BB_2 antagonist	Suppression of snack consumption in home cage	Sprague-Dawley rats (300-375g)	10	ip, 20	+		Merali et al., 2006	J. Neurosci. 26:10387-10396
PD 176252	BB_1/BB_2 antagonist	Fear-potentiated startle reflex	Sprague-Dawley rats (300-375g)	5-10	ip, 20	+		Merali et al., 2006	J. Neurosci. 26:10387-10396
PD 176252	BB_1/BB_2 antagonist	Elevated plus-maze	Sprague-Dawley rats (275-300g)	0.621 nmol/3 µl	icv, 15	+		Bédard et al., 2007	Behav. Brain Res. 179:133-140
RC-3095	GRP antagonist	Conditioned fear	Sprague-Dawley rats (275-300g)	50-1000 ng/0.5 µl/site	basolateral amygdala, 15	+	(1) Electric shocks of 1 mA/1 s were applied; (2) Contextual task	Mountney et al., 2008	Psychopharmacology 200:51-58
RC-3095	GRP antagonist	Conditioned fear	Sprague-Dawley rats (275-300g)	50-1000 ng/0.5 µl/site	basolateral amygdala, 15	o	(1) Electric shocks of 1 mA/1 s were applied; (2) Cue task	Mountney et al., 2008	Psychopharmacology 200:51-58

Oxytocin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Isotocin	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	ED50=0.21	im, 10	+	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330
Isotocin+desglyDTyrOVT	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.96	im, 10	(o)	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330
Isotocin+SDR149415	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.98	im, 10	(o)	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330
Isotocin+SR49059	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.87	im, 10	(o)	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330
L-371,257	OT antagonist	Four-plate test	Swiss-Webster mice (18-24g)	3 µg/0.2 µl	icv, 20	o	Electric shocks of 0.8 mA/0.5 s were applied	Ring et al., 2006	Psychopharmacology 185:218-225
L-371,257	OT antagonist	Four-plate test	Swiss-Webster mice (18-24g)	3	icv, 20	o	Shocks of 0.8 mA/0.5 s were applied	Ring et al., 2010	Neuropharmacology 58:69-77
Mutant mice	OT knockout	Stress-induced hyperthermia	Female and male mice from a mixed 129/C57BL/6 background (25-35g)			o	No phenotypic differences	Amico et al., 2008	Prog. Brain Res. 170:53-64
Mutant mice	OT knockout	Stress-induced hyperthermia	Pregnant female mice from a mixed 129/C57BL/6 background (25-35g)			o	No phenotypic differences	Amico et al., 2008	Prog. Brain Res. 170:53-64
Mutant mice	OT receptor knockout	Elevated plus-maze	C57BL/6 x 129X1/SvJ background mice (10-12-week-old)			o	No phenotypic differences	Okimoto et al., 2012	Brain Res. 1453:26-33

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	OT receptor knockout	Elevated plus-maze	C57BL/6 x 129X1/SvJ background mice (10-12-week-old)			o	(1) Mice were subjected to restraint stress; (2) No phenotypic differences	Okimoto et al., 2012	Brain Res. 1453:26-33
OXT-A	OT antagonist	Light/dark test	Female and male LAB rats (250-350g)	1 µg/5 µl	icv, 10	o		Slattery and Neumann, 2010	Neuropharmacology 58:56-61
OXT-A	OT antagonist	Light/dark test	Female and male LAB rats (250-350g)	1 µg/5 µl	minipumps for 7 days	-	Anxiogenic-like effects observed only in females	Slattery and Neumann, 2010	Neuropharmacology 58:56-61
OXT-A	OT antagonist	Light/dark test	Wistar rats (250-300g)	0.75 µg/5 µl	icv, 20	o		Lukas et al., 2011	Neuropsychopharmacology 36:2159-2168
OXT-A	OT antagonist	Elevated plus-maze	C57BL/6 mice (20-24g)	0.75 µg/5 µl	icv, 20	o		Lukas et al., 2011	Neuropsychopharmacology 36:2159-2168
Oxytocin	Endogenous peptide	Four-plate test	Swiss-Webster mice (18-24g)	10	ip, 30	+	Electric shocks of 0.8 mA/0.5 s were applied	Ring et al., 2006	Psychopharmacology 185:218-225
Oxytocin	Endogenous peptide	Four-plate test	Swiss-Webster mice (18-24g)	10 µg/0.2 µl	icv, 20	+		Ring et al., 2006	Psychopharmacology 185:218-225
Oxytocin	Endogenous peptide	Elevated zero-maze	BALB/c mice (18-24g)	1 µg/0.2 µl	icv, 20	+		Ring et al., 2006	Psychopharmacology 185:218-225
Oxytocin	Endogenous peptide	Stress-induced hyperthermia	C57Bl/6N mice (18-24g)	1-10	ip, 60	+		Ring et al., 2006	Psychopharmacology 185:218-225
Oxytocin	Endogenous peptide	Elevated plus-maze	Wistar rats (260-300g)	0.01 nmol/0.5 µl	paraventricular nucleus, 5	+		Blume et al., 2008	Eur. J. Neurosci. 27:1947-1956
Oxytocin	Endogenous peptide	Light/dark test	Wistar rats (260-300g)	0.01 nmol/0.5 µl	paraventricular nucleus, 5	+		Blume et al., 2008	Eur. J. Neurosci. 27:1947-1956
Oxytocin	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (225-250g)	0.01-1µg/ml/kg	sc, 30	+		Missig et al., 2010	Neuropsychopharmacology 35:2607-2616
Oxytocin	Endogenous peptide	Acoustic startle reflex	Sprague-Dawley rats (225-250g)	0.01-1µg/ml/kg	sc, 30	o		Missig et al., 2010	Neuropsychopharmacology 35:2607-2616
Oxytocin	Endogenous peptide	Open-field	C57BL/6J	10 µg/2 µl	icv, 15	+		Yoshida et al., 2009	J. Neurosci. 29:2259-2271

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Oxytocin	Endogenous peptide	Light/dark test	Female and male HAB rats (250-350g)	1 µg/5 µl	icv, 10	o		Slattery and Neumann, 2010	Neuropharmacology 58:56-61
Oxytocin	Endogenous peptide	Light/dark test	Female and male LAB rats (250-350g)	1 µg/5 µl	icv, 10	o		Slattery and Neumann, 2010	Neuropharmacology 58:56-61
Oxytocin	Endogenous peptide	Elevated plus-maze	Female and male NAB rats (250-350g)	1 µg/5 µl	icv, 10	o		Slattery and Neumann, 2010	Neuropharmacology 58:56-61
Oxytocin	Endogenous peptide	Light/dark test	Female and male HAB rats (250-350g)	1 µg/5 µl	minipumps for 7 days	+	Anxiolytic-like effects observed only in females	Slattery and Neumann, 2010	Neuropharmacology 58:56-61
Oxytocin	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	ED50=4.2	im, 10	+	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330
Oxytocin+desglyDTyrOVT	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.93	im, 10	(o)	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330
Oxytocin+L-371,257 (3 µg/0.2 µl)	Endogenous peptide	Four-plate test	Swiss-Webster mice (18-24g)	10	ip, 30	(o)	(1) Antagonism of the effects of oxytocin; (2) Electric shocks of 0.8 mA/0.5 s	Ring et al., 2006	Psychopharmacology 185:218-225
Oxytocin+ritanserin (5 mg/kg)	Endogenous peptide	Open-field	C57BL/6J	10 µg/2 µl	icv, 15	(o)		Yoshida et al., 2009	J. Neurosci. 29:2259-2271
Oxytocin+SDR149415	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.98	im, 10	(o)	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330
Oxytocin+SR49059	Endogenous peptide	Defensive behaviors	Zebrafish (*D. rerio*, 0.4-1 g, 6-12-month-old)	r^2=0.87	im, 10	(o)	Fear response to predator	Braida et al., 2012	Psychopharmacology 220:319-330

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Oxytocin+U0126 (0.5 nmol/0.5 µl)	Endogenous peptide	Light/dark test	Wistar rats (260-300g)	0.01 nmol/0.5 µl	paraventricular nucleus, 5	(o)	(1) Antagonism of the anxiolytic-like effects of OT; (2) U0126 is a MEK1/2 inhibitor	Blume et al., 2008	Eur. J. Neurosci. 27:1947-1956
Oxytocin+WAY-162720 (30 mg/kg)	Endogenous peptide	Four-plate test	Swiss-Webster mice (18-24g)	3 µg/0.2 µl	icv, 20	(o)	(1) Antagonism of the effects of oxytocin; (2) Electric shocks of 0.8 mA/0.5 s were applied	Ring et al., 2006	Psychopharmacology 185:218-225
WAY-162720	OT antagonist	Four-plate test	Swiss-Webster mice (18-24g)	30	ip, 30	o	Electric shocks of 0.8 mA/0.5 s were applied	Ring et al., 2006	Psychopharmacology 185:218-225
WAY-267464	OT agonist	Four-plate test	Swiss-Webster mice (18-24g)	10-30	ip, 20	+	Shocks of 0.8 mA/0.5 s were applied	Ring et al., 2010	Neuropharmacology 58:69-77
WAY-267464	OT agonist	Four-plate test	Swiss-Webster mice (18-24g)	10 µg/2 µl	icv, 20	+	Shocks of 0.8 mA/0.5 s were applied	Ring et al., 2010	Neuropharmacology 58:69-77
WAY-267464	OT agonist	Elevated zero-maze	BALB/c mice (18-24g)	3 µg/2 µl	icv, 20	+		Ring et al., 2010	Neuropharmacology 58:69-77
WAY-267464	OT agonist	Stress-induced hyperthermia	C57BL/6N mice (18-24g)	1 µg/2 µl	icv, 20	+		Ring et al., 2010	Neuropharmacology 58:69-77
WAY-267464+L-371,257 (3 mg/kg)	OT agonist	Four-plate test	Swiss-Webster mice (18-24g)	10	ip, 20	(o)	Shocks of 0.8 mA/0.5 s were applied	Ring et al., 2010	Neuropharmacology 58:69-77

Endocannabinoid

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
(-)-11-OH-Δ^8-THC-DMH	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	0.05-0.5	ip, 30	-		Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
12β-NH_2-Δ^8-THC	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	3-30	ip, 30	-		Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
6-I-CPS	TRPV1 antagonist	Elevated plus-maze	Wistar rats (260-300g)	1 nmol/0.2 µl	prelimbic medial prefrontal cortex, 10	o		Fogaça et al., 2012	Neuropharmacology 63:202-210
6-I-CPS	TRPV1 antagonist	Vogel conflict test	Wistar rats (260-300g)	3 pmol/0.2 µl	prelimbic medial prefrontal cortex, 10	+	Shocks of 0.5 mA/2 s were applied	Fogaça et al., 2012	Neuropharmacology 63:202-210
6-I-CPS+ACEA (50 pmol/0.2 µl)	TRPV1 antagonist	Elevated plus-maze	Wistar rats (260-300g)	1 nmol/0.2 µl	prelimbic medial prefrontal cortex, 10	(+)		Fogaça et al., 2012	Neuropharmacology 63:202-210
6-I-CPS+AM 251 (100 pmol/0.2 µl)	TRPV1 antagonist	Elevated plus-maze	Wistar rats (260-300g)	3 pmol/0.2 µl	prelimbic medial prefrontal cortex, 10	(o)		Fogaça et al., 2012	Neuropharmacology 63:202-210
6-I-CPS+AM 251 (100 pmol/0.2 µl)	TRPV1 antagonist	Vogel conflict test	Wistar rats (260-300g)	3 pmol/0.2 µl	prelimbic medial prefrontal cortex, 10	(o)	Shocks of 0.5 mA/2 s were applied	Fogaça et al., 2012	Neuropharmacology 63:202-210
AA-5-HT	Dual FAAH/TRPV1 blocker	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	0.1-2.5	ip, 30	+		Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT	Dual FAAH/TRPV1 blocker	Elevated plus-maze	Swiss mice (7-8-week-old)	1-5	ip, 30	o		Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT	Dual FAAH/TRPV1 blocker	Elevated plus-maze	Swiss mice (7-8-week-old)	2.5	ip, for 7 days, o.d.	+		Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT	Dual FAAH/TRPV1 blocker	Elevated plus-maze	Sprague-Dawley rats (275-350g)	0.25-0.5 nmol/0.4 µl	basolateral amygdala, 10	+		John and Currie, 2012	Behav. Brain. Res. 233:382-388

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AA-5-HT+AM 251 (1 mg/kg)	Dual FAAH/TRPV1 blocker	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	0.1	ip, 30	o	No interaction	Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT+AM 251 (1 mg/kg)	Dual FAAH/TRPV1 blocker	Elevated plus-maze	Swiss mice (7-8-week-old)	2.5	ip, for 7 days, o.d.	(-)	The combination produced anxiogenic-like effects	Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT+olvanil (0.1 mg/kg)	Dual FAAH/TRPV1 blocker	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	0.1	ip, 30	o	No interaction	Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT+olvanil (0.1 mg/kg)	Dual FAAH/TRPV1 blocker	Elevated plus-maze	Swiss mice (7-8-week-old)	2.5	ip, for 7 days, o.d.	o	No interaction	Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT+SB366791 (0.5 mg/kg)	Dual FAAH/TRPV1 blocker	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	0.1	ip, 30	o	No interaction	Micale et al., 2009	Neuropsychopharmacology 34:593-606
AA-5-HT+SB366791 (0.5 mg/kg)	Dual FAAH/TRPV1 blocker	Elevated plus-maze	Swiss mice (7-8-week-old)	1	ip, 30	(+/-)	The combination produced anxiolytic- or anxiogenic-like effects at 1 and 5 mg/kg, respectively	Micale et al., 2009	Neuropsychopharmacology 34:593-606
ACEA	CB1 agonist	DPAG stimulation	Wistar rats (300-330g)	0.05 pmol/0.2 µl	dorsal PAG, 10	+		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486
ACEA	CB1 agonist	Elevated plus-maze	Wistar rats (260-300g)	5 pmol/0.2 µl	prelimbic medial prefrontal cortex, 10	+		Fogaça et al., 2012	Neuropharmacology 63:202-210
ACEA+AM 251 (100 pmol/0.2 µl)	CB1 agonist	Elevated plus-maze	Wistar rats (260-300g)	50 pmol/0.2 µl	prelimbic medial prefrontal cortex, 10	(-)		Fogaça et al., 2012	Neuropharmacology 63:202-210
ACEA+AM 251 (5 pmol/0.2 µl)	CB1 agonist	Elevated plus-maze	Wistar rats (260-300g)	5 pmol/0.2 µl	prelimbic medial prefrontal cortex, 10	(o)		Fogaça et al., 2012	Neuropharmacology 63:202-210
ACEA+AM 251 (75 pmol/0.2 µl)	CB1 agonist	DPAG stimulation	Wistar rats (300-330g)	0.05 pmol/0.2 µl	dorsal PAG, 10	(o)		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486
ACEA+capsazepine (0.1 nmol/0.2 µl)	CB1 agonist	DPAG stimulation	Wistar rats (300-330g)	0.5 pmol/0.2	dorsal PAG, 10	(+)		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
				µl					
ACPA	CB_1 agonist	Elevated plus-maze	Wistar rats (220-270g)	1.25-5 nmol/0.5 µl/side	central amygdala, 5	+		Zarrindast et al., 2008	Behav. Pharmacol. 19:716-723
ACPA+morphine (6 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-270g)	0.125-5 nmol/0.5 µl/side	central amygdala, 5	(+)		Zarrindast et al., 2008	Behav. Pharmacol. 19:716-723
ACPA+naloxone (0.1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-270g)	0.125-5 nmol/0.5 µl/side	central amygdala, 5	(o)		Zarrindast et al., 2008	Behav. Pharmacol. 19:716-723
AM 251	CB_1 antagonist	Elevated plus-maze	ICR mice (21-24g)	3-10	ip, 30	-		Patel and Hillard, 2006	J. Pharmacol. Exp. Ther. 318:304-311
AM 251	CB_1 antagonist	Conditioned fear	Long-Evans rats (about 350g)	3	ip, 15	+	The drug decreased the expression of contextual fear when administered prior to training, testing or both	Arenos et al., 2006	Eur. J. Pharmacol. 539:177-183
AM 251	CB_1 antagonist	Elevated plus-maze	Wistar rats (180-230g)	10-50 ng/0,5 µl	hippocampus CA1, 5	+		Roohbakhsh et al., 2007	Clin. Exp. Pharmacol. Physiol. 34:223-229
AM 251	CB_1 antagonist	Open-field	Ovariectomized female Long-Evans rats (10-week-old, 225-275g)	1	sc, 60	o		Hill et al., 2007	Psychoneuroendocrinology 32:350-357
AM 251	CB_1 antagonist	Elevated plus-maze	CD1 outbred background mice (2-month-old, 35g)	3	ip, 30	-		Haller et al., 2004	Behav. Pharmacol. 15:299-304
AM 251	CB_1 antagonist	Elevated plus-maze	CB1 KO mice (CD1 outbred background, 2-month-old, 35g)	0.3-3	ip, 30	o		Haller et al., 2004	Behav. Pharmacol. 15:299-304
AM 251	CB_1 antagonist	Elevated plus-maze	CD1 mice (2-month-old, 35g)	1-3	ip, 30	-		Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
AM 251	CB_1 antagonist	Elevated plus-maze	Wistar rats (2-month-old, 300g)	0,1-5	ip, 30	o		Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
AM 251	CB_1 antagonist	Elevated plus-maze	Wistar rats (2-month-old, 300g)	0,3-3	ip, 30	o	Animals were housed individually	Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AM 251	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	3	ip, 40	o		Rubino et al., 2007	Neuropsychopharmacology 32:2036-2045
AM 251	CB_1 antagonist	Conditioned fear	Syrian hamsters (*M. auratus*, 90-160g)	5	ip, 30	o	The drug was inactive on both conditioned and unconditioned social defeat	Moise et al., 2008	Psychopharmacology 200:333-246
AM 251	CB_1 antagonist	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	1	ip, 30	o		Micale et al., 2009	Neuropsychopharmacology 34:593-606
AM 251	CB_1 antagonist	Elevated plus-maze	Swiss mice (7-8-week-old)	1	ip, for 7 days, o.d.	o		Micale et al., 2009	Neuropsychopharmacology 34:593-606
AM 251	CB_1 antagonist	Conditioned fear	Wistar rats (210-230g)	100 pmol-300 nmol/200 nl	dorsolateral PAG, 5	o	Shocks of 1.5 mA/3 s were delivered the day before	Resstel et al., 2008	Psychopharmacology 198:405-411
AM 251	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	1 µg/0.4 µl	prefrontal cortex, 15	o		Rubino et al., 2007	Cereb. Cortex 18:1292-12301
AM 251	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	10 µg/1 µl	prefrontal cortex, 35	o		Rubino et al., 2008	Neuropharmacology 54:151-160
AM 251	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	10 µg/1 µl	ventral hippocampus, 35	o		Rubino et al., 2008	Neuropharmacology 54:151-160
AM 251	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	1 µg/1 µl	basolateral amygdala, 35	o		Rubino et al., 2008	Neuropharmacology 54:151-160
AM 251	CB_1 antagonist	Stress-induced hyperthermia	OT KO mice from a mixed 129/C57BL/6 background (25-35g)	3	ip, 60	o		Amico et al., 2008	Prog. Brain Res. 170:53-64
AM 251	CB_1 antagonist	Stress-induced hyperthermia	OT WT mice from a mixed 129/C57BL/6 background (25-35g)	3	ip, 60	o		Amico et al., 2008	Prog. Brain Res. 170:53-64
AM 251	CB_1 antagonist	Vogel conflict test	Wistar rats (230-250g)	100 pmol/0.2 µl	dorsolateral PAG, 15	o	Electric shocks of 0.5 mA/2 s were delivered	Lisboa et al., 2008	Eur. J. Pharmacol. 593:73-78
AM 251	CB_1 antagonist	Elevated plus-maze	Wistar rats (180-230g, 8-9-week-old)	0.001-0.1 µg/0.5 µl	ventral hippocampus, 5	o		Roohbakhsh et al., 2007	Basic Clin. Pharmacol. Toxicol. 105:333-338

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AM 251	CB_1 antagonist	Conditioned fear	Sprague-Dawley rats (250-300g, 60-day-old)	6 ng/0.5 µl	basolateral amygdala	-	(1) The drug blocked extinction; (2) Shock of 0.7 mA/2 s were applied	Ganon-Elazar and Akirav, 2009	J. Neurosci. 29:11078-11088
AM 251	CB_1 antagonist	Conditioned fear	Adult Sprague-Dawley rats	8	ip, 30	+	The drug was administered prior to conditioning.Freezing was reduced during a conditioned tone cue played within a novel context	Sink et al., 2010	Pharmacol. Biochem. Behav. 95:479-484
AM 251	CB_1 antagonist	Conditioned fear	Adult Sprague-Dawley rats	4-8	ip, 30	-	The drug was administered prior to conditioning. Freezing was increased in a fear retention test	Sink et al., 2010	Pharmacol. Biochem. Behav. 95:479-484
AM 251	CB_1 antagonist	Elevated plus-maze	Male Wistar rats (200-225g)	1	ip, 60	o		Seiller and Giuffrida, 2011	Pharmacol. Biochem. Behav. 98:583-586
AM 251	CB_1 antagonist	Elevated plus-maze	Wistar rats (220-270g)	25-100 nmol/0.5 µl/side	central amygdala, 5	o		Zarrindast et al., 2008	Behav. Pharmacol. 19:716-723
AM 251	CB_1 antagonist	Conditioned fear	C57BL/6J mice (6-8-week-old)	10	ip, 20	-	(1) The drug enhanced acquisition of freezing for trace-conditioning; (2) Shocks of 0.8 mA were delivered	Reich et al., 2008	J. Psychopharmacol.22:769-777
AM 251	CB_1 antagonist	Conditioned fear	C57BL/6J mice (6-8-week-old)	10	ip, 20	-	(1) The drug enhanced acquisition of freezing for delay-conditioning; (2) Shocks of 0.8 mA were delivered	Reich et al., 2008	J. Psychopharmacol.22:769-777
AM 251	CB_1 antagonist	Conditioned fear	C57BL/6J mice (6-8-week-old)	10	ip, 20	-	(1) The drug enhanced fear during memory recall tests; (2) Shocks of 0.8 mA were delivered	Reich et al., 2008	J. Psychopharmacol.22:769-777

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AM 251	CB_1 antagonist	Conditioned fear	C57BL/6J mice (6-8-week-old)	10	ip, 20	-	(1) The drug enhanced cued freezing during memory recall tests; (2) Shocks of 0.8 mA were delivered	Reich et al., 2008	J. Psychopharmacol.22:769-777
AM 251	CB_1 antagonist	Elevated plus-maze	NMRI mice (20-25g)	5-10	ip, 30	-		Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
AM 251	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (319±2.1g)	1	ip, 40	o		Haller et al., 2009	Psychopharmacology 204:607-616
AM 251	CB_1 antagonist	Vogel conflict test	Swiss mice (22-25g)	5	ip, 30	-	Shocks of 0.5 mA/2 s were applied	Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199
AM 251	CB_1 antagonist	Social interaction	Swiss mice (22-25g)	5	ip, 30	-		Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199
AM 251	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	3	ip, 40	o		Braida et al., 2009	Br. J. Pharmacol. 157:844-853
AM 251	CB_1 antagonist	DPAG stimulation	Wistar rats (300-330g)	75 pmol/0.2 µl	dorsal PAG, 10	o		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486
AM 251	CB_1 antagonist	Light/dark inhibitory avoidance	Sprague-Dawley rats (60-day-old, 250-300g)	0.3 ng/0.5 µl	basolateral amygdala	o	Shocks of 0.7 mA/2 s were applied 2 min or 2 h prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week during nicotine abstinence	o	Animals were low responders as screened in a novelty-seeking test, they received several days of nicotine and had one week of abstinence	Aydin et al., 2012	Neuropharmacology 63:1335-1345
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week	o	Animals were low responders as screened in a novelty-seeking test	Aydin et al., 2012	Neuropharmacology 63:1335-1345

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week during nicotine abstinence	o	Animals were low responders as screened in a novelty-seeking test, they received several days of nicotine and had three week of abstinence	Aydin et al., 2012	Neuropharmacology 63:1335-1345
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week	o	Animals were low responders as screened in a novelty-seeking test	Aydin et al., 2012	Neuropharmacology 63:1335-1345
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week during nicotine abstinence	o	Animals were high responders as screened in a novelty-seeking test, they received several days of nicotine and had one week of abstinence	Aydin et al., 2012	Neuropharmacology 63:1335-1345
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week	o	Animals were high responders as screened in a novelty-seeking test	Aydin et al., 2012	Neuropharmacology 63:1335-1345
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week during nicotine abstinence	-	Animals were high responders as screened in a novelty-seeking test, they received several days of nicotine and had three week of abstinence	Aydin et al., 2012	Neuropharmacology 63:1335-1345
AM 251	CB_1 antagonist	Social interaction	Sprague-Dawley rats (PN 44)	5	ip, for one week	o	Animals were high responders as screened in a novelty-seeking test	Aydin et al., 2012	Neuropharmacology 63:1335-1345
AM 251	CB_1 antagonist	Elevated plus-maze	Wistar rats (260-300g)	1-100 pmol/0.2 µl	prelimbic medial prefrontal cortex, 10	o		Fogaça et al., 2012	Neuropharmacology 63:202-210
AM 251	CB_1 antagonist	Vogel conflict test	Wistar rats (260-300g)	100 pmol/0.2 µl	prelimbic medial prefrontal	o	Shocks of 0.5 mA/2 s were applied	Fogaça et al., 2012	Neuropharmacology 63:202-210

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
					cortex, 10				
AM 251+17*β*-estradiol (10 µg)	CB_1 antagonist	Elevated plus-maze	Ovariectomized female Long-Evans rats (10-week-old, 225-275g)	1	sc, 60	(o)	Blockade of the anxiolytic-like effects of 17*β*-estradiol	Hill et al., 2007	Psychoneuroendocrinology 32:350-357
AM 251+17*β*-estradiol (10 µg)	CB_1 antagonist	Open-field	Ovariectomized female Long-Evans rats (10-week-old, 225-275g)	1	sc, 60	(o)	Blockade of the anxiolytic-like effects of 17*β*-estradiol	Hill et al., 2007	Psychoneuroendocrinology 32:350-357
AM 251+acetaminophen (200 mg/kg)	CB_1 antagonist	Vogel conflict test	Swiss mice (22-25g)	1	ip, 30	(o)	Shocks of 0.5 mA/2 s were applied	Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199
AM 251+acetaminophen (200 mg/kg)	CB_1 antagonist	Social interaction	Swiss mice (22-25g)	1	ip, 30	(o)		Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199
AM 251+diazepam (1-2 mg/kg)	CB_1 antagonist	Elevated plus-maze	NMRI mice (20-25g)	5	ip, 30	(o)	Blockade of the anxiolytic-like effects of diazepam	Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
AM 251+morphine (6 mg/kg)	CB_1 antagonist	Elevated plus-maze	Wistar rats (220-270g)	0.125-5 nmol/0.5 µl/side	central amygdala, 5	+	Combination produced anxiolytic-like effects	Zarrindast et al., 2008	Behav. Pharmacol. 19:716-723
AM 251+naloxone (0.1 mg/kg)	CB_1 antagonist	Elevated plus-maze	Wistar rats (220-270g)	0.125-5 nmol/0.5 µl/side	central amygdala, 5	+	Combination produced anxiolytic-like effects	Zarrindast et al., 2008	Behav. Pharmacol. 19:716-723
AM 251+Salvia divinorum (0.1 µg)	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	3	ip, 40	(o)	Blockade of the anxiolytic-like effects of *Salvia divinorum*	Braida et al., 2009	Br. J. Pharmacol. 157:844-853
AM 3506	FAAH inhibitor	Conditioned fear	129S1/Sv1mJ (S1) mice (8-12-week-old)	1	ip	+	Drug was given before extinction	Gunduz-Cinar et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2012.72
AM 3506	FAAH inhibitor	Conditioned fear	129S1/Sv1mJ (S1) mice (8-12-week-old)	1	ip	o	Test was performed in the absence of extinction training	Gunduz-Cinar et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2012.72
AM 3506	FAAH inhibitor	Conditioned fear	129S1/Sv1mJ (S1) mice (8-12-week-old)	1	basolateral amygdala, 30	+	Drug was given before extinction	Gunduz-Cinar et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2012.72

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
AM 3506+rimonabant (0.1 µg/µl in BLA)	FAAH inhibitor	Conditioned fear	129S1/Sv1mJ (S1) mice (8-12-week-old)	1	ip	(o)	Drug was given before extinction	Gunduz-Cinar et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2012.72
AM 3506+rimonabant (1 mg/kg)	FAAH inhibitor	Conditioned fear	129S1/Sv1mJ (S1) mice (8-12-week-old)	1	ip	(o)	Drug was given before extinction	Gunduz-Cinar et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2012.72
AM 404	AMT inhibitor	Elevated plus-maze	ICR mice (21-24g)	1-3	ip, 30	+		Patel and Hillard, 2006	J. Pharmacol. Exp. Ther. 318:304-311
AM 404	AMT inhibitor	Elevated plus-maze	Wistar rats (200-350g)	5	ip, 30	+		Bortolato et al., 2006	Neuropsychopharmacology 31:2652-2659
AM 404	AMT inhibitor	Defensive withdrawal	Wistar rats (200-350g)	5	ip, 45	+		Bortolato et al., 2006	Neuropsychopharmacology 31:2652-2659
AM 404	AMT inhibitor	Ultrasonic distress vocalizations	Wistar rats (10-day-old)	1-2	ip, 30	+		Bortolato et al., 2006	Neuropsychopharmacology 31:2652-2659
AM 404	AMT inhibitor	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.75-1.25	ip, 60	+		Braida et al., 2007	Eur. J. Pharmacol. 555:156-163
AM 404	AMT inhibitor	Conditioned fear	Wistar rats (210-230g)	50 pmol/200 nl	dorsolateral PAG, 5	+	Shocks of 1.5 mA/3 s were delivered the day before	Resstel et al., 2008	Psychopharmacology 198:405-411
AM 404	AMT inhibitor	Conditioned fear	Wistar rats (3-month-old)	1 µg/1 µl	icv, 5	+	(1) The drug facilitated the extinction of Conditioned fear stress; (2) Shocks of 1.5 mA were applied	Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
AM 404	AMT inhibitor	Elevated plus-maze	Wistar rats (3-month-old)	1 µg/1 µl	icv, 5	o		Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
AM 404	AMT inhibitor	Elevated plus-maze	Wistar rats (3-month-old)	1 µg/1 µl	icv, 5	+	Animals were subjected to Conditioned fear stress prior to testing	Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
AM 404	AMT inhibitor	Vogel conflict test	Wistar rats (230-250g)	50 pmol/0.2 µl	dorsolateral PAG, 10	+	Electric shocks of 0.5 mA/2 s were delivered	Lisboa et al., 2008	Eur. J. Pharmacol. 593:73-78
AM 404	AMT inhibitor	Elevated plus-maze	NMRI mice (20-25g)	1-2	ip, 30	+		Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
AM 404	AMT inhibitor	Holeboard	NMRI mice (20-25g)	0.5-2	ip, 30	o		Naderi et	Pharmacol. Biochem.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								al., 2008	Behav. 89:64-75
AM 404	AMT inhibitor	Elevated plus-maze	BALB/c mice (20-30g, 3-4-month-old)	1	ip, 30	+		Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
AM 404+8-OH-DPAT (0.0075 mg/kg)	AMT inhibitor	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.015	ip, 60	(+)	Synergistic effects	Braida et al., 2007	Eur. J. Pharmacol. 555:156-163
AM 404+AM 251 (100 pmol/200 nl)	AMT inhibitor	Conditioned fear	Wistar rats (210-230g)	50 pmol/200 nl	dorsolateral PAG, 5	(o)	(1) Antagonism of the effects of AM 404; (2) Shocks of 1.5 mA/3 s were delivered the day before	Resstel et al., 2008	Psychopharmacology 198:405-411
AM 404+AM 251 (100 pmol/200 nl)	AMT inhibitor	Vogel conflict test	Wistar rats (230-250g)	50 pmol/0.2 µl	dorsolateral PAG, 10	(o)	(1) Blockade of the anxiolytic-like effects; (2) Electric shocks of 0.5 mA/2 s were delivered	Lisboa et al., 2008	Eur. J. Pharmacol. 593:73-78
AM 404+diazepam (0.5 mg/kg)	AMT inhibitor	Elevated plus-maze	NMRI mice (20-25g)	1-2	ip, 30	o	No interaction	Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
AM 404+diazepam (0.5 mg/kg)	AMT inhibitor	Holeboard	NMRI mice (20-25g)	1	ip, 30	(o)	Blockade of the anxiolytic-like effects of diazepam	Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
AM 404+rimonabant (0.2 mg/kg)	AMT inhibitor	Conditioned fear	Wistar rats (3-month-old)	1 µg/1 µl	icv, 5	(o)	(1) Antagonism of the effects of AM404; (2) Shocks of 1.5 mA were applied	Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
AM 404+rimonabant (1 mg/kg)	AMT inhibitor	Elevated plus-maze	Wistar rats (200-350g)	5	ip, 30	(o)	Blockade of the effects of AM 404	Bortolato et al., 2006	Neuropsychopharmacology 31:2652-2659
AM 404+WAY 100635 (0.3 mg/kg)	AMT inhibitor	Elevated plus-maze	Sprague-Dawley rats (150-175g)	1.25	ip, 60	(o)	Blockade of the anxiolytic-like effects of AM 404	Braida et al., 2007	Eur. J. Pharmacol. 555:156-163
AM 4113	CB_1 antagonist	Conditioned fear	Adult Sprague-Dawley rats	6	ip, 30	+	The drug was administered prior to conditioning.Freezing was reduced during a conditioned tone cue played within a novel context	Sink et al., 2010	Pharmacol. Biochem. Behav. 95:479-484
AM 4113	CB_1 antagonist	Conditioned fear	Adult Sprague-Dawley rats	3-12	ip, 30	o	The drug was administered prior to conditioning.	Sink et al., 2010	Pharmacol. Biochem. Behav. 95:479-484

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							Contextual fear memory was not affected		
Anandamide	Endogenous cannabinoid	Elevated plus-maze	C57BL/6J mice (20-30g)	20	ip, 30	o		Naidu et al., 2007	Psychopharmacology 192:61-70
Anandamide	Endogenous cannabinoid	Elevated plus-maze	C57BL/6J background FAAH (-/-) mice (20-30g)	2,5-10	ip, 30	o		Naidu et al., 2007	Psychopharmacology 192:61-70
Anandamide	Endogenous cannabinoid	Light/dark test	Sprague-Dawley rats (300-325g)	0.3	iv, o.d. for 3 days	+	The compound was tested for 3 consecutive days. It was active after the fist and second injection	Scherma et al., 2008	Neuropharmacology 54:129-140
Anandamide	Endogenous cannabinoid	Light/dark test	Sprague-Dawley rats (300-325g)	3	iv, o.d. for 3 days	-	The compound was tested for 3 consecutive days. It was active after the fist and second injection	Scherma et al., 2008	Neuropharmacology 54:129-140
Anandamide	Endogenous cannabinoid	Conditioned fear	Wistar rats (210-230g)	5 pmol/200 nl	dorsolateral PAG, 5	+	Shocks of 1.5 mA/3 s were delivered the day before	Resstel et al., 2008	Psychopharmacology 198:405-411
Anandamide	Endogenous cannabinoid	Vogel conflict test	Wistar rats (230-250g)	5 pmol/0.2 µl	dorsolateral PAG, 10	+	Electric shocks of 0.5 mA/2 s were delivered	Lisboa et al., 2008	Eur. J. Pharmacol. 593:73-78
Anandamide	Endogenous cannabinoid	Elevated plus-maze	C57BL/6J mice (20-30g, 2-month-old))	0.1	ip, 15	+	Animals were subjected to an open-field prior to testing	Ribeiro et al., 2009	Braz. J. Med. Biol. Res. 42:556-560
Anandamide	Endogenous cannabinoid	Open-field	C57BL/6J mice (20-30g, 2-month-old))	0.1	ip, 10	+		Ribeiro et al., 2009	Braz. J. Med. Biol. Res. 42:556-560
Anandamide	Endogenous cannabinoid	Vogel conflict test	Swiss mice (22-25g)	10-20 µg/1 µl	icv, 5	+	Shocks of 0.5 mA/2 s were applied	Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199
Anandamide	Endogenous cannabinoid	Social interaction	Swiss mice (22-25g)	10-20 µg/1 µl	icv, 5	+		Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Anandamide+acetaminophen (25 mg/kg)	Endogenous cannabinoid	Vogel conflict test	Swiss mice (22-25g)	5 µg/1 µl	icv, 5	(+)	Shocks of 0.5 mA/2 s were applied	Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199
Anandamide+acetaminophen (25 mg/kg)	Endogenous cannabinoid	Social interaction	Swiss mice (22-25g)	5 µg/1 µl	icv, 5	(+)		Umathe et al., 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1191-1199
Anandamide+AM 251 (100 pmol/200 nl)	Endogenous cannabinoid	Conditioned fear	Wistar rats (210-230g)	5 pmol/200 nl	dorsolateral PAG, 5	(o)	(1) Antagonism of the effects of AM 404; (2) Shocks of 1.5 mA/3 s were delivered the day before	Resstel et al., 2008	Psychopharmacology 198:405-411
Anandamide+AM 251 (100 pmol/200 nl)	Endogenous cannabinoid	Vogel conflict test	Wistar rats (230-250g)	5 pmol/0.2 µl	dorsolateral PAG, 10	(o)	(1) Blockade of the anxiolytic-like effects; (2) Electric shocks of 0.5 mA/2 s were delivered	Lisboa et al., 2008	Eur. J. Pharmacol. 593:73-78
AVE1625	CB_1 antagonist	Light/dark test	NMRI mice (18-20g)	10-100	po, 60	o		Black et al., 2011	Psychopharmacology 215:149-163
Cannabidiol	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	0.5-50	ip, 30	+		Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Cannabidiol	CB_1 agonist	Vogel conflict test	Wistar rats (220-240g)	10	ip, 30	+	An electric shock of 0.5 mA/2 s was delivered	Moreira et al., 2006	Prog. Neuropsychopharmacol. Biol. Psychiatry 30:1466-1471
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (220-240g)	30 nmol/0.2 µl	dorsolateral PAG, 10	+		Campos et al., 2008	Psychopharmacology 199:223-230
Cannabidiol	CB_1 agonist	Vogel conflict test	Wistar rats (220-240g)	30 nmol/0.2 µl	dorsolateral PAG, 10	+	Shocks of 0.5 mA were applied	Campos et al., 2008	Psychopharmacology 199:223-230
Cannabidiol	CB_1 agonist	Conditioned fear	Wistar rats (3-month-old)	2 µg/1 µl	icv, 5	+	(1) The drug facilitated the extinction of Conditioned fear stress; (2) Shocks of 1.5 mA were applied	Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (3-month-old)	2 µg/1 µl	icv, 5	o		Bitencourt et al., 2008	Eur. Neuropsychopharmacol.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
									18:849-859
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (3-month-old)	2 µg/1 µl	icv, 5	+	Animals were subjected to Conditioned fear stress prior to testing	Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
Cannabidiol	CB_1 agonist	Conditioned emotional response	Lister-hooded rats (150-200g)	10	ip, 14 days	-		Elbaths et al., 2012	Psychopharmacology 221:239-247
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (230-250g)	10	ip, 24 h	+	Animals were subjected to restraint stress the day prior to testing	Resstel et al., 2009	Br. J. Pharmacol. 156:181-188
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (220-240g)	30 nmol/0.2 µl	dorsal PAG, 10	+		Campos and Guimarães, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1517-1521
Cannabidiol	CB_1 agonist	Defensive behaviors	Swiss mice (25-35g)	0.3-30	ip, 30	+	Defensive behaviors were elicited by constrictor snake	Uribe-Mariño et al., 2012	Neuropsychopharmacology 37:412-421
Cannabidiol	CB_1 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	5-10	ip, 30	+		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-7
Cannabidiol	CB_1 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	5-20	ip, 30	o		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-7
Cannabidiol	CB_1 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	5	ip, for 21 days	o		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-7
Cannabidiol	CB_1 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	5	ip, for 21 days	+		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-7
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (220-250g)	5	ip, for 7 days, o.d.	o		Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (220-250g)	5	ip, for 7 days, o.d.	+	Animals were exposed a cat for 10 min, 7 days prior to testing	Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (220-250g)	5	ip, 60	o		Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
Cannabidiol	CB_1 agonist	Elevated plus-maze	Wistar rats (220-250g)	5	ip, 60	o	Animals were exposed a cat for 10 min prior to testing	Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
Cannabidiol	CB_1 agonist	Light/dark test	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, 10	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Light/dark test	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, 10	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Light/dark test	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, for 15 days	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Light/dark test	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, for 15 days	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Light/dark test	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, for 15 days	o	Test was carried 2 days after the last injection	Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Light/dark test	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, for 15 days	o	Test was carried 2 days after the last injection	Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Open-field	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, 10	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Open-field	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, 10	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Open-field	$Nrg1^{+/+}$ mice (18-24-week-old)	1 and 100	ip, for 13 days	+		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Open-field	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, for 13 days	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Open-field	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, for 13 days	o	Test was carried 2 days after the last injection	Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Open-field	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, for 13 days	o	Test was carried 2 days after the last injection	Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Acoustic startle reflex	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, 10	-		Long et al., 2012	PLoS ONE 7:e34129

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cannabidiol	CB_1 agonist	Acoustic startle reflex	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, 10	-		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Acoustic startle reflex	$Nrg1^{+/+}$ mice (18-24-week-old)	1 and 100	ip, for 21 days	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Acoustic startle reflex	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, for 21 days	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Acoustic startle reflex	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, for 21 days	o	Test was carried 2 days after the last injection	Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Acoustic startle reflex	$Nrg1^{+/-}$ mice (18-24-week-old)	1-100	ip, for 21 days	o	Test was carried 2 days after the last injection	Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Social interaction	$Nrg1^{+/+}$ mice (18-24-week-old)	1-100	ip, 10	o		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Social interaction	$Nrg1^{+/-}$ mice (18-24-week-old)	50-100	ip, 10	+		Long et al., 2012	PLoS ONE 7:e34129
Cannabidiol	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, 30	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Cannabidiol	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 7 days, o.d.	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Cannabidiol	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 14 days, o.d.	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Cannabidiol+11-COOH-Δ^8-THC (20 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	1-10	ip, 30	(o)	Blockade of the anxiolytic-like effects of cannabidiol	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Cannabidiol+AM 251 (100 pmol/0.2 µl)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-240g)	30 nmol/0.2 µl	dorsolateral PAG, 10	+	No antagonism of the effects of cannabidiol	Campos et al., 2008	Psychopharmacology 199:223-230
Cannabidiol+capsazepine (10 nmol/0.2 µl)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-240g)	60 nmol/0.2 µl	dorsal PAG, 10	(+)		Campos and Guimarães, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1517-1521
Cannabidiol+flumazenil (10 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	1-10	ip, 30	(o)	Blockade of the anxiolytic-like effects of cannabidiol	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Cannabidiol+flumazenil (10 mg/kg)	CB_1 agonist	Vogel conflict test	Wistar rats (220-240g)	10	ip, 30	+	(1) No interaction; (2) An electric shock of 0.5 mA/2 s was delivered	Moreira et al., 2006	Prog. Neuropsychopharmacol. Biol. Psychiatry 30:1466-1471
Cannabidiol+naloxone (1 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	1-10	ip, 30	+	No interaction	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Cannabidiol+rimonabant (0.2 mg/kg)	CB_1 agonist	Conditioned fear	Wistar rats (3-month-old)	2 µg/1 µl	icv, 5	(o)	(1) Antagonism of the effects of annabidiol; (2) Shocks of 1.5 mA were applied	Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
Cannabidiol+WAY100635 (0.1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (230-250g)	10	ip, 24 h	(o)	Animals were subjected to restraint stress the day prior to testing	Resstel et al., 2009	Br. J. Pharmacol. 156:181-188
Cannabidiol+WAY100635 (0.37 nmol/0.2 µl)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-240g)	30 nmol/0.2 µl	dorsolateral PAG, 10	(o)	Antagonism of the anxiolytic-like effects of cannabidiol	Campos et al., 2008	Psychopharmacology 199:223-230
Cannabidiol+WAY100635 (0.37 nmol/0.2 µl)	CB_1 agonist	Inhibitory avoidance in the elevated T-maze	Wistar rats (250-300g)	5	ip, for 21 days	(o)		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-7
Cannabidiol+WAY100635 (0.37 nmol/0.2 µl)	CB_1 agonist	Escape behavior in the elevated T-maze	Wistar rats (250-300g)	5	ip, for 21 days	(o)		Campos et al., 2012	Psychopharmacology doi: 10.1007/s00213-012-2878-7
Cannabidiol+WAY100635 (1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-250g)	5	ip, for 7 days, o.d.	o	No interaction	Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
Cannabidiol+WAY100635 (1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-250g)	5	ip, for 7 days, o.d.	(o)	Animals were exposed a cat for 10 min, 7 days prior to testing	Campos et al., 2012	J. Psychiatr. Res. 46:1501-1510
Cannabigerol	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, 30	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Cannabigerol	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 7 days, o.d.	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Cannabigerol	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 14 days, o.d.	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Capsaicin	TRPV1 agonist	Elevated plus-maze	Wistar rats (220-240g)	1 nmol/0.2	dorsolateral PAG, 10	+		Terzian et al., 2009	Eur. Neuropsychopharmacol.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
				µl					19:188-195
Capsaicin	TRPV1 agonist	Vogel conflict test	Wistar rats (220-240g)	1 nmol/0.2 µl	dorsolateral PAG, 10	+	Electric shocks of 0.5 mA/2 s were delivered	Terzian et al., 2009	Eur. Neuropsychopharmacol. 19:188-195
Capsazepine	TRPV1 antagonist	Elevated plus-maze	Wistar rats (220-240g)	60 nmol/0.2 µl	dorsolateral PAG, 10	+		Terzian et al., 2009	Eur. Neuropsychopharmacol. 19:188-195
Capsazepine	TRPV1 antagonist	Vogel conflict test	Wistar rats (220-240g)	60 nmol/0.2 µl	dorsolateral PAG, 10	+	Electric shocks of 0.5 mA/2 s were delivered	Terzian et al., 2009	Eur. Neuropsychopharmacol. 19:188-195
Capsazepine	TRPV1 antagonist	Elevated plus-maze	Wistar rats (300-350g, 3-month-old)	2 nmol/0.4 µl	ventral hippocampus, 10	+		Carolina et al., 2008	Behav. Pharmacol. 19:357-360
Capsazepine	TRPV1 antagonist	Elevated plus-maze	Wistar rats (220-240g)	10 nmol/0.2 µl	dorsal PAG, 10	o		Campos and Guimarães, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1517-1521
Capsazepine	TRPV1 antagonist	DPAG stimulation	Wistar rats (300-330g)	1-10 nmol/0.2 µl	dorsal PAG, 10	+		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486
Capsazepine	TRPV1 antagonist	Elevated plus-maze	Sprague-Dawley rats (275-350g)	1 nmol/0.4 µl	basolateral amygdala, 10	o		John and Currie, 2012	Behav. Brain. Res. 233:382-388
Capsazepine+AM 251 (75 pmol/0.2 µl)	TRPV1 antagonist	DPAG stimulation	Wistar rats (300-330g)	10 nmol/0.2 µl	dorsal PAG, 10	(o)		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486
Capsazepine+URB597 (0.01 µg/0.4 µl)	TRPV1 antagonist	Elevated plus-maze	Sprague-Dawley rats (275-350g)	1 nmol/0.4 µl	basolateral amygdala, 10	(+)		John and Currie, 2012	Behav. Brain. Res. 233:382-388
Capsazepine+URB597 (0.1 µg/0.4 µl)	TRPV1 antagonist	Elevated plus-maze	Sprague-Dawley rats (275-350g)	10 nmol/0.4 µl	basolateral amygdala, 10	(+)		John and Currie, 2012	Behav. Brain. Res. 233:382-388
Compound 5c	FAAH inhibitor	Elevated plus-maze	CD1 mice (5-6-week-old)	5-30	po, 60	o		Butini et al., 2012	J. Med. Chem. 55:6898-6915
Compound 5d	FAAH inhibitor	Elevated plus-maze	CD1 mice (5-6-week-old)	5-30	po, 60	o		Butini et al., 2012	J. Med. Chem. 55:6898-6915
Compound 5n	FAAH inhibitor	Elevated plus-maze	CD1 mice (5-6-week-old)	5-30	po, 60	o		Butini et al., 2012	J. Med. Chem. 55:6898-6915

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP 55,940	CB_1 agonist	Elevated plus-maze	ICR mice (21-24g)	0.01, 0.03 and 0.3	ip, 30	+		Patel and Hillard, 2006	J. Pharmacol. Exp. Ther. 318:304-311
CP 55,940	CB_1 agonist	Holeboard	Wistar rats (250-300g)	0.075-0.125	ip, 30	-	Overall exploratory behaviors were decreased	Arévalo et al., 2001	Pharmacol. Biochem. Behav. 70:123-131
CP 55,940	CB_1 agonist	Elevated plus-maze	Wistar rats (250-300g)	0.075-0.125	ip, 30	-	Closed arm entries were decreased	Arévalo et al., 2001	Pharmacol. Biochem. Behav. 70:123-131
CP 55,940	CB_1 agonist	Social interaction	Hooded Lister rats (220-250g)	2,5-10	ip, 30	o	HLU conditions were used	Genn et al., 2004	Pharmacol. Biochem. Behav. 77:567-573
CP 55,940	CB_1 agonist	Social interaction	Hooded Lister rats (220-250g)	2,5-10	ip, 30	o	HLF conditions were used	Genn et al., 2004	Pharmacol. Biochem. Behav. 77:567-573
CP 55,940	CB_1 agonist	Social interaction	Hooded Lister rats (220-250g)	40	ip, 30	-	(1) HLF conditions were used; (2) Locomotor activity was decreased	Genn et al., 2004	Pharmacol. Biochem. Behav. 77:567-573
CP 55,940	CB_1 agonist	Social interaction	Hooded Lister rats (220-250g)	40	ip, 30	-	(1) LLF conditions were used; (2) Locomotor activity was decreased	Genn et al., 2004	Pharmacol. Biochem. Behav. 77:567-573
CP 55,940	CB_1 agonist	Social interaction	Hooded Lister rats (220-250g)	40	ip, 24 h	-	(1) LLF conditions were used; (2) Rats were exposed to the test the day before and injected prior to testing	Genn et al., 2004	Pharmacol. Biochem. Behav. 77:567-573
CP 55,940	CB_1 agonist	Social interaction	Hooded Lister rats (220-250g)	40	ip, 24 h	+	(1) LLF conditions were used; (2) Rats were exposed to the test the day before and injected after testing	Genn et al., 2004	Pharmacol. Biochem. Behav. 77:567-573
CP 55,940	CB_1 agonist	Ultrasonic distress vocalizations	Long-Evans rat pups (11-13-day-old)	0,1-1	ip, 30	+		McGregor et al., 1996	Eur. J. Pharmacol. 313:43-49
CP 55,940	CB_1 agonist	Elevated plus-maze	Wistar rats (90-day-old)	0,001 and 0,05	ip, 30	+/-	The lower dose produced anxiolytic-like effects, while the higher dose produced anxiogenic-like effects	Marco et al., 2004	Behav. Pharmacol. 15:21-27
CP 55,940	CB_1 agonist	Holeboard	Wistar rats (90-day-	0,001	ip, 30	-	The drug reduced	Marco et	Behav. Pharmacol. 15:21-

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
			old)	and 0,05			head-dipping duration	al., 2004	27
CP 55,940	CB_1 agonist	Elevated plus-maze	Wistar rats (100-day-old)	0,075	ip, 30	-		Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940	CB_1 agonist	Holeboard	Wistar rats (100-day-old)	0,075	ip, 30	-		Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940	CB1 agonist	Elevated plus-maze	Female Wistar rats (75-day-old)	0.4	ip, for 10 days	o	Animals were treated during periadolescent period (D28 to D38)	Higuera-Matas et al., 2009	Pharmacol. Biochem. Behav. 93:482-490
CP 55,940	CB1 agonist	Elevated plus-maze	Wistar rats (75-day-old)	0.4	ip, for 10 days	o	Animals were treated during periadolescent period (D28 to D38)	Higuera-Matas et al., 2009	Pharmacol. Biochem. Behav. 93:482-490
CP 55,940	CB_1 agonist	Elevated plus-maze	Syrian hamsters (*M. auratus*, 3-6-month-old)	0.01	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
CP 55,940	CB1 agonist	T-tube	Syrian hamsters (*M. auratus*, 3-6-month-old)	0.01	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
CP 55,940	CB1 agonist	Conflict test	Syrian hamsters (*M. auratus*, 3-6-month-old)	0.01	ip, 30	o	Test was carried out at Zeitgeber 23	Gannon et al., 2011	Behav. Brain. Res. 218:8-14
CP 55,940	CB_1 agonist	Elevated plus-maze	C57BL/6N mice (70-90-day-old)	0.001 and 0.05	ip, 30	+/-	Biphasic effects	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940	CB_1 agonist	Elevated plus-maze	Glu-CB1-KO ($CB1^{floxed/floxed;Nex\text{-}Cre}$) C57BL/6N mice (70-90-day-old)	0.001-0.05	ip, 30	+	CB_1 receptor inactivation in cortical glutamatergic neurons	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940	CB_1 agonist	Elevated plus-maze	GABA-CB1-KO ($CB1^{floxed/floxed;Dlx5/6\text{-}Cre}$) C57BL/6N mice (70-90-day-old)	0.001-0.05	ip, 30	-	CB_1 receptor inactivation in forebrain GABAergic neurons	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940	CB_1 agonist	Holeboard	C57BL/6N mice (70-90-day-old)	0.001 and 0.05	ip, 30	+/-	Biphasic effects	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940	CB_1 agonist	Holeboard	Glu-CB1-KO ($CB1^{floxed/floxed;Nex\text{-}Cre}$) C57BL/6N mice (70-90-day-old)	0.001-0.05	ip, 30	+	CB_1 receptor inactivation in cortical glutamatergic neurons	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP 55,940	CB_1 agonist	Holeboard	GABA-CB1-KO ($CB1^{floxed/floxed;Dlx5/6-Cre}$) C57BL/6N mice (70-90-day-old)	0.001-0.05	ip, 30	-	CB_1 receptor inactivation in forebrain GABAergic neurons	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940	CB_1 agonist	Elevated plus-maze	C57BL/6N mice (70-90-day-old)	0.05	ip, 30	-		Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940	CB_1 agonist	Holeboard	C57BL/6N mice (70-90-day-old)	0.05	ip, 30	-		Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940+cyprodime (10 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (100-day-old)	0,075	ip, 30	-	No interaction	Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940+cyprodime (10 mg/kg)	CB_1 agonist	Holeboard	Wistar rats (100-day-old)	0,075	ip, 30	-	No interaction	Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940+flumazenil (20 mg/kg)	CB_1 agonist	Ultrasonic distress vocalizations	Long-Evans rat pups (11-13-day-old)	1	ip, 30	+	No interaction	McGregor et al., 1996	Eur. J. Pharmacol. 313:43-49
CP 55,940+GS-39783 (2 mg/kg)	CB_1 agonist	Elevated plus-maze	C57BL/6N mice (70-90-day-old)	0.05	ip, 30	(o)	GS-39783 is positive allosteric modulator of $GABA_B$ receptor	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940+GS-39783 (2 mg/kg)	CB_1 agonist	Holeboard	C57BL/6N mice (70-90-day-old)	0.05	ip, 30	(o)	GS-39783 is positive allosteric modulator of $GABA_B$ receptor	Aparisi Rey et al., 2012	Neuropsychopharmacology 37:2624-2634
CP 55,940+naloxone (1 mg/kg)	CB_1 agonist	Ultrasonic distress vocalizations	Long-Evans rat pups (11-13-day-old)	1	ip, 30	+	No interaction	McGregor et al., 1996	Eur. J. Pharmacol. 313:43-49
CP 55,940+naltrindole (1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (100-day-old)	0,075	ip, 30	-	No interaction	Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940+naltrindole (1 mg/kg)	CB_1 agonist	Holeboard	Wistar rats (100-day-old)	0,075	ip, 30	-	No interaction	Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940+nor-binaltorphimine (5 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (100-day-old)	0,075	ip, 30	(o)	Blockade of the anxiogenic-like effects	Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940+nor-binaltorphimine (5 mg/kg)	CB_1 agonist	Holeboard	Wistar rats (100-day-old)	0,075	ip, 30	-	No interaction	Marín et al., 2003	Pharmacol. Biochem. Behav. 74:649-656
CP 55,940+rimonabant (20 mg/kg)	CB_1 agonist	Ultrasonic distress vocalizations	Long-Evans rat pups (11-13-day-old)	1	ip, 30	(o)	Antagonism of the effects of CP 55,940	McGregor et al., 1996	Eur. J. Pharmacol. 313:43-49

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
CP 55,940+rimonabant (3 mg/kg)	CB_1 agonist	Holeboard	Wistar rats (250-300g)	0.075-0.125	ip, 30	-	No blockade of the effects of CP 55,940	Arévalo et al., 2001	Pharmacol. Biochem. Behav. 70:123-131
CP 55,940+rimonabant (3 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (250-300g)	0.075-0.125	ip, 30	-	No blockade of the effects of CP 55,940	Arévalo et al., 2001	Pharmacol. Biochem. Behav. 70:123-131
CP 55,940+SCH 23390 (0,5 mg/kg)	CB_1 agonist	Ultrasonic distress vocalizations	Long-Evans rat pups (11-13-day-old)	1	ip, 30	+	No interaction	McGregor et al., 1996	Eur. J. Pharmacol. 313:43-49
CP 55,940+WAY 100635 (1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (90-day-old)	0,001	ip, 30	+	No interaction	Marco et al., 2004	Behav. Pharmacol. 15:21-27
CP 55,940+WAY 100635 (1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (90-day-old)	0,05	ip, 30	(o)	Blockade of the anxiogenic-like effects	Marco et al., 2004	Behav. Pharmacol. 15:21-27
CP 55,940+WAY 100635 (1 mg/kg)	CB_1 agonist	Holeboard	Wistar rats (90-day-old)	0,05	ip, 30	(o)	Blockade of the anxiogenic-like effects	Marco et al., 2004	Behav. Pharmacol. 15:21-27
HU-210	CB_1 agonist	Elevated plus-maze	Long-Evans rats (300g, 70-day-old)	0.01 and 0.05	ip, 30	+/-	The drug was anxiolytic at the low and anxiogenic at the high dose	Hill and Gorzalka, 2004	Eur. J. Pharmacol. 499:291-295
HU-210	CB_1 agonist	Elevated plus-maze	Long-Evans rats (300g, 70-day-old)	0.01 and 0.05	ip, 30	-	Animals were subjected to a 21-day regimen of unpredictable stress	Hill and Gorzalka, 2004	Eur. J. Pharmacol. 499:291-295
HU-210	CB_1 agonist	Distress vocalizations	SPF-Wistar rats (200-230g)	0.1	ip, 50	-	To elicit vocalizations, rats were gently pressed 2 or 4 times bilaterally behind their forelimb	Giuliani et al., 2000	Pharmacol. Res. 41:47-53
HU-210	CB_1 agonist	Distress vocalizations	SPF-Wistar rats (200-230g)	0.1	ip, for 9 days, o.d.	-	To elicit vocalizations, rats were gently pressed 2 or 4 times bilaterally behind their forelimb	Giuliani et al., 2000	Pharmacol. Res. 41:47-53
HU-210	CB_1 agonist	Distress vocalizations	SPF-Wistar rats (200-230g)	0.1	ip, for 9 days, o.d.	-	(1) Testing occurred 24 hrs after the last injection; (2) To elicit vocalizations, rats were gently pressed 2 or 4 times bilaterally behind their forelimb	Giuliani et al., 2000	Pharmacol. Res. 41:47-53

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
HU-210	CB_1 agonist	Distress vocalizations	SPF-Wistar rats (200-230g)	0.1	ip, for 9 days, o.d.	o	(1) Testing occurred 7 days after the last injection; (2) To elicit vocalizations, rats were gently pressed 2 or 4 times bilaterally behind their forelimb	Giuliani et al., 2000	Pharmacol. Res. 41:47-53
HU-210	CB_1 agonist	Elevated plus-maze	SPF-Wistar rats (200-230g)	0.025-0.1	ip, 60	o		Giuliani et al., 2000	Pharmacol. Res. 41:47-53
HU-210	CB_1 agonist	Elevated plus-maze	SPF-Wistar rats (200-230g)	0.05-0.1	ip, for 9 days, o.d.	-		Giuliani et al., 2000	Pharmacol. Res. 41:47-53
HU-210	CB_1 agonist	Elevated plus-maze	SPF-Wistar rats (200-230g)	0.1	ip, for 9 days, o.d.	-	Testing occurred 24 hrs after the last administration	Giuliani et al., 2000	Pharmacol. Res. 41:47-53
HU-210	CB_1 agonist	Elevated plus-maze	SPF-Wistar rats (200-230g)	0.1	ip, for 9 days, o.d.	-	Testing occurred 7 days after the last administration	Giuliani et al., 2000	Pharmacol. Res. 41:47-53
HU-210	CB_1 agonist	Defensive withdrawal	Wistar rats (365-435g)	4-10 µg/kg	ip, 50	-	Tests were performed in an open-field containing a cylindrical chamber	Rodríguez de Fonseca et al., 1996	J, Pharmacol. Exp. Ther. 276:56-64
HU-210	CB_1 agonist	Elevated plus-maze	Long-Evans rats (300g, 70-day-old)	0.005-0.1	ip, o.d. for 12 days	o		Hill and Gorzalka, 2004	Psychoneuroendocrinology 31:526-536
HU-210	CB_1 agonist	Open-field	Long-Evans rats (300g, 70-day-old)	0.1	ip, o.d. for 12 days	-		Hill and Gorzalka, 2004	Psychoneuroendocrinology 31:526-536
HU-210+D-Phe CRF_{12-41} (5 µg)	CB_1 agonist	Defensive withdrawal	Wistar rats (365-435g)	20 µg/kg	ip, 50	(+)	Tests were performed in an open-field containing a cylindrical chamber	Rodríguez de Fonseca et al., 1996	J, Pharmacol. Exp. Ther. 276:56-64
JNJ-5003	FAAH inhibitor	Elevated plus-maze	C57BL/6J mice (3-month-old)	50	food for 21 days	o		Hill et al., 2012	Mol Psychiatry doi: 10.1038/mp.2012.90
JNJ-5003	FAAH inhibitor	Elevated plus-maze	C57BL/6J mice (3-month-old)	50	food for 21 days	+	Mice were subjected to 21days of daily restraint stress	Hill et al., 2012	Mol Psychiatry doi: 10.1038/mp.2012.90
Levonantradol	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	0.05-1	ip, 30	-		Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
LH 21	CB_1 antagonist	Elevated plus-maze	Wistar rats (175-225g)	3-10	ip, 30	o		Pavon et al., 2206	Neuropharmacology 51:358-366

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
LY2183240	Endocannabinoid uptake inhibitor	Fear-potentiated startle reflex	Male and female HAP mice HS/Ibg (62-103-day-old)	30	ip, 30 before each session	+	HAP = high alcohol preference	Powers et al., 2010	Psychopharmacology 212:571-583
LY2183240	Endocannabinoid uptake inhibitor	Fear-potentiated startle reflex	Male and female LAP mice HS/Ibg (62-103-day-old)	10-30	ip, 30 before each session	o	LAP = low alcohol preference	Powers et al., 2010	Psychopharmacology 212:571-583
Methanandamide	Anandamide analog	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.1-1 µg/0.4 µl	prefrontal cortex, 15	+	The drug produced anxiogenic-like effects at 10 µg/0.4 µl	Rubino et al., 2007	Cereb. Cortex 18:1292-12301
Methanandamide	Anandamide analog	Light/dark test	ICR mice (18-25g)	5	30	-		Akinshola et al., 1999	Neurochem. Res. 24:1233-1240
Methanandamide+AM 251 (1 µg/0.4 µl)	Anandamide analog	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.1 µg/0.4 µl	prefrontal cortex, 15	(o)	Antagonism of the effects anxiolytic-like of methanandamide	Rubino et al., 2007	Cereb. Cortex 18:1292-12301
Methanandamide+capsazepine (5 µg/0.4 µl)	Anandamide analog	Elevated plus-maze	Sprague-Dawley rats (150-175g)	3 µg/0.4 µl	prefrontal cortex, 15	(o)	Antagonism of the effects anxigenic-like effects of methanandamide	Rubino et al., 2007	Cereb. Cortex 18:1292-12301
Mutant mice	CB1 knockout	Mouse defense test battery	C57BL/6x129/Ola background mice (10-week-old)			+	KO mice displayed reduced defensive aggression responses	Griebel et al., 2005	Biol. Psychiatry 57:261-267
Mutant mice	CB1 knockout	Light/dark test	CD1 background mice			-	KO mice displayed increased anxiety-like behavior	Martin et al., 2002	Psychopharmacology 159:379-387
Mutant mice	CB1 knockout	Conditioned fear	C57BL/6NCrl background mice (6-14-week-old)			-	KO mice were impaired in within-session extinction and adaptation, but not in acquisition of conditioned and sensitized fear	Kamprath et al., 2006	J. Neurosci. 26:6677-6686
Mutant mice	CB1 knockout	Conditioned fear	C57BL/6NCrl background mice (6-14-week-old)			-	CB1 deficiency impaired both within-session and long-term adaptation of sensitized fear	Kamprath et al., 2006	J. Neurosci. 26:6677-6686
Mutant mice	CB1 knockout	Open-field	CD1 background mice (4-month-old, 28-30g)			-	Mice exhibited a mild anxiety-like behavior	Maccarrone et al., 2002	Eur. J. Neurosci. 15:1178-1186
Mutant mice	CB1 knockout	Light/dark test	CD1 background mice (4-month-old, 28-30g)			-	Mice exhibited a mild anxiety-like behavior	Maccarrone et al., 2002	Eur. J. Neurosci. 15:1178-1186

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	CB1 knockout	Elevated plus-maze	CD1 outbred background mice (2-month-old)			-	CB1 KO mice exhibited increased anxiety-like behavior	Haller et al., 2002	Eur. J. Neurosci. 16:1395-1398
Mutant mice	CB1 knockout	Elevated plus-maze	CD1 outbred background mice (2-3-month-old, 30-35g)			o	Both genotypes displayed similar performance under low light condition (0,5 lux)	Haller et al., 2004	Eur. J. Neurosci. 19:1906-1912
Mutant mice	CB1 knockout	Elevated plus-maze	CD1 outbred background mice (2-3-month-old, 30-35g)			-	CB1 KO mice exhibited increased anxiety-like behavior under high light condition (200 lux)	Haller et al., 2004	Eur. J. Neurosci. 19:1906-1912
Mutant mice	CB1 knockout	Social interaction	CD1 outbred background mice (2-3-month-old, 30-35g)			-	CB1 KO mice exhibited increased anxiety-like behavior	Haller et al., 2004	Eur. J. Neurosci. 19:1906-1912
Mutant mice	CB1 knockout	Conditioned fear	C57BL/6JOlaHsd (10-16-week-old)			-	(1) KO mice showed impaired short-term and long-term extinction in auditory fear conditioning; (2) Electric shocks of 0,7 mA were used	Marsicano et al., 2002	Nature 418:530-534
Mutant mice	CB1 knockout	Elevated plus-maze	C57BL/6JOlaHsd (10-16-week-old)			o	No phenotypic difference	Marsicano et al., 2002	Nature 418:530-534
Mutant mice	FAAH knockout	Elevated plus-maze	C57BL/6J background mice (20-30g)			o	No phenotypic difference	Naidu et al., 2007	Psychopharmacology 192:61-70
Mutant mice	FAAH knockout	Elevated plus-maze	C57BL/6J background mice (20-30g)			-	CB1 KO mice exhibited increased anxiety-like behavior	Haller et al., 2004	Behav. Pharmacol. 15:299-304
Mutant mice	CB1 knockout	Elevated plus-maze	CD1 background mice (30-35g)			-	CB1 KO mice displayed an anxiogenic-like phenotype	Touriño et al., 2008	Biol. Psychiatry 63:1030-1038
Mutant mice	FAAH knockout	Elevated plus-maze	C57BL/6J background mice (20-30g, 3-4-month-old)			+	KO mice exhibited decreased anxiety-like behavior	Moreira et al., 2008	Neuropharmacology 54:141-150
Mutant mice	FAAH knockout	Light/dark test	C57BL/6J background mice (20-30g, 3-4-month-old)			+	KO mice exhibited decreased anxiety-like behavior	Moreira et al., 2008	Neuropharmacology 54:141-150

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	CB1 knockout	Light/dark test	C57BL6/J mice (8-10-week-old, 24-26g)			-	Anxiogenic-like phenotype	Bura et al., 2010	Eur. Neuropsychopharmacol. 20:369-378
Mutant mice	FAAH knockout	Social interaction	C57BL6/6J background (30-35g, 6-7-month-old)			+	Anxiolytic-like phenotype	Cassano et al., 2011	Psychopharmacology 214:465-476
Mutant mice	FAAH knockout	Open-field	C57BL6/6J background (30-35g, 6-7-month-old)			+	Anxiolytic-like phenotype	Cassano et al., 2011	Psychopharmacology 214:465-476
Mutant mice	FAAH knockout	Open-field	C57BL6/6J mice (25-40g)			+		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Mutant mice	FAAH knockout	Elevated plus-maze	C57BL6/6J mice (25-40g)			+		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Mutant mice	FAAH knockout	Novelty-suppressed feeding	C57BL6/6J mice (25-40g)			o		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			o	Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			o		Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			o	Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			-		Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			o	(1) CB1 deletion in glutamatergic neurons; (2) Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			o	CB_1 deletion in glutamatergic neurons	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			-	Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			o	(1) CB1 deletion in glutamatergic neurons; (2) Mice were subjected to 7	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							days of social stress		
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			o	(1) CB1 deletion in GABAergic neurons; (2) Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			o	CB_1 deletion in GABAergic neurons	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			o	CB_1 deletion in GABAergic neurons	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			o	(1) CB1 deletion in GABAergic neurons; (2) Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			o	(1) CB1 deletion in 5-HT neurons; (2) Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Elevated plus-maze	C57BL/6N mice (2-3-month-old)			-	CB_1 deletion in 5-HT neurons	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			o	CB_1 deletion in 5-HT neurons	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-3-month-old)			o	(1) CB1 deletion in 5-HT neurons; (2) Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-4-month-old)			-		Metna-Laurent et al., 2012	J. Neurosci. 32:7109-7118
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-4-month-old)			o	CB_1 deletion in glutamatergic neurons	Metna-Laurent et al., 2012	J. Neurosci. 32:7109-7118
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-4-month-old)			+	CB_1 deletion in GABAergic neurons	Metna-Laurent et al., 2012	J. Neurosci. 32:7109-7118

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Mutant mice	CB_1 knockout	Conditioned fear	C57BL/6NCrl mice (8-14-week-old)			-		Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Mutant mice	CB_1 knockout	Conditioned fear	CaMK-CB1xC57BL/6NCrl mice (8-14-week-old)			-	CB1 was deleted in forebrain neurons	Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Mutant mice	CB_1 knockout	Conditioned fear	Glu-CB1xC57BL/6NCrl mice (8-14-week-old)			o	CB1 was deleted in cortical glutamatergic neurons	Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Mutant mice	FAAH knockout	Elevated plus-maze	C57BL/6J background mice (3-5-month-old)			o		Hill et al., 2012	Mol Psychiatry doi: 10.1038/mp.2012.90
Mutant mice	FAAH knockout	Elevated plus-maze	C57BL/6J background mice (3-5-month-old)			+	Mice were subjected to 21days of daily restraint stress	Hill et al., 2012	Mol Psychiatry doi: 10.1038/mp.2012.90
Mutant mice+AAV-CB_1	CB_1 knockout	Conditioned fear	C57BL/6N mice (2-4-month-old)	0,5 µL ($6x10^{11}$VG/ml)		(o)		Metna-Laurent et al., 2012	J. Neurosci. 32:7109-7118
Mutant mice+rimonabant (1 mg/kg)	FAAH knockout	Open-field	C57BL6/6J mice (25-40g)			(o)		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Mutant mice+rimonabant (1 mg/kg)	FAAH knockout	Elevated plus-maze	C57BL6/6J mice (25-40g)			(o)		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Mutant mice+rimonabant (1 mg/kg)	FAAH knockout	Novelty-suppressed feeding	C57BL6/6J mice (25-40g)			o		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Nabilone	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	0.01-0.1	ip, 30	+		Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Nabilone+11-COOH-Δ^8-THC (20 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	0.01-0.1	ip, 30	(o)	Blockade of the anxiolytic-like effects of nabilone	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Nabilone+flumazenil (10 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	0.01-0.1	ip, 30	(o)	Blockade of the anxiolytic-like effects of nabilone	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Nabilone+naloxone (1 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	0.01-0.1	ip, 30	+	No interaction	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Oleamide	Endogenous fatty acid amide	Social interaction	Sprague-Dawley rats (150-250g)	5	ip, 15	+	HLU conditions were used	Fedorova et al., 2001	J. Pharmacol. Exp. Ther. 299:332-342
Oleamide	Endogenous fatty acid amide	Elevated plus-maze	Sprague-Dawley rats (150-250g)	5	ip, 15	+		Fedorova et al., 2001	J. Pharmacol. Exp. Ther. 299:332-342

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Oleamide	Endogenous fatty acid amide	Elevated plus-maze	Swiss-Webster mice (3-week-old)	10-20	ip, 30	+	Experiment was performed in group-housed mice	Wei et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:1189-1195
Oleamide	Endogenous fatty acid amide	Elevated plus-maze	Swiss-Webster mice (3-week-old)	10-20	ip, 30	+	Experiment was performed in socially-isolated mice	Wei et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:1189-1195
Oleamide	Endogenous fatty acid amide	Light/dark test	Swiss-Webster mice (3-week-old)	10	ip, 30	+	Experiment was performed in group-housed mice	Wei et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:1189-1195
Oleamide	Endogenous fatty acid amide	Light/dark test	Swiss-Webster mice (3-week-old)	20	ip, 30	+	Experiment was performed in socially-isolated mice	Wei et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:1189-1195
Oleamide	Endogenous fatty acid amide	Holeboard	Swiss-Webster mice (3-week-old)	10-20	ip, 30	+	Experiment was performed in group-housed mice	Wei et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:1189-1195
Oleamide	Endogenous fatty acid amide	Holeboard	Swiss-Webster mice (3-week-old)	20	ip, 30	+	Experiment was performed in socially-isolated mice	Wei et al., 2007	Prog. Neuropsychopharmacol. Biol. Psychiatry 31:1189-1195
Olvanil	Capsaicin analog	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	0.1	ip, 30	o		Micale et al., 2009	Neuropsychopharmacology 34:593-606
Olvanil	Capsaicin analog	Elevated plus-maze	Swiss mice (7-8-week-old)	0.1	ip, for 7 days, o.d.	o		Micale et al., 2009	Neuropsychopharmacology 34:593-606
Rimonabant	CB_1 antagonist	Elevated plus-maze	ICR mice (21-24g)	3-10	ip, 30	-		Patel and Hillard, 2006	J. Pharmacol. Exp. Ther. 318:304-311
Rimonabant	CB_1 antagonist	Vogel conflict test	Sprague-Dawley rats (190-235 g)	0.3-3	ip, 30	+	Electric shocks of 0.6 mA/500 ms were delivered	Griebel et al., 2005	Biol. Psychiatry 57:261-267
Rimonabant	CB_1 antagonist	Elevated plus-maze	Sprague-Dawley rats (180-200g)	10	po, 60	+	Weak effects	Griebel et al., 2005	Biol. Psychiatry 57:261-267
Rimonabant	CB_1 antagonist	Mouse defense test battery	OF1 mice (10-week-old)	1 and 10	ip, 30	+	The drug decreased defensive aggression	Griebel et al., 2005	Biol. Psychiatry 57:261-267

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Rimonabant	CB_1 antagonist	Conditioned fear	C57BL/6NCrl background mice (6-14-week-old)	3	sc, 30	-	The drug impaired both within-session and long-term adaptation of sensitized fear	Kamprath et al., 2006	J. Neurosci. 26:6677-6686
Rimonabant	CB_1 antagonist	Holeboard	Wistar rats (250-300g)	3	ip, 30	-		Arévalo et al., 2001	Pharmacol. Biochem. Behav. 70:123-131
Rimonabant	CB_1 antagonist	Elevated plus-maze	Wistar rats (250-300g)	3	ip, 30	-		Arévalo et al., 2001	Pharmacol. Biochem. Behav. 70:123-131
Rimonabant	CB_1 antagonist	Elevated plus-maze	Wistar rats (200-350g)	1	ip, 30	o		Bortolato et al., 2006	Neuropsychopharmacology 31:2652-2659
Rimonabant	CB_1 antagonist	Light/dark test	CD1 mice (22-24g)	0.5	ip, 35	o		Berrendero and Maldonado, 2002	Psychopharmacology 163:111-117
Rimonabant	CB_1 antagonist	Elevated zero-maze	Wistar rats (200-350g)	2	ip, 60	o		Kathuria et al., 2003	Nat. Med. 9:76-81
Rimonabant	CB_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (10-day-old)	2	ip, 60	o		Kathuria et al., 2003	Nat. Med. 9:76-81
Rimonabant	CB_1 antagonist	Ultrasonic distress vocalizations	Long-Evans rat pups (11-13-day-old)	20	ip, 30	-		McGregor et al., 1996	Eur. J. Pharmacol. 313:43-49
Rimonabant	CB_1 antagonist	Defensive withdrawal	Wistar rats (315-385g)	3	ip, 30	-		Navarro et al., 1997	Neuroreport 8:491-496
Rimonabant	CB_1 antagonist	Elevated plus-maze	Wistar rats (315-385g)	3	ip, 30	-		Navarro et al., 1997	Neuroreport 8:491-496
Rimonabant	CB_1 antagonist	Elevated plus-maze	CD1 outbred background mice (2-month-old)	3	ip, 40	+		Haller et al., 2002	Eur. J. Neurosci. 16:1395-1398
Rimonabant	CB_1 antagonist	Elevated plus-maze	CB1 KO CD1 outbred background mice (2-month-old)	3	ip, 40	+		Haller et al., 2002	Eur. J. Neurosci. 16:1395-1398
Rimonabant	CB_1 antagonist	Conditioned fear	C57BL/6JOlaHsd (10-16-week-old)	3	sc, 20	-	(1) The drug impaired short-term and long-term extinction in auditory fear conditioning; (2) Electric shocks of 0,7 mA were used	Marsicano et al., 2002	Nature 418:530-534

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Rimonabant	CB_1 antagonist	Elevated plus-maze	Swiss-Webster mice (10-12-week-old)	0.1-10	ip, 30	o		Rodgers et al., 2003	Eur. J. Neurosci. 17:1279-1286
Rimonabant	CB_1 antagonist	Elevated plus-maze	Swiss-Webster mice (10-12-week-old)	1-3	ip, 30	+	Mice had been given a single undrugged exposure to the maze 24h prior to testing	Rodgers et al., 2003	Eur. J. Neurosci. 17:1279-1286
Rimonabant	CB_1 antagonist	Elevated plus-maze	Female Sabra mice (2-4-month-old)	2	ip, for 116 days, o.d.	o	The compound did not produce any effect when tested at days 12, 48 and 75, and 25 days after the last administration	Gobshtis et al., 2007	Eur. J. Pharmacol. 554:155-163
Rimonabant	CB_1 antagonist	Elevated zero-maze	Wistar rats (300-350g)	1-3	ip, 15	-		Sütt et al., 2008	Psychopharmacology 198:509-520
Rimonabant	CB_1 antagonist	Elevated zero-maze	Wistar rats (300-350g)	1-3	ip, 15	o	Rats were exposed to a cat odour prior to testing	Sütt et al., 2008	Psychopharmacology 198:509-520
Rimonabant	CB_1 antagonist	Elevated plus-maze	Syrian hamsters (*M. auratus*, 90-160g)	5	ip, 30	-		Moise et al., 2008	Psychopharmacology 200:333-246
Rimonabant	CB_1 antagonist	Conditioned fear	Syrian hamsters (*M. auratus*, 90-160g)	5	ip, 30	o	The drug was inactive on both conditioned and unconditioned social defeat	Moise et al., 2008	Psychopharmacology 200:333-246
Rimonabant	CB_1 antagonist	Elevated plus-maze	Wistar rats (250-300g)	0.5	ip, 30	+	The drug reversed anxiogenic-like effects of acute alcohol withdrawal	Rubio et al., 2008	Neuropharmacology 54:976-988
Rimonabant	CB_1 antagonist	Light/dark test	ICR mice (18-25g)	0.03-3	30	+		Akinshola et al., 1999	Neurochem. Res. 24:1233-1240
Rimonabant	CB_1 antagonist	Light/dark test	C57BL/6 mice (18-25g)	0.03	30	+		Akinshola et al., 1999	Neurochem. Res. 24:1233-1240
Rimonabant	CB_1 antagonist	Light/dark test	DBA/2 mice (18-25g)	3	30	-		Akinshola et al., 1999	Neurochem. Res. 24:1233-1240
Rimonabant	CB_1 antagonist	Elevated plus-maze	C57BL/6J mice (20-30g, 3-4-month-old)	3	ip, 30	o		Moreira et al., 2008	Neuropharmacology 54:141-150
Rimonabant	CB_1 antagonist	Elevated plus-maze	C57BL/6J background FAAH (-/-) mice (20-30g, 3-4-month-old)	3	ip, 30	(o)	Blockade by rimonabant of the anxiolytic-like phenotype of KO mice	Moreira et al., 2008	Neuropharmacology 54:141-150

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Rimonabant	CB_1 antagonist	Light/dark test	C57BL/6J mice (20-30g, 3-4-month-old)	3	ip, 30	o		Moreira et al., 2008	Neuropharmacology 54:141-150
Rimonabant	CB_1 antagonist	Light/dark test	C57BL/6J background FAAH (-/-) mice (20-30g, 3-4-month-old)	3	ip, 30	(o)	Blockade by rimonabant of the anxiolytic-like phenotype of KO mice	Moreira et al., 2008	Neuropharmacology 54:141-150
Rimonabant	CB_1 antagonist	Conditioned fear	Wistar rats (3-month-old)	0.2	ip, 20	o	Shocks of 1.5 mA were applied	Bitencourt et al., 2008	Eur. Neuropsychopharmacol. 18:849-859
Rimonabant	CB_1 antagonist	Elevated plus-maze	Swiss mice (20-25g)	0.5-2	ip, 30	-		Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
Rimonabant	CB_1 antagonist	Social interaction	FAAH $^{-/-}$ C57BL6/6J background (30-35g, 6-7-month-old)	1	ip, 25	(o)	The drug antagonized the anxiolytic-like phenotype of mutant mice	Cassano et al., 2011	Psychopharmacology 214:465-476
Rimonabant	CB_1 antagonist	Open-field	FAAH $^{-/-}$ C57BL6/6J background (30-35g, 6-7-month-old)	1	ip, 25	(o)	The drug antagonized the anxiolytic-like phenotype of mutant mice	Cassano et al., 2011	Psychopharmacology 214:465-476
Rimonabant	CB_1 antagonist	Open-field	C57BL6/6J mice (25-40g)	1	ip, 30	o		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Rimonabant	CB_1 antagonist	Elevated plus-maze	C57BL6/6J mice (25-40g)	1	ip, 30	o		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Rimonabant	CB_1 antagonist	Novelty-suppressed feeding	C57BL6/6J mice (25-40g)	1	ip, 30	-		Bambico et al., 2010	Neuropharmacology 35:2083-2100
Rimonabant	CB_1 antagonist	Elevated plus-maze	C57BL/6N mice (2-3-month-old)	3	ip, for 7 days, o.d.	o	Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Rimonabant	CB_1 antagonist	Conditioned fear	C57BL/6N mice (2-3-month-old)	3	ip, for 7 days, o.d.	o	Mice were subjected to 7 days of social stress	Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Rimonabant	CB_1 antagonist	Elevated plus-maze	C57BL/6N mice (2-3-month-old)	3	ip, for 7 days, o.d.	o		Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Rimonabant	CB_1 antagonist	Conditioned fear	C57BL/6N mice (2-3-month-old)	3	ip, for 7 days, o.d.	o		Dubreucq et al., 2012	Neuropsychopharmacology 37:1885-1900
Rimonabant	CB_1 antagonist	Conditioned fear	CRF_1 KOx129/OlaxCD1mice (8-14-week-old)	10	sc, 45	-		Kamprath et al., 2009	Genes Brain Behav. 8:203-211

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Rimonabant	CB_1 antagonist	Conditioned fear	129/OlaxCD1mice (8-14-week-old)	10	sc, 45	-		Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Rimonabant	CB_1 antagonist	Conditioned fear	CRF_2 KOx129/OlaxCD1mice (8-14-week-old)	10	sc, 45	-		Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Rimonabant	CB_1 knockout	Conditioned fear	129/OlaxCD1mice (8-14-week-old)	10	sc, 45	-		Kamprath et al., 2009	Genes Brain Behav. 8:203-211
Rimonabant	CB_1 antagonist	Conditioned fear	129S1/Sv1mJ (S1) mice (8-12-week-old)	1	ip	o	Drug was given before extinction	Gunduz-Cinar et al., 2012	Mol. Psychiatry doi: 10.1038/mp.2012.72
Rimonabant	CB_1 antagonist	Light/dark test	NMRI mice (18-20g)	10	po, 60	-		Black et al., 2011	Psychopharmacology 215:149-163
Rimonabant	CB_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (175-200g)	1.25 and 5	ip, 30	-	Shocks of 0.5 mA/1 s were applied	Varga et al., 2012	Pharmacol. Biochem. Behav. 103:425-430
Rimonabant	CB_1 antagonist	Elevated plus-maze	Mice	1	ip	+		Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
Rimonabant	CB_1 antagonist	Elevated plus-maze	BALB/c mice (20-30g, 3-4-month-old)	1	ip, 30	o		Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
Rimonabant	CB_1 antagonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, 30	-		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Rimonabant	CB_1 antagonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 7 days, o.d.	-		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Rimonabant	CB_1 antagonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 14 days, o.d.	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Rimonabant+acetaminophen (200 mg/kg)	CB_1 antagonist	Elevated plus-maze	BALB/c mice (20-30g, 3-4-month-old)	1	ip, 30	(o)	Blockade of the anxiolytic-like effects of acetaminophen	Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
Rimonabant+AM404 (1 mg/kg)	CB_1 antagonist	Elevated plus-maze	BALB/c mice (20-30g, 3-4-month-old)	1	ip, 30	(o)	Blockade of the anxiolytic-like effects of AM404	Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
Rimonabant+d-amphetamine (2 mg/kg)	CB_1 antagonist	Elevated plus-maze	Swiss mice (20-25g)	0.5-1	ip, 30	(o)	Anxiogenic-like effects of d-amphetamine were blunted	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Rimonabant+d-amphetamine (2 mg/kg)	CB_1 antagonist	Elevated plus-maze	Swiss mice (20-25g)	0.5-1	ip, 30	(o)	(1) d-amphetamine was given for 9 days; (2) rimonabant blocked the tolerance to the anxiogenic-like effects of d-amphetamine	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
Rimonabant+d-amphetamine (2 mg/kg, 6 days)+nicotine (last day)	CB_1 antagonist	Elevated plus-maze	Swiss mice (20-25g)	0.5-1	ip, 30	(o)	Rimonabant blocked the tolerance to the anxiogenic-like effects of d-amphetamine+nicotine	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
Rimonabant+d-amphetamine (2 mg/kg, last day)+nicotine (6 days)	CB_1 antagonist	Elevated plus-maze	Swiss mice (20-25g)	0.5-1	ip, 30	(o)	Rimonabant blocked the tolerance to the anxiogenic-like effects of d-amphetamine+nicotine	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
Rimonabant+desipramine (5 mg/kg)	CB_1 antagonist	Elevated plus-maze	Female Sabra mice (2-4-month-old)	2	ip, for 116 days, o.d.	(-)	The combination produced anxiogenic-like effects when the test was performed at days 12 and 75, but not at day 75 and 25 days post-treatment	Gobshtis et al., 2007	Eur. J. Pharmacol. 554:155-163
Rimonabant+methanadamide (5 mg/kg)	CB_1 antagonist	Light/dark test	ICR mice (18-25g)	0.03-3	30	(o)	Rimonabant blocked the anxiogenic-like effects of methanadamide	Akinshola et al., 1999	Neurochem. Res. 24:1233-1240
Rimonabant+MTEP (3 mg/kg)	CB_1 antagonist	Ultrasonic distress vocalizations	Wistar rats (175-200g)	1.25 and 5	ip, 30	(o)	Shocks of 0.5 mA/1 s were applied	Varga et al., 2012	Pharmacol. Biochem. Behav. 103:425-430
Rimonabant+nicotine (0.1 mg/kg)	CB_1 antagonist	Elevated plus-maze	Swiss mice (20-25g)	0.5-1	ip, 30	(o)	Anxiogenic-like effects of d-amphetmine were blunted	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
Rimonabant+nicotine (0.1 mg/kg)	CB_1 antagonist	Elevated plus-maze	Swiss mice (20-25g)	0.5-1	ip, 30	(o)	(1) nicotine was given for 9 days; (2) rimonabant blocked the tolerance to the anxiogenic-like effects	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							of nicotine		
SB366791	TRPV1 antagonist	Elevated plus-maze	C57BL/6J mice (7-8-week-old)	1	ip, 30	+		Micale et al., 2009	Neuropsychopharmacology 34:593-606
SB366791	TRPV1 antagonist	Elevated plus-maze	Swiss mice (7-8-week-old)	2.5	ip, 30	-		Micale et al., 2009	Neuropsychopharmacology 34:593-606
SB366791	TRPV1 antagonist	DPAG stimulation	Wistar rats (300-330g)	10 nmol/0.2 µl	dorsal PAG, 10	+		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486
SB366791+AM 251 (75 pmol/0.2 µl)	TRPV1 antagonist	DPAG stimulation	Wistar rats (300-330g)	10 nmol/0.2 µl	dorsal PAG, 10	(o)		Casarotto et al., 2012	Neuropsychopharmacology 37:478-486
Surinabant (SR147778)	CB_1 antagonist	Conditioned fear	Wistar rats (3-month-old)	1	ip, 30	-	(1) The drug disrupted the extinction of 24 h-old contextual fear; (2) An electric shock of 1.5 mA/1 s was delivered on session 1	Pamplona et al., 2006	Psychopharmacology 188:641-649
Taranabant	CB_1 antagonist	Light/dark test	NMRI mice (18-20g)	10	po, 60	-		Black et al., 2011	Psychopharmacology 215:149-163
Tetrahydrocannabivarin	CB_1 antagonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, 30	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Tetrahydrocannabivarin	CB_1 antagonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 7 days, o.d.	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Tetrahydrocannabivarin	CB_1 antagonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 14 days, o.d.	o		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
URB532	FAAH inhibitor	Elevated zero-maze	Wistar rats (200-350g)	1-10	ip, 30	+		Kathuria et al., 2003	Nat. Med. 9:76-81
URB532	FAAH inhibitor	Ultrasonic distress vocalizations	Wistar rats (10-day-old)	1-10	ip, 30	+		Kathuria et al., 2003	Nat. Med. 9:76-81
URB532+rimonabant (2 mg/kg)	FAAH inhibitor	Elevated zero-maze	Wistar rats (200-350g)	5	ip, 30	(o)	Antagonism of the anxiolytic-like effects of URB532	Kathuria et al., 2003	Nat. Med. 9:76-81
URB532+rimonabant (2 mg/kg)	FAAH inhibitor	Ultrasonic distress vocalizations	Wistar rats (10-day-old)	5	ip, 30	(o)	Antagonism of the anxiolytic-like effects of URB532	Kathuria et al., 2003	Nat. Med. 9:76-81

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
URB597	FAAH inhibitor	Elevated plus-maze	ICR mice (21-24g)	0.1-0.3	ip, 30	+		Patel and Hillard, 2006	J. Pharmacol. Exp. Ther. 318:304-311
URB597	FAAH inhibitor	Elevated zero-maze	Wistar rats (200-350g)	0.1	ip, 30	+		Kathuria et al., 2003	Nat. Med. 9:76-81
URB597	FAAH inhibitor	Ultrasonic distress vocalizations	Wistar rats (10-day-old)	0,1	ip, 30	+		Kathuria et al., 2003	Nat. Med. 9:76-81
URB597	FAAH inhibitor	Elevated plus-maze	C57BL/6J mice (20-30g)	0,03-10	ip, 30	o		Naidu et al., 2007	Psychopharmacology 192:61-70
URB597	FAAH inhibitor	Elevated plus-maze	ICR mice (20-30g)	0,03-10	ip, 30	o		Naidu et al., 2007	Psychopharmacology 192:61-70
URB597	FAAH inhibitor	Elevated plus-maze	ICR mice (20-30g)	0,03-0,1	ip, 30	o	Lighting conditions: light of 60 W was suspended above the open arms	Naidu et al., 2007	Psychopharmacology 192:61-70
URB597	FAAH inhibitor	Elevated plus-maze	ICR mice (20-30g)	0,1	ip, 120	+	Lighting conditions: light of 60 W was suspended above the open arms	Naidu et al., 2007	Psychopharmacology 192:61-70
URB597	FAAH inhibitor	Elevated plus-maze	Ovariectomized female Long-Evans rats (10-week-old, 225-275g)	0.1-0.3	sc, 60	+		Hill et al., 2007	Psychoneuroendocrinology 32:350-357
URB597	FAAH inhibitor	Open-field	Ovariectomized female Long-Evans rats (10-week-old, 225-275g)	0.1	sc, 60	+		Hill et al., 2007	Psychoneuroendocrinology 32:350-357
URB597	FAAH inhibitor	Light/dark test	Sprague-Dawley rats (300-325g)	0.1-0.3	ip, o.d. for 3 days	+	The compound was tested for 3 consecutive days. It was active after the fist and second injection	Scherma et al., 2008	Neuropharmacology 54:129-140
URB597	FAAH inhibitor	Elevated plus-maze	Syrian hamsters (*M. auratus*, 90-160g)	0.1-0.3	ip, 30	+		Moise et al., 2008	Psychopharmacology 200:333-246
URB597	FAAH inhibitor	Conditioned fear	Syrian hamsters (*M. auratus*, 90-160g)	0.3-3	ip, 30	o	The drug was inactive on both conditioned and unconditioned social defeat	Moise et al., 2008	Psychopharmacology 200:333-246
URB597	FAAH inhibitor	Elevated	C57BL/6J mice (7-8-	1	ip, 30	+		Micale et	Neuropsychopharmacology

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		plus-maze	week-old)					al., 2009	34:593-606
URB597	FAAH inhibitor	Elevated plus-maze	Swiss mice (7-8-week-old)	1	ip, for 7 days, o.d.	+		Micale et al., 2009	Neuropsychopharmacology 34:593-606
URB597	FAAH inhibitor	Stress-induced reinstatement of alcohol seeking	Wistar rats (175-225g)	0.1-1	ip, 30	o	Shocks of 1 mA were delivered for 15 min prior to testing	Cippitelli et al., 2008	Psychopharmacology 198:449-460
URB597	FAAH inhibitor	Elevated plus-maze	Wistar rats (175-225g)	0.3-1	ip, 30	+	The drug reversed anxiogenic-like effects of acute alcohol withdrawal	Cippitelli et al., 2008	Psychopharmacology 198:449-460
URB597	FAAH inhibitor	Yohimbine-induced reinstatement of alcohol seeking	Wistar rats (175-225g)	0.1-1	ip, 30	o		Cippitelli et al., 2008	Psychopharmacology 198:449-460
URB597	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.01 µg/0.4 µl	prefrontal cortex, 15	+		Rubino et al., 2007	Cereb. Cortex 18:1292-12301
URB597	FAAH inhibitor	Elevated plus-maze	C57BL/6J mice (20-30g, 3-4-month-old)	1	ip, 30	+		Moreira et al., 2008	Neuropharmacology 54:141-150
URB597	FAAH inhibitor	Vogel conflict test	Wistar rats (230-250g)	0.01 nmol/0.2 µl	dorsolateral PAG, 10	+	Electric shocks of 0.5 mA/2 s were delivered	Lisboa et al., 2008	Eur. J. Pharmacol. 593:73-78
URB597	FAAH inhibitor	Elevated plus-maze	Wistar rats (180-230g, 8-9-week-old)	0.1-1 µg/0.5 µl	ventral hippocampus, 30	-		Roohbakhsh et al., 2007	Basic Clin. Pharmacol. Toxicol. 105:333-338
URB597	FAAH inhibitor	Elevated plus-maze	Male Wistar rats (200-225g)	0.3	ip, 60	o		Seiller and Giuffrida, 2011	Pharmacol. Biochem. Behav. 98:583-586
URB597	FAAH inhibitor	Open-field	C57BL/6 mice (8-10-week-old)	0,3	ip	+	Aminals were subjected to social defeat stress prior to testing	Rossi et al., 2010	Mol. Pharmacol. 78:260-268
URB597	FAAH inhibitor	Elevated plus-maze	C57BL/6 mice (8-10-week-old)	0,3	ip	+	Aminals were subjected to social defeat stress prior to testing	Rossi et al., 2010	Mol. Pharmacol. 78:260-268
URB597	FAAH inhibitor	Elevated	NMRI mice (20-25g)	0.03-0.3	ip, 30	o		Naderi et	Pharmacol. Biochem.

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
		plus-maze						al., 2008	Behav. 89:64-75
URB597	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (319±2.1g)	0.1-0.3	ip, 40	o	Test was performed under continuous high light	Haller et al., 2009	Psychopharmacology 204:607-616
URB597	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (319±2.1g)	0.3	ip, 40	+	Level of light underwent a sudden change during testing	Haller et al., 2009	Psychopharmacology 204:607-616
URB597	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (319±2.1g)	0.3	ip, 40	+		Haller et al., 2009	Psychopharmacology 204:607-616
URB597	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (319±2.1g)	0.3	ip, 40	o	Test was performed under low light conditions	Haller et al., 2009	Psychopharmacology 204:607-616
URB597	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (319±2.1g)	0.3	ip, 40	+	Test was performed under high light conditions	Haller et al., 2009	Psychopharmacology 204:607-616
URB597	FAAH inhibitor	Elevated zero-maze	CD1 mice (80-day-old)	0.4	ip, between P29 and P38	o		Macri et al., 2012	PLoS ONE e41821
URB597	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (275-350g)	0.01 µg/0.4 µl	basolateral amygdala, 10	o		John and Currie, 2012	Behav. Brain. Res. 233:382-388
URB597	FAAH inhibitor	Elevated plus-maze	Mice	0.07	ip	+		Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
URB597	FAAH inhibitor	Elevated plus-maze	BALB/c mice (20-30g, 3-4-month-old)	0.08-0.1	ip, 30	+		Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
URB597+acetaminophen (200 mg/kg)	FAAH inhibitor	Elevated plus-maze	BALB/c mice (20-30g, 3-4-month-old)	0.07	ip, 30	(o)	Blockade of the anxiolytic-like effects of acetaminophen	Zaitone et al., 2012	Behav. Pharmacol. 23:417-425
URB597+AM 251 (1 mg/kg)	FAAH inhibitor	Elevated plus-maze	Sprague-Dawley rats (319±2.1g)	0.3	ip, 40	(o)		Haller et al., 2009	Psychopharmacology 204:607-616
URB597+AM 251 (100 pmol/200 nl)	FAAH inhibitor	Vogel conflict test	Wistar rats (230-250g)	0.01 nmol/0.2 µl	dorsolateral PAG, 10	(o)	(1) Blockade of the anxiolytic-like effects; (2) Electric shocks of 0.5 mA/2 s were delivered	Lisboa et al., 2008	Eur. J. Pharmacol. 593:73-78
URB597+AM 251 (6 mg/kg)	FAAH inhibitor	Open-field	C57BL/6 mice (8-10-week-old)	0,3	ip	(o)	Aminals were subjected to social defeat stress prior to testing	Rossi et al., 2010	Mol. Pharmacol. 78:260-268

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
URB597+AM 251 (6 mg/kg)	FAAH inhibitor	Elevated plus-maze	C57BL/6 mice (8-10-week-old)	0,3	ip	(o)	Aminals were subjected to social defeat stress prior to testing	Rossi et al., 2010	Mol. Pharmacol. 78:260-268
URB597+anandamide (0.3 mg/kg)	FAAH inhibitor	Light/dark test	Sprague-Dawley rats (300-325g)	0.3	ip, o.d. for 3 days	(o)	URB597 blocked the anxiolytic-like effects of anandamide	Scherma et al., 2008	Neuropharmacology 54:129-140
URB597+anandamide (3 mg/kg)	FAAH inhibitor	Light/dark test	Sprague-Dawley rats (300-325g)	0.3	ip, o.d. for 3 days	(-)	URB597 potentiated the anxiogenic-like effects of anandamide	Scherma et al., 2008	Neuropharmacology 54:129-140
URB597+anandamide (3 mg/kg)+AM 251 (3 mg/kg)	FAAH inhibitor	Light/dark test	Sprague-Dawley rats (300-325g)	0.3	ip, 40	(o)	AM251 blocked the anxiogenic-like effects of anandamide+URB association	Scherma et al., 2008	Neuropharmacology 54:129-140
URB597+bicuculline (2 µg/0.5 µl)	FAAH inhibitor	Elevated plus-maze	Wistar rats (180-230g, 8-9-week-old)	0.1 µg/0.5 µl	ventral hippocampus, 30	-	No interaction	Roohbakhsh et al., 2007	Basic Clin. Pharmacol. Toxicol. 105:333-338
URB597+corticosterone (100 mg/l G13-G21)	FAAH inhibitor	Elevated zero-maze	CD1 mice (80-day-old)	0.4	ip, between P29 and P38	-	Corticosterone was given during gestation	Macri et al., 2012	PLoS ONE e41821
URB597+diazepam (0.25-2.5 mg/kg)	FAAH inhibitor	Elevated plus-maze	NMRI mice (20-25g)	0.3	ip, 30	(+)		Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
URB597+phaclofen (1 µg/0.5 µl)	FAAH inhibitor	Elevated plus-maze	Wistar rats (180-230g, 8-9-week-old)	0.1 µg/0.5 µl	ventral hippocampus, 30	-	No interaction	Roohbakhsh et al., 2007	Basic Clin. Pharmacol. Toxicol. 105:333-338
URB597+rimonabant (1 mg/kg)	FAAH inhibitor	Elevated plus-maze	Syrian hamsters (*M. auratus*, 90-160g)	0.3	ip, 30	(o)	Blockade of the effects of URB597	Moise et al., 2008	Psychopharmacology 200:333-246
URB597+rimonabant (2 mg/kg)	FAAH inhibitor	Elevated zero-maze	Wistar rats (200-350g)	0,1	ip, 30	(o)	Antagonism of the anxiolytic-like effects of URB532	Kathuria et al., 2003	Nat. Med. 9:76-81
URB597+rimonabant (2 mg/kg)	FAAH inhibitor	Ultrasonic distress vocalizations	Wistar rats (10-day-old)	0,1	ip, 30	(o)	Antagonism of the anxiolytic-like effects of URB532	Kathuria et al., 2003	Nat. Med. 9:76-81
URB597+rimonabant (3 mg/kg)	FAAH inhibitor	Elevated plus-maze	C57BL/6J mice (20-30g, 3-4-month-old)	1	ip, 30	(o)	Blockade of the anxiolytic-like effects of URB597	Moreira et al., 2008	Neuropharmacology 54:141-150
WIN 55212-2	CB_1 agonist	Elevated plus-maze	ICR mice (21-24g)	1-3	ip, 30	+		Patel and Hillard, 2006	J. Pharmacol. Exp. Ther. 318:304-311

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WIN 55212-2	CB_1 agonist	Conditioned fear	Wistar rats (3-month-old)	0.25	ip, 30	+	(1) The drug facilitated the extinction of 24 h-old contextual fear; (2) An electric shock of 1.5 mA/1 s was delivered on session 1	Pamplona et al., 2006	Psychopharmacology 188:641-649
WIN 55212-2	CB_1 agonist	Conditioned fear	Wistar rats (3-month-old)	0.25	ip, 30	+	(1) The drug facilitated the extinction of 30-day-old contextual fear; (2) An electric shock of 1.5 mA/1 s was delivered on session 1	Pamplona et al., 2006	Psychopharmacology 188:641-649
WIN 55212-2	CB_1 agonist	Elevated plus-maze	Wistar rats (180-230g)	2,5-5 µg/0,5 µl	hippocampus CA1, 5	-		Roohbakhsh et al., 2007	Clin. Exp. Pharmacol. Physiol. 34:223-229
WIN 55212-2	CB_1 agonist	Elevated plus-maze	CD1 outbred background mice (2-month-old, 35g)	1-3	ip, 30	+		Haller et al., 2004	Behav. Pharmacol. 15:299-304
WIN 55212-2	CB_1 agonist	Elevated plus-maze	CB1 KO mice (CD1 outbred background, 2-month-old, 35g)	1-3	ip, 30	o		Haller et al., 2004	Behav. Pharmacol. 15:299-304
WIN 55212-2	CB_1 agonist	Elevated plus-maze	CD1 mice (2-month-old, 35g)	1-3	ip, 30	+		Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
WIN 55212-2	CB_1 agonist	Elevated plus-maze	Wistar rats (2-month-old, 300g)	1-3	ip, 30	-		Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
WIN 55212-2	CB_1 agonist	Elevated plus-maze	Wistar rats (2-month-old, 300g)	3	ip, 30	-	Testing was performed under dim light conditions (1 lux)	Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
WIN 55212-2	CB_1 agonist	Elevated plus-maze	Wistar rats (2-month-old, 300g)	3	ip, 30	o	Testing was performed under intense light conditions (200 lux)	Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
WIN 55212-2	CB_1 agonist	Elevated plus-maze	Wistar rats (250-300g)	1	ip, 30	o	The drug did not reverse anxiogenic-like effects of acute alcohol withdrawal	Rubio et al., 2008	Neuropharmacology 54:976-988
WIN 55212-2	CB_1 agonist	Elevated plus-maze	Swiss mice (20-25g)	1	ip, 30	+		Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WIN 55212-2	CB_1 agonist	Conditioned fear	Sprague-Dawley rats (250-300g, 60-day-old)	5 µg/0.5 µl	basolateral amygdala	o	(1) The drug was infused into the BLA before conditioning, before extinction or immediately after extinction; (2) shock of 0.7 mA/2 s were applied	Ganon-Elazar and Akirav, 2009	J. Neurosci. 29:11078-11088
WIN 55212-2	CB_1 agonist	Conditioned fear	Sprague-Dawley rats (250-300g, 60-day-old)	5 µg/0.5 µl	basolateral amygdala	+	(1) The drug was infused before exposing to a stressor; (2) (2) shock of 0.7 mA/2 s were applied	Ganon-Elazar and Akirav, 2009	J. Neurosci. 29:11078-11088
WIN 55212-2	CB_1 agonist	Open-field	Sprague-Dawley rats (250-300g, 60-day-old)	5 µg/0.5 µl	basolateral amygdala, 20	o		Ganon-Elazar and Akirav, 2009	J. Neurosci. 29:11078-11088
WIN 55212-2	CB_1 agonist	Elevated plus-maze	NMRI mice (20-25g)	0.625-2.5	ip, 30	+		Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
WIN 55212-2	CB_1 agonist	Holeboard	NMRI mice (20-25g)	0.25-0.5	ip, 30	o		Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
WIN 55212-2	CB_1 agonist	Elevated plus-maze	Wistar rats (220-240g)	3-10 pmol/0.2 µl	dorsal PAG, 10	+		Campos and Guimarães, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1517-1521
WIN 55212-2	CB_1 agonist	Light/dark inhibitory avoidance	Sprague-Dawley rats (60-day-old, 250-300g)	0.5	ip	+	Shocks of 0.7 mA/2 s were applied 2 min, 2, 24 or 48 h prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
WIN 55212-2	CB_1 agonist	Light/dark inhibitory avoidance	Sprague-Dawley rats (60-day-old, 250-300g)	5 µg/0.5 µl	basolateral amygdala	+	Shocks of 0.7 mA/2 s were applied 2 min or 2 h prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
WIN 55212-2	CB_1 agonist	Acoustic startle reflex	Sprague-Dawley rats (60-day-old, 250-300g)	0.5	ip	+	Shocks of 0.7 mA/2 s were applied 2 min, 2, 24 or 48 h prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
WIN 55212-2	CB_1 agonist	Acoustic startle reflex	Sprague-Dawley rats (60-day-old, 250-300g)	5 µg/0.5 µl	basolateral amygdala	+	Shocks of 0.7 mA/2 s were applied 2 min prior to testing	Ganon-Elazar and Akirav,	Neuropsychopharmacology 37:456-466

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
								2012	
WIN 55212-2	CB_1 agonist	Open-field	Sprague-Dawley rats (60-day-old, 250-300g)	0.5	ip	o	Shocks of 0.7 mA/2 s were applied one week prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
WIN 55212-2	CB_1 agonist	Light/dark test	Sprague-Dawley rats (60-day-old, 250-300g)	0.5	ip	o	Shocks of 0.7 mA/2 s were applied one week prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
WIN 55212-2+AM 251 (0,5 mg/kg)	CB_1 agonist	Elevated plus-maze	CD1 mice (2-month-old, 35g)	3	ip, 30	(o)	Antagonism of the anxiolytic-like effects of WIN 55212-2	Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
WIN 55212-2+AM 251 (0.3 ng/0.5 µl)	CB_1 agonist	Light/dark inhibitory avoidance	Sprague-Dawley rats (60-day-old, 250-300g)	5 µg/0.5 µl	basolateral amygdala	(o)	Shocks of 0.7 mA/2 s were applied 2 min or 2 h prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
WIN 55212-2+AM 251 (0.3 ng/0.5 µl)	CB_1 agonist	Acoustic startle reflex	Sprague-Dawley rats (60-day-old, 250-300g)	5 µg/0.5 µl	basolateral amygdala	(o)	Shocks of 0.7 mA/2 s were applied 2 min prior to testing	Ganon-Elazar and Akirav, 2012	Neuropsychopharmacology 37:456-466
WIN 55212-2+AM 251 (1 mg/kg)	CB_1 agonist	Elevated plus-maze	Wistar rats (2-month-old, 300g)	1-3	ip, 30	(-)	Potentation of the anxiogenic-like effects of WIN 55212-2	Haller et al., 2007	Eur. J. Neurosci. 25:2445-2456
WIN 55212-2+AM 251 (2 ng/0,5 µl)	CB_1 agonist	Elevated plus-maze	Wistar rats (180-230g)	1-5 µg/0,5 µl	hippocampus CA1, 5	(o)	Antagonism of the effects of WIN 55212-2	Roohbakhsh et al., 2007	Clin. Exp. Pharmacol. Physiol. 34:223-229
WIN 55212-2+AM 251 (3 mg/kg)	CB_1 agonist	Elevated plus-maze	CD1 outbred background mice (2-month-old, 35g)	3	ip, 30	(o)	Antagonism of the anxiolytic-like effects of WIN 55212-2	Haller et al., 2004	Behav. Pharmacol. 15:299-304
WIN 55212-2+AM 251 (3 mg/kg)	CB_1 agonist	Elevated plus-maze	CB1 KO mice (CD1 outbred background, 2-month-old, 35g)	3	ip, 30	o	No interaction	Haller et al., 2004	Behav. Pharmacol. 15:299-304
WIN 55212-2+capsazepine (10 nmol/0.2 µl)	CB_1 agonist	Elevated plus-maze	Wistar rats (220-240g)	10-30 pmol/0.2 µl	dorsal PAG, 10	(o)		Campos and Guimarães, 2009	Prog. Neuropsychopharmacol. Biol. Psychiatry 33:1517-1521
WIN 55212-2+d-amphetamine (2 mg/kg)	CB_1 agonist	Elevated plus-maze	Swiss mice (20-25g)	0.25-0.5	ip, 30	(o)	Anxiogenic-like effects of nicotine were blunted	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
WIN 55212-2+d-amphetamine (2 mg/kg)	CB_1 agonist	Elevated plus-maze	Swiss mice (20-25g)	0.25-0.5	ip, 30	(o)	(1) d-amphetamine was given for 9 days; (2) WIN blocked the tolerance to the anxiogenic-like effects of d-amphetamine	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
WIN 55212-2+d-amphetamine (2 mg/kg, 6 days)+nicotine (last day)	CB_1 agonist	Elevated plus-maze	Swiss mice (20-25g)	0.25-0.5	ip, 30	(o)	WIN blocked the tolerance to the anxiogenic-like effects of d-amphetamine+nicotine	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
WIN 55212-2+d-amphetamine (2 mg/kg, last day)+nicotine (6 days)	CB_1 agonist	Elevated plus-maze	Swiss mice (20-25g)	0.25-0.5	ip, 30	(o)	WIN blocked the tolerance to the anxiogenic-like effects of d-amphetamine+nicotine	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
WIN 55212-2+diazepam (0.2-1.4 mg/kg)	CB_1 agonist	Elevated plus-maze	NMRI mice (20-25g)	0.2-1.4	ip, 30	(+)		Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
WIN 55212-2+diazepam (0.4-1.5 mg/kg)	CB_1 agonist	Holeboard	NMRI mice (20-25g)	0.45-1.5	ip, 30	o	No interaction	Naderi et al., 2008	Pharmacol. Biochem. Behav. 89:64-75
WIN 55212-2+L-Arginine (0,01 µg/0,5 µl)	CB_1 agonist	Elevated plus-maze	Wistar rats (180-230g)	1-5 µg/0,5 µl	hippocampus CA1, 5	+	No interaction	Roohbakhsh et al., 2007	Clin. Exp. Pharmacol. Physiol. 34:223-229
WIN 55212-2+L-NAME (1 ng/0,5 µl)	CB_1 agonist	Elevated plus-maze	Wistar rats (180-230g)	1-5 µg/0,5 µl	hippocampus CA1, 5	(o)	Antagonism of the effects of WIN 55212-2	Roohbakhsh et al., 2007	Clin. Exp. Pharmacol. Physiol. 34:223-229
WIN 55212-2+nicotine (0.1 mg/kg)	CB_1 agonist	Elevated plus-maze	Swiss mice (20-25g)	0.25-0.5	ip, 30	(o)	Anxiogenic-like effects of d-amphetamine were blunted	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
WIN 55212-2+nicotine (0.1 mg/kg)	CB_1 agonist	Elevated plus-maze	Swiss mice (20-25g)	0.25-0.5	ip, 30	(o)	(1) nicotine was given for 9 days; (2) WIN blocked the tolerance to the anxiogenic-like effects of nicotine	Biala et al., 2009	J. Physiol. Pharmacol. 60:113-122
WIN 55212-2+surinabant (0.2 mg/kg)	CB_1 agonist	Conditioned fear	Wistar rats (3-month-old)	0.25	ip, 30	(o)	(1) The facilitating effect of extinction of 30-day-old contextual fear was blocked by surinabant; (2) An	Pamplona et al., 2006	Psychopharmacology 188:641-649

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
							electric shock of 1.5 mA/1 s was delivered on session 1		
$\Delta^{9,11}$-THC	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	30-100	ip, 30	-		Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	ICR mice (21-24g)	1-10	ip, 30	-		Patel and Hillard, 2006	J. Pharmacol. Exp. Ther. 318:304-311
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	3-10	ip, 30	-	Closed arm entries were decreased	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10-20	ip, 30	-	Closed arm entries were decreased	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (200-250g)	5	ip, for 14 days, o.d.	-	Closed arm entries were decreased	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10	ip, for 14 days, o.d.	-	Closed arm entries were decreased	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	20	ip, from 30 min to 2 h	-	Closed arm entries were decreased	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^{9}-THC	CB_1 agonist	Light/dark test	CD1 mice (22-24g)	0.3	ip, 30	+		Berrendero and Maldonado, 2002	Psychopharmacology 163:111-117
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.075-1.5	ip, 30	+		Rubino et al., 2007	Neuropsychopharmacology 32:2036-2045
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.075-0.75	ip, 30	+		Braida et al., 2007	Eur. J. Pharmacol. 555:156-163
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	10 µg/1 µl	prefrontal cortex, 30	+		Rubino et al., 2008	Neuropharmacology 54:151-160
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	5 µg/1 µl	ventral hippocampus, 30	+		Rubino et al., 2008	Neuropharmacology 54:151-160
Δ^{9}-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	1 µg/1 µl	basolateral amygdala, 30	-		Rubino et al., 2008	Neuropharmacology 54:151-160

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Δ^9-THC	CB_1 agonist	Conflict test	CD1 mice (5-week-old, 20-25g)	1	ip, 30	+	(1) FR1 schedule; (2) Electric shock of 0,21-0,23 mA/2s; (3) Mice were food-restricted	Flavia Barbano et al., 2009	Psychopharmacology 205:475-487
Δ^9-THC	CB_1 agonist	Conflict test	CD1 mice (5-week-old, 20-25g)	1	ip, 30	+	(1) FR1 schedule; (2) Electric shock of 0,21 mA/2s; (3) Mice were sated	Flavia Barbano et al., 2009	Psychopharmacology 205:475-487
Δ^9-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (270-320g)	0.5 and 1	ip, 30	-/+	Animals were subjected to chronic unpredictable stress for 10 days. The low dose induced anxiogenic-like effects, while the higher dose had the opposite effects	Fokos and Panagis, 2009	J. Psychopharmacol. 5:767-77
Δ^9-THC	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (270-320g)	0.5 and 1	ip, 30	-		Fokos and Panagis, 2009	J. Psychopharmacol. 5:767-77
Δ^9-THC	CB_1 agonist	Conditioned fear	C57BL/6N mice (2-4-month-old)	0.3-3	ip	+/-	Biphasic effect. Drug was given 1 before the CS re-exposure session	Metna-Laurent et al., 2012	J. Neurosci. 32:7109-7118
Δ^9-THC	CB_1 agonist	Emergence test	Australian Albino Wistar rats (130-200g, 33-39-day-old)	1	ip, 60	o		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC	CB_1 agonist	Emergence test	Australian Albino Wistar rats (130-200g, 33-39-day-old)	3	ip, for 8 days	-		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC	CB_1 agonist	Elevated plus-maze	Australian Albino Wistar rats (130-200g, 33-39-day-old)	1	ip, for 2 days	o		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC	CB_1 agonist	Elevated plus-maze	Australian Albino Wistar rats (130-200g, 33-39-day-old)	3	ip, for 9 days	-		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC	CB_1 agonist	Social interaction	Australian Albino Wistar rats (130-200g, 33-39-day-old)	1	ip, for 5-6 days	o		Klein et al., 2011	Psychopharmacology 218:443-457

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Δ^9-THC	CB_1 agonist	Social interaction	Australian Albino Wistar rats (130-200g, 33-39-day-old)	3	ip, for 12-13 days	o		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC	CB_1 agonist	Social interaction	Sprague-Dawley rats (72-day-old)	5	sc, between P35 and 60	o		Shen et al., 2011	Neuropharmacology 61:1183-1192
Δ^9-THC	CB_1 agonist	Emergence test	Sprague-Dawley rats (72-day-old)	5	sc, between P35 and 60	o		Shen et al., 2011	Neuropharmacology 61:1183-1192
Δ^9-THC	CB_1 agonist	Holeboard	Sprague-Dawley rats (72-day-old)	5	sc, between P35 and 60	o		Shen et al., 2011	Neuropharmacology 61:1183-1192
Δ^9-THC	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, 30	-		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Δ^9-THC	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 7 days, o.d.	-		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Δ^9-THC	CB_1 agonist	Light/dark test	Sprague-Dawley rats (225-265g)	2.5	ip, for 14 days, o.d.	-		O'Brien et al., 2012	Pharmacol. Biochem. Behav. 103:597-602
Δ^9-THC+11-COOH-Δ^8-THC (20 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10-20	ip, 30	(o)	Blockade of the anxiogenic-like effects of Δ^9-THC	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^9-THC+8-OH-DPAT (0.0075 mg/kg)	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.015	ip, 30	(+)	Synergistic effects	Braida et al., 2007	Eur. J. Pharmacol. 555:156-163
Δ^9-THC+AM 251 (10 µg/1 µl)	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	10 µg/1 µl	prefrontal cortex, 30	(o)	Antagonism of the anxiolytic-like effects	Rubino et al., 2008	Neuropharmacology 54:151-160
Δ^9-THC+AM 251 (10 µg/1 µl)	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	10 µg/1 µl	ventral hippocampus, 30	(o)	Antagonism of the anxiolytic-like effects	Rubino et al., 2008	Neuropharmacology 54:151-160
Δ^9-THC+AM 251 (10 µg/1 µl)	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (125-150g)	1 µg/1 µl	basolateral amygdala, 30	(o)	Antagonism of the anxiogenic-like effects	Rubino et al., 2008	Neuropharmacology 54:151-160
Δ^9-THC+AM 251 (3 mg/kg)	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.75	ip, 30	(o)	Blockade of the anxiolytic-like effects of Δ^9-THC	Rubino et al., 2007	Neuropsychopharmacology 32:2036-2045
Δ^9-THC+cannabidiol (0.01 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10-20	ip, 30	(o)	Blockade of the anxiogenic-like effects of Δ^9-THC	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^9-THC+Cannabidiol (3 mg/kg)	CB_1 agonist	Emergence test	Australian Albino Wistar rats (130-200g, 33-39-day-old)	1	ip, 60	(-)		Klein et al., 2011	Psychopharmacology 218:443-457

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Δ^9-THC+Cannabidiol (3 mg/kg)	CB_1 agonist	Emergence test	Australian Albino Wistar rats (130-200g, 33-39-day-old)	3	ip, for 8 days	(-)		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC+Cannabidiol (3 mg/kg)	CB_1 agonist	Elevated plus-maze	Australian Albino Wistar rats (130-200g, 33-39-day-old)	1	ip, for 2 days	(-)		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC+Cannabidiol (3 mg/kg)	CB_1 agonist	Elevated plus-maze	Australian Albino Wistar rats (130-200g, 33-39-day-old)	3	ip, for 9 days	(-)		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC+Cannabidiol (3 mg/kg)	CB_1 agonist	Social interaction	Australian Albino Wistar rats (130-200g, 33-39-day-old)	1	ip, for 5-6 days	(-)		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC+Cannabidiol (3 mg/kg)	CB_1 agonist	Social interaction	Australian Albino Wistar rats (130-200g, 33-39-day-old)	3	ip, for 12-13 days	(-)		Klein et al., 2011	Psychopharmacology 218:443-457
Δ^9-THC+diazepam (0.001 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10-20	ip, 30	(o)	Blockade of the anxiogenic-like effects of Δ^9-THC	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^9-THC+flumazenil (10 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10-20	ip, 30	(o)	Blockade of the anxiogenic-like effects of Δ^9-THC	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^9-THC+naloxone (1 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10-20	ip, 30	-	No interaction	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^9-THC+naltrindole (2.5 mg/kg)	CB_1 agonist	Light/dark test	CD1 mice (22-24g)	0.3	ip, 30	(o)	Antagonism of the anxiolytic-like effects of Δ^9-THC	Berrendero and Maldonado, 2002	Psychopharmacology 163:111-117
Δ^9-THC+nor-binaltorphimine (2.5 mg/kg)	CB_1 agonist	Light/dark test	CD1 mice (22-24g)	0.3	ip, 30	+	No interaction	Berrendero and Maldonado, 2002	Psychopharmacology 163:111-117
Δ^9-THC+rimonabant (0.5 mg/kg)	CB_1 agonist	Light/dark test	CD1 mice (22-24g)	0.3	ip, 30	(o)	Antagonism of the anxiolytic-like effects of Δ^9-THC	Berrendero and Maldonado, 2002	Psychopharmacology 163:111-117
Δ^9-THC+WAY 100635 (0.3 mg/kg)	CB_1 agonist	Elevated plus-maze	Sprague-Dawley rats (150-175g)	0.75	ip, 30	(o)	Blockade of the anxiolytic-like effects of Δ^9-THC	Braida et al., 2007	Eur. J. Pharmacol. 555:156-163

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Δ^9-THC+β-CCP (10 mg/kg)	CB_1 agonist	Elevated plus-maze	ICR mice (25-30g)	10-20	ip, 30	(o)	Blockade of the anxiogenic-like effects of Δ^9-THC	Onaivi et al., 1990	J. Pharmacol. Exp. Ther. 253:1002-1009
Δ^9-THC+β-funaltrexamine (5 mg/kg)	CB_1 agonist	Light/dark test	CD1 mice (22-24g)	0.3	ip, 30	(o)	Antagonism of the anxiolytic-like effects of Δ^9-THC	Berrendero and Maldonado, 2002	Psychopharmacology 163:111-117

Neuropeptide S

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Swiss mice (2-3-month-old, 30-35g)	0.01-1 nmol	icv, 60	+		Rizzi et al., 2008	Br. J. Pharmacol. 154:471-479
Neuropeptide S	Endogenous peptide	Stress-induced hyperthermia	Swiss mice (2-3-month-old, 30-35g)	0.1-1 nmol	icv, 60	+		Rizzi et al., 2008	Br. J. Pharmacol. 154:471-479
Neuropeptide S	Endogenous peptide	Four-plate test	Swiss Webster mice (17-24g)	0,2-2 µg/0,3 µl	icv, 20	+	Shocks of 0,8 mA/0,5 s were applied	Leonard et al., 2008	Psychopharmacology 197:601-611
Neuropeptide S	Endogenous peptide	Elevated zero-maze	BALB/c mice (17-20g)	0,1-1 µg/0,3 µl	icv, 25	+		Leonard et al., 2008	Psychopharmacology 197:601-611
Neuropeptide S	Endogenous peptide	Stress-induced hyperthermia	C57BL/6 (17-24g)	2 µg/0,3 µl	icv, 60	+		Leonard et al., 2008	Psychopharmacology 197:601-611
SHA 68	NPS-R antagonist	Conditioned fear	C57BL/6J mice (8-12-week-old)	10 µM/0.5 µl	lateral amygdala, 20	-		Chauveau et al., 2012	Neuropsychopharmacology 37:1588-1599
Neuropeptide S	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (8-12-week-old)	10 µM/0.5 µl	lateral amygdala, 20	+	Immobilization stress was applied 10 days prior to testing	Chauveau et al., 2012	Neuropsychopharmacology 37:1588-1599
Neuropeptide S	Endogenous peptide	Conditioned fear	C57BL/6J mice (8-12-week-old)	10 µM/0.5 µl	lateral amygdala, 20	+	with CS+ and CS -	Chauveau et al., 2012	Neuropsychopharmacology 37:1588-1599
Neuropeptide S	Endogenous peptide	Elevated plus-maze	C57BL/6N mice (10-week-old)	14 nmol/14 µl	intranasal, 240	+		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337
Neuropeptide S	Endogenous peptide	Light/dark test	C57BL/6N mice (10-week-old)	7-28 nmol/14 µl	intranasal, 240	o		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337
Neuropeptide S	Endogenous peptide	Elevated plus-maze	HAB mice (10-week-old)	14 nmol	intranasal, 240	o		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337
Neuropeptide S	Endogenous peptide	Light/dark test	HAB mice (10-week-old)	14 nmol	intranasal, 240	+		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337
Neuropeptide S	Endogenous peptide	Elevated plus-maze	C57BL/6N mice (10-week-old)	14 nmol/14 µl	intranasal, 30	o		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337
Neuropeptide S	Endogenous peptide	Light/dark test	C57BL/6N mice (10-week-old)	14 nmol/14 µl	intranasal, 30	o		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Neuropeptide S	Endogenous peptide	Elevated plus-maze	HAB mice (10-week-old)	14 nmol	intranasal, 30	o		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337
Neuropeptide S	Endogenous peptide	Light/dark test	HAB mice (10-week-old)	14 nmol	intranasal, 30	o		Ionescu et al., 2012	Neuropsychopharmacology 37:1323-1337
Mutant mice	NPS receptor knockout	Elevated plus-maze	CD-1x129/SvEv mice (8-10-week-old, 28-35g)			o		Ruzza et al., 2012	Neuropharmacology 62:1999-2009
Mutant mice	NPS receptor knockout	Open-field	CD-1x129/SvEv mice (8-10-week-old, 28-35g)			o		Ruzza et al., 2012	Neuropharmacology 62:1999-2009
Mutant mice	NPS receptor knockout	Stress-induced hyperthermia	CD-1x129/SvEv mice (8-10-week-old, 28-35g)			o		Ruzza et al., 2012	Neuropharmacology 62:1999-2009
Neuropeptide S	Endogenous peptide	Shock-probe burying test	Wistar rats (180-200g)	1-10 nmol/5 µl	icv, 15	+		Vitale et al., 2008	Peptides 29:2286-2291
Neuropeptide S	Endogenous peptide	Light/dark transfer test	C57BL/6J mice	0.45 nmol/2 µl	icv, 20	+		Paneda et al., 2009	J. Neurosci. 29:4155-4161
Neuropeptide S+antalarmin (30 mg/kg)	Endogenous peptide	Light/dark transfer test	C57BL/6J mice	0.45 nmol/2 µl	icv, 20	+	No interaction	Paneda et al., 2009	J. Neurosci. 29:4155-4161
Neuropeptide S	Endogenous peptide	Light/dark transfer test	CRF1 KO (C57BL/6Jx129SvJ) mice	0.45 nmol/2 µl	icv, 20	+	Anxiolytic-like effects still present	Paneda et al., 2009	J. Neurosci. 29:4155-4161
Neuropeptide S	Endogenous peptide	Marble burying	C57BL/6J mice	0.45 nmol/2 µl	icv, 20	+		Paneda et al., 2009	J. Neurosci. 29:4155-4161
Neuropeptide S	Endogenous peptide	Marble burying	CRF1 KO (C57BL/6Jx129SvJ) mice	0.45 nmol/2 µl	icv, 20	+	Anxiolytic-like effects still present	Paneda et al., 2009	J. Neurosci. 29:4155-4161
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	1 nmol/5 µl	icv, 30	+		Lukas and Neumann, 2012	Neuropharmacology 62:398-405
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	40 nmol/10 µl	intranasal, 30	+		Lukas and Neumann, 2012	Neuropharmacology 62:398-405
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Wistar rats (250-300g)	40 nmol/500 µl	sc, 30	o		Lukas and Neumann, 2012	Neuropharmacology 62:398-405
Neuropeptide S	Endogenous peptide	Elevated plus-maze	FSL rats (10-12-week-old, 280-350g)	0.25-1 nmol/5 µl	icv, 45	+		Wegener et al., 2012	Int. J. Neuropsychopharmacol. 15:375-387

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Neuropeptide S	Endogenous peptide	Elevated plus-maze	FRL rats (10-12-week-old, 280-350g)	1 nmol/5 µl	icv, 45	+		Wegener et al., 2012	Int. J. Neuropsychopharmacol. 15:375-387
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (10-12-week-old, 280-350g)	0.25-1 nmol/5 µl	icv, 45	+		Wegener et al., 2012	Int. J. Neuropsychopharmacol. 15:375-387
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Female FSL rats (10-12-week-old, 280-350g)	1 nmol/5 µl	icv, 45	+		Wegener et al., 2012	Int. J. Neuropsychopharmacol. 15:375-387
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Female FRL rats (10-12-week-old, 280-350g)	1 nmol/5 µl	icv, 45	o		Wegener et al., 2012	Int. J. Neuropsychopharmacol. 15:375-387
Neuropeptide S	Endogenous peptide	Elevated plus-maze	Female Sprague-Dawley rats (10-12-week-old, 280-350g)	1 nmol/5 µl	icv, 45	o		Wegener et al., 2012	Int. J. Neuropsychopharmacol. 15:375-387
Neuropeptide S	Endogenous peptide	Inhibitory avoidance in the elevated T-maze	CD1 mice (25-35g)	0.001-1 nmol	icv, 30	+		Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x
Neuropeptide S	Endogenous peptide	Escape behavior in the elevated T-maze	CD1 mice (25-35g)	0.001 nmol	icv, 30	+		Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x
Mutant mice	NPS receptor knockout	Inhibitory avoidance in the elevated T-maze	CD1 mice (2-4-month-old, 28-35g)			+		Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x
Mutant mice	NPS receptor knockout	Escape behavior in the elevated T-maze	CD1 mice (2-4-month-old, 28-35g)			+		Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x
Neuropeptide S	Endogenous peptide	Inhibitory avoidance in the elevated T-maze	NPSR knockout CD1 mice (2-4-month-old, 28-35g)	0.01 nmol	icv, 30	(o)	Effects were lost in KO mice	Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x
Neuropeptide S	Endogenous peptide	Escape behavior in the elevated T-maze	NPSR knockout CD1 mice (2-4-month-old, 28-35g)	0.01 nmol	icv, 30	(o)	Effects were lost in KO mice	Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Neuropeptide S	Endogenous peptide	Inhibitory avoidance in the elevated T-maze	NPSR wild-type CD1 mice (2-4-month-old, 28-35g)	0.01 nmol	icv, 30	+		Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x
Neuropeptide S	Endogenous peptide	Escape behavior in the elevated T-maze	NPSR wild-type CD1 mice (2-4-month-old, 28-35g)	0.01 nmol	icv, 30	+		Pulga et al., 2012	Eur. J. Neurosci. Doi:10.1111/j.1460-9568.2012.08265.x
Neuropeptide S	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (8-week-old)	3 nmol/2 µl	icv, 0	o		Enquist et al., 2012	Neuropsychopharmacology 37:2436-2445
Neuropeptide S+ethanol (chronic consumption)	Endogenous peptide	Elevated plus-maze	C57BL/6J mice (8-week-old)	3 nmol/2 µl	icv, 0	(+)		Enquist et al., 2012	Neuropsychopharmacology 37:2436-2445
Neuropeptide S	Endogenous peptide	Light/dark test	C57BL/6J mice (8-week-old)	3 nmol/2 µl	icv, 0	+		Enquist et al., 2012	Neuropsychopharmacology 37:2436-2445
Neuropeptide S+ethanol (chronic consumption)	Endogenous peptide	Light/dark test	C57BL/6J mice (8-week-old)	3 nmol/2 µl	icv, 0	(+)		Enquist et al., 2012	Neuropsychopharmacology 37:2436-2445
Neuropeptide S	Endogenous peptide	Open-field	C57BL/6J mice (8-week-old)	3 nmol/2 µl	icv, 0	o		Enquist et al., 2012	Neuropsychopharmacology 37:2436-2445
Neuropeptide S+ethanol (chronic consumption)	Endogenous peptide	Open-field	C57BL/6J mice (8-week-old)	3 nmol/2 µl	icv, 0	(+)		Enquist et al., 2012	Neuropsychopharmacology 37:2436-2445
Neuropeptide S+ethanol (chronic consumption)	Endogenous peptide	Light/dark test	C57BL/6J mice (8-week-old)	3 nmol/2 µl	basolateral amygdala, 0	+		Enquist et al., 2012	Neuropsychopharmacology 37:2436-2445

Orexin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Almorexant	OX1R antagonist	Fear-potentiated startle reflex	F344 rats (8-10-week-old)	100-300	po, 60	+		Steiner et al., 2012	Psychopharmacology 223:465-475
Almorexant	OX1R antagonist	Acoustic startle reflex	F344 rats (8-10-week-old)	300	po, 60	+	Animals were tested in dark condition	Steiner et al., 2012	Psychopharmacology 223:465-475
Almorexant	OX1R antagonist	Elevated plus-maze	Sprague-Dawley rats (8-10-week-old)	30-300	po, 60	o		Steiner et al., 2012	Psychopharmacology 223:465-475
Almorexant	OX1R antagonist	Acoustic startle reflex	F344 rats (8-10-week-old)	300	po, 60	o	Animals were tested in light condition	Steiner et al., 2012	Psychopharmacology 223:465-475
Mutant mice	Hcrt1 knockout	Elevated plus-maze	C57BL/6 mice (8-10-week-old)			o		Scott et al., 2011	Behav. Brain Res. 222:289-294
Mutant mice	Hcrt1 knockout	Light/dark test	C57BL/6 mice (8-10-week-old)			o		Scott et al., 2011	Behav. Brain Res. 222:289-294
Mutant mice	Hcrt2 knockout	Elevated plus-maze	C57BL/6 mice (8-10-week-old)			o		Scott et al., 2011	Behav. Brain Res. 222:289-294
Mutant mice	Hcrt2 knockout	Light/dark test	C57BL/6 mice (8-10-week-old)			o		Scott et al., 2011	Behav. Brain Res. 222:289-294
Orexin-A	Endogenous peptide	Elevated plus-maze	C57BL/6NCrj mice (25-30g)	1 nmol/2 µl	icv, 15	-		Suzuki et al., 2005	Brain Res. 1044:116-121
Orexin-A	Endogenous peptide	Elevated plus-maze	Wistar rats (300-400g)	0,1-3 nmol/5 µl	icv, 15	o		Suzuki et al., 2005	Brain Res. 1044:116-121
Orexin-A	Endogenous peptide	Light/dark test	C57BL/6NCrj mice (25-30g)	0,1-1	icv, 15	-		Suzuki et al., 2005	Brain Res. 1044:116-121
Orexin-A	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (200-225g)	1-3 nmol/10 µl	icv, 10	+	The effects lasted for 50 min post-infusion	Singareddy et al., 2006	Physiol. Behav. 89:650-655
Orexin-A	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3-10 µg/0.8nmol	midline thalamus, 5	+		Li et al., 2010	Psychopharmacology 212:251-265
Orexin-A	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3-10 µg/0.8nmol	paraventricular nucleus thalamus, 5	-		Li et al., 2010	Psychopharmacology 212:251-265

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Orexin-A	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	10 µg/0.8nmol	lateral thalamus, 5	o		Li et al., 2010	Psychopharmacology 212:251-265
Orexin-A	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (300-350g)	300 pmol/100 nl	bed nucleus of the stria terminalis, 30	+		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
Orexin-A	Endogenous peptide	Social interaction	Sprague-Dawley rats (300-350g)	300 pmol/100 nl	bed nucleus of the stria terminalis, 30	+		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
Orexin-A	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (300-350g)	300 pmol/100 nl	medial septum, 30	o		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
Orexin-A	Endogenous peptide	Social interaction	Sprague-Dawley rats (300-350g)	300 pmol/100 nl	medial septum, 30	o		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
Orexin-A+AP5 (10 pmo/100 nl)	Endogenous peptide	Social interaction	Sprague-Dawley rats (300-350g)	300 pmol/100 nl	bed nucleus of the stria terminalis, 30	(o)		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
Orexin-A+CNQX (250 pmo/100 nl)	Endogenous peptide	Social interaction	Sprague-Dawley rats (300-350g)	300 pmol/100 nl	bed nucleus of the stria terminalis, 30	(o)		Lungwitz et al., 2012	Physiol. Behav. 107:726-732
Orexin-A+DNQX (250 pmo/100 nl)	Endogenous peptide	Social interaction	Sprague-Dawley rats (300-350g)	300 pmol/100 nl	bed nucleus of the stria terminalis, 30	+	No interaction	Lungwitz et al., 2012	Physiol. Behav. 107:726-732
Orexin-A+norBNI (10 µg)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3 µg/0.8 nmol	paraventricular nucleus thalamus, 5	(o)		Li et al., 2010	Psychopharmacology 212:251-265
Orexin-A+norBNI (10 µg)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3 µg/0.8 nmol	icv, 5	(o)		Li et al., 2010	Psychopharmacology 212:251-265
Orexin-A+α-hel CRF9-41 (1 µg)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3 µg/0.8 nmol	paraventricular nucleus thalamus, 5	(o)		Li et al., 2010	Psychopharmacology 212:251-265
Orexin-A+α-hel CRF9-41 (1 µg)	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3 µg/0.8 nmol	icv, 5	(o)		Li et al., 2010	Psychopharmacology 212:251-265
Orexin-B	Endogenous peptide	Fear-potentiated startle reflex	Sprague-Dawley rats (200-225g)	3-10 nmol/10 µl	icv, 10	+	The effects lasted for 10 min post-infusion	Singareddy et al., 2006	Physiol. Behav. 89:650-655

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Orexin-B	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3 µg/1 nmol	midline thalamus, 5	+		Li et al., 2010	Psychopharmacology 212:251-265
Orexin-B	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (210-230g)	3 µg/1 nmol	paraventricular nucleus thalamus, 5	-		Li et al., 2010	Psychopharmacology 212:251-265
SB334867	OX1R antagonist	Elevated plus-maze	Sprague-Dawley rats (210-230g)	10 µg/31.3 nmol	paraventricular nucleus thalamus, 5	o		Li et al., 2010	Psychopharmacology 212:251-265
SB334867	OX1R antagonist	Elevated plus-maze	Sprague-Dawley rats (210-230g)	10 µg/31.3 nmol	paraventricular nucleus thalamus, 5	o	Animals were shocked prior to testing	Li et al., 2010	Psychopharmacology 212:251-265
SB334867	OX1R antagonist	Open-field	Sprague-Dawley rats (300-350g)	30	ip	+	Animals were exposed to CO_2 prior to testing	Johnson et al., 2012	Neuropsychopharmacology 37:1911-1922
SB334867+FG-7142 (7.5 mg/kg)	OX1R antagonist	Open-field	Wistar rats (250-300g)	30	ip, 15	(o)	Blockade of the anxiogenic-like effects of FG-7142	Johnson et al., 2012	Physiol. Behav. 107:733-742
SB334867+FG-7142 (7.5 mg/kg)	OX1R antagonist	Social interaction	Wistar rats (250-300g)	30	ip, 15	(o)	Blockade of the anxiogenic-like effects of FG-7142	Johnson et al., 2012	Physiol. Behav. 107:733-742
TCSOX229	OX2R antagonist	Elevated plus-maze	Sprague-Dawley rats (210-230g)	10 µg/23 nmol	paraventricular nucleus thalamus, 15	+	Animals were shocked prior to testing	Li et al., 2010	Psychopharmacology 212:251-265
TCSOX229	OX2R antagonist	Elevated plus-maze	Sprague-Dawley rats (210-230g)	10 µg/23 nmol	paraventricular nucleus thalamus, 15	o		Li et al., 2010	Psychopharmacology 212:251-265

TRH

Drug	Mechanism	Test	Animals	Doses (mg/kg)	Route	Effect	Comments	Reference	
Mutant mice	TRH-R2 knockout	Novelty-suppressed feeding	Female and male 129/SvJ mice (8-12-week-old)			-	Mutant mice displayed increased anxiety-related behavior as compared to wild-type mice	Sun et al., 2009	Neuropsychopharmacology 34:1601-1608
Mutant mice	TRH-R2 knockout	Elevated plus-maze	Female and male 129/SvJ mice (8-12-week-old)			o	No phenotype	Sun et al., 2009	Neuropsychopharmacology 34:1601-1608
Mutant mice	TRH-R2 knockout	Open-field	Female and male 129/SvJ mice (8-12-week-old)			o	No phenotype	Sun et al., 2009	Neuropsychopharmacology 34:1601-1608

Somatostatin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
L-779976	sst2 agonist	Elevated plus-maze	Sprague-Dawley rats (170-230g)	27 µg/4 µl	icv, 20	+		Engin and Treit, 2009	Psychopharmacology 206:281-289
L-796778	sst3 agonist	Elevated plus-maze	Sprague-Dawley rats (170-230g)	3-27 µg/4 µl	icv, 20	o		Engin and Treit, 2009	Psychopharmacology 206:281-289
L-797591	sst1 agonist	Elevated plus-maze	Sprague-Dawley rats (170-230g)	3-27 µg/4 µl	icv, 20	o		Engin and Treit, 2009	Psychopharmacology 206:281-289
L-803087	sst4 agonist	Elevated plus-maze	Sprague-Dawley rats (170-230g)	3 µg/4 µl	icv, 20	o		Engin and Treit, 2009	Psychopharmacology 206:281-289
L-817818	sst5 agonist	Elevated plus-maze	Sprague-Dawley rats (170-230g)	3 µg/4 µl	icv, 20	o		Engin and Treit, 2009	Psychopharmacology 206:281-289
Somatostatin	Endogenous peptide	Elevated plus-maze	Sprague-Dawley rats (250-300g)	8 µg/4µl	icv, 20	+		Engin et al., 2008	Neuroscience 157:666-676
SST 14	SST isoform	Shock-probe burying test	Sprague-Dawley rats (200-300g)	3 µg/3 µl	amygdala, 10	+	Shocks of 2 mA were applied	Yeung et al., 2011	Psychopharmacology 216:557-567
SST 14	SST isoform	Shock-probe burying test	Sprague-Dawley rats (200-300g)	3 µg/3 µl	lateral septum, 10	+	Shocks of 2 mA were applied	Yeung et al., 2011	Psychopharmacology 216:557-567
SST 14	SST isoform	Elevated plus-maze	Sprague-Dawley rats (200-300g)	3 µg/3 µl	amygdala, 10	+		Yeung et al., 2011	Psychopharmacology 216:557-567
SST 14	SST isoform	Elevated plus-maze	Sprague-Dawley rats (200-300g)	3 µg/3 µl	lateral septum, 10	+		Yeung et al., 2011	Psychopharmacology 216:557-567
SST 14	SST isoform	Elevated plus-maze	Sprague-Dawley rats (200-300g)	3 µg/3 µl	striatum, 10	o		Yeung et al., 2011	Psychopharmacology 216:557-567
SST 14	SST isoform	Shock-probe burying test	Sprague-Dawley rats (200-300g)	3 µg/3 µl	striatum, 10	o	Shocks of 2 mA were applied	Yeung et al., 2011	Psychopharmacology 216:557-567

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
SST 28	SST isoform	Shock-probe burying test	Sprague-Dawley rats (200-300g)	3 µg/3 µl	amygdala, 10	+	Shocks of 2 mA were applied	Yeung et al., 2011	Psychopharmacology 216:557-567
SST 28	SST isoform	Shock-probe burying test	Sprague-Dawley rats (200-300g)	3 µg/3 µl	lateral septum, 10	+	Shocks of 2 mA were applied	Yeung et al., 2011	Psychopharmacology 216:557-567
SST 28	SST isoform	Elevated plus-maze	Sprague-Dawley rats (200-300g)	3 µg/3 µl	amygdala, 10	+		Yeung et al., 2011	Psychopharmacology 216:557-567
SST 28	SST isoform	Elevated plus-maze	Sprague-Dawley rats (200-300g)	3 µg/3 µl	lateral septum, 10	+		Yeung et al., 2011	Psychopharmacology 216:557-567

Angiotensin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Angiotensin-(1-7)	Endogenous peptide	Elevated plus-maze	Wistar rats (200-250g, 17-19-week-old)	0.1/2 µl	icv, for 8 days	+		Bild and Ciobica, 2012	J. Affect. Disord. Doi:10.1016/j.ad.2012.07.024
Losartan	AT_1 antagonist	Elevated plus-maze	Holtzman-derived rats (90-day-old, 240-290g)	4 µg/1 µl	amygdala, 15	+		Llano López et al., 2012	Pharmacol. Rep. 64:54-63
Losartan	AT_1 antagonist	Elevated plus-maze	Holtzman-derived rats (90-day-old, 240-290g)	4 µg/1 µl	amygdala, 15	+	Animals were subjected to 15 min of restraint stress prior to testing	Llano López et al., 2012	Pharmacol. Rep. 64:54-63

Ghrelin

Drug	Mechanism	Test	Animals	Doses	Route	Effect	Comments	Reference	
Ghrelin	Endogenous peptide	Elevated plus-maze	C57BL6/J mice (8-10-week-old)	2 µg	sc	+		Lutter et al., 2008	Nat. Neurosci. 752-753
Mutant mice	Ghrelin knockout	Elevated plus-maze	C57BL6/J mice (8-10-week-old)			o		Lutter et al., 2008	Nat. Neurosci. 752-753