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(71) Applicant *(for all designated States except US)*: **AMGEN, INC.** [US/US]; Patent Operations, M/S 27-4, One Amgen Center Drive, Thousand Oaks, California 91320-1799 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **TEMPEST, Paul** [US/US]; One Amgen Center Drive, Thousand Oaks, California 91320-1799 (US). **HULME, Christopher** [US/GB]; One Amgen Center Drive, Thousand Oaks, California 91320-1799 (US). **MA, Vu** [VN/US]; One Amgen Center Drive, Thousand Oaks, California 91320-1799 (US).

(74) Agents: **SCHAMMEL, Bradley, S.** et al.; Senniger, Powers, Leavitt & Roedel, #1 Metropolitan Square, 16th Floor, St. Louis, Missouri 63102 (US).

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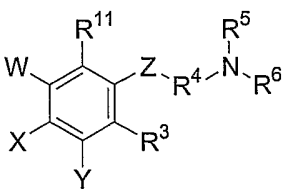
(54) Title: MELANIN CONCENTRATING HORMONE RECEPTOR ANTAGONISTS



(I)

(57) Abstract: Novel compounds, or pharmaceutically-acceptable salts, tautomers or prodrugs thereof, of Formula (I) (I) wherein W, X, Y, Z, R^3-R^6 , and R^{11} are as defined in the specification, are provided. Also provided are methods of treating or preventing a melanin concentrating hormone-mediated disorder in a subject, comprising administering to a subject in need of such treatment or prevention a compound of Formula I.

MELANIN CONCENTRATING HORMONE RECEPTOR ANTAGONISTS

Background of the Invention

[0001] In 1999, 61% of adults, 13% of children aged 6 to 11 years and 14% of adolescents aged 12 to 19 years in the United States were overweight. Increases in occurrence of overweight and obesity has been seen in all age, racial and ethnic groups, and in both men and women.

[0002] Epidemiological studies show an increase in mortality associated with overweight and obesity. Individuals who are obese (body mass index ("BMI") > 30) have a 50-100% increased risk of premature death from all causes compared to individuals with a BMI in the range of 20 to 25. BMI is calculated according to the formula:

$$BMI = \frac{\text{Weight in pounds}}{(\text{Height in inches})^2} \times 703$$

[0003] An estimated 300,000 deaths a year in the United States may be attributable to obesity. Overweight and obesity are associated with an increased risk for coronary heart disease; type 2 diabetes; endometrial, colon, postmenopausal breast, and other cancers; and certain musculoskeletal disorders, such as knee osteoarthritis.

[0004] Both modest and large weight gains are associated with significantly increased risk of disease. For example, a weight gain of 11 to 18 pounds increases a person's risk of developing type 2 diabetes to twice that of individuals who have not gained weight, while those who gain 44 pounds or more have four times the risk of type 2 diabetes. A gain of approximately 10 to 20 pounds results in an increased risk of coronary heart disease (nonfatal myocardial infarction and death) of 1.25 times in women and 1.6 times in men. Higher levels of body weight gain of 22 pounds in men and 44 pounds in women result in an increased coronary heart disease risk of 1.75 and 2.65, respectively. In women with a BMI of 34 or greater, the risk of

developing endometrial cancer is increased by more than six times. Overweight and obesity are also known to exacerbate many chronic conditions such as hypertension and elevated cholesterol. Overweight and obese individuals also may suffer from social stigmatization, discrimination, and poor body image. Although obesity-associated morbidities occur most frequently in adults, important consequences of excess weight as well as antecedents of adult disease occur in overweight children and adolescents. Overweight children and adolescents are more likely to become overweight or obese adults; this concern is greatest among adolescents. Type 2 diabetes, high blood lipids, and hypertension as well as early maturation and orthopedic problems also occur with increased frequency in overweight youth. A common consequence of childhood overweight is psychosocial—specifically discrimination. See The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity, U.S. Dept. of Health and Human Services, 2001. Thus, the need exists for methods of controlling weight and treating obesity.

[0005] Melanin-concentrating hormone (MCH) is a cyclic, 19-amino acid hypothalamic neuropeptide derived from a larger pro-hormone precursor of MCH, Pmch. Pmch-deficient mice are lean, hypophagic, and have an increased metabolic rate. Transgenic mice over-expressing Pmch are hyperphagic and develop mild obesity. Consequently, MCH has been implicated in the regulation of energy homeostasis, through actions on motor activity, metabolism, food intake and neuroendocrine function.

[0006] Two receptors have been identified in MCH, and are designated MCH 1 receptor and MCH 2 receptor. The MCH 1 and MCH 2 receptors are G protein-coupled receptors (GPCRs) believed to be responsible for the actions of MCH. G proteins are heterotrimeric proteins that control cellular responses to stimuli by cycling between a GTP-bound active state, which regulates the activity of a number of effector proteins, and a

GDP-bound inactive state. GPCRs accelerate activation of the G protein by increasing the GDP/GTP exchange rate..

[0007] MCH 1 receptor-deficient mice have normal body weights, yet are lean and have reduced fat mass. Surprisingly, MCH 1 receptor-deficient mice are hyperphagic when maintained on regular chow, and their leanness is a consequence of hyperactivity and altered metabolism. Consistent with the hyperactivity, MCH 1 receptor-deficient mice are less susceptible to diet-induced obesity. Importantly, chronic central infusions of MCH induce hyperphagia and mild obesity in wild-type mice, but not in MCH 1 receptor-deficient mice. Marsh et al., Proc. Nat. Acad. Sci., 99(5), 3241 (2002).

[0008] Because MCH has been shown to be an important regulator of food intake and energy balance, compounds capable of modulating the activity of MCH receptors, particularly MCH 1 receptors, are highly desirable for the treatment of eating disorders and metabolic disorders.

[0009] PCT Publication No. WO 02/04433 describes phenylcycloalkylmethylamino and phenylalkenylamino derivatives as modulators of MCH 1 receptors useful in the treatment of certain metabolic, feeding and sexual disorders.

[0010] U.S. Patent No. 6,472,394 describes the use of amide derivatives of 1,4-disubstituted piperidine as MCH antagonists for the treatment of obesity and diabetes.

Summary of the Invention

[0011] Among the several objects of certain embodiments of the present invention, therefore, may be noted the provision of melanin concentrating hormone receptor antagonists; the provision of pharmaceutical compositions comprising melanin concentrating hormone receptor antagonists; the provision of methods of treating, preventing, or otherwise ameliorating melanin concentrating hormone-mediated disorders in a subject; the provision of methods for treating, preventing or otherwise

ameliorating obesity in a subject; and the provision of methods of achieving sustained body weight loss in a subject.

[0012] Briefly therefore, the present invention is directed to a melanin concentrating hormone receptor antagonist of Formula I as defined herein.

[0013] The present invention is also directed to pharmaceutical compositions comprising a compound of Formula I, as defined herein, and a pharmaceutically acceptable carrier, adjuvant, or diluent.

[0014] The present invention is also directed to a method of inhibiting a GPCR, comprising contacting a compound of Formula I, as defined herein, with a GPCR, wherein the compound of Formula I is present at a concentration sufficient to inhibit the binding of a GPCR ligand *in vitro*. This method includes inhibiting a GPCR *in vivo*, e.g., in a subject given an amount of a compound of Formula I that would be sufficient to inhibit the binding of a ligand to the GCPR *in vitro*. Examples of GPCRs which may be inhibited according to the present invention include, but are not limited to the following GPCR families: Acetylcholine muscarinic, Adenosine, adrenergic, adrenergic, alpha-adrenergic, angiotensin, AR, Cannabinoid, DA, dopamine, His, imidazoline, Leukotriene, mAch, MCH, Opioid, serotonergic, serotonin, and Somatostatin.

[0015] Inhibition of the binding of a GPCR ligand to GPCRs is useful in the treatment of numerous disorders, including digestive tract disorders; mucolytic asthma; arrhythmia; ischemia; reperfusion injury; bronchospasm associated with asthma, emphysema and chronic bronchitis; acute and chronic respiratory diseases, including cystic fibrosis; cardiostimulant; chronic bronchitis; neurological depression; heart failure; benign prostate hypertrophy; diabetes; muscle spasm; myocardial infarction; stroke; Alzheimer's disease; anorexia; cachexia; multiple sclerosis; hyperprolactinemia; psychotropism; mydriasis in ocular examination and surgery;

deficitary and productive schizophrenia, psychasthenia and non-endogenous depression; kidney disease; vasodilation; chronic gastritis; glaucoma; depression; rhinitis, including allergic rhinitis; pain, including cancer pain, musculoskeletal pain, post-operative pain; eye disease; dyspepsia; cough; ulcer, including gastrointestinal, gastric and esophageal ulcers; helicobacter pylori prophylaxis infection; oesophagitis; allergies, including non-asthma allergies; cold; asthma; conjuctivitis; urticaria; diarrhea; Creutzfeldt-Jakob disease; dysmenorrhoea; drug addiction and drug overdose; septic shock treatment; cerebral ischaemia; drug posoning; head trauma; inflammation; pruritus; tardive dyskinesia; emesis; anxiety; motility dysfunction; cluster headaches; hypertension; cancer; irritable bowel syndrome; hemotherapy-induced nausea and vomiting; thrombosis; dementia; opiate-induced nausea and vomiting; bipolar depression; migraine; sleep disorders; traumatic shock; gastritis; gastro-oesophageal reflux; psychosis; Parkinson disease; Dependence treatment; Pre-eclampsia; Raynaud's disease; Vasospasm; haemostasis; nausea and vomiting; spasms; post-operative nausea and vomiting; alcoholism, alcohol addiction; bulimia; nicotine addiction; obsessive-compulsive disorder; panic disorder; post-traumatic stress disorder; premenstrual syndrome; and dermatitis, including allergic dermatitis.

[0016] The present invention is also directed to methods of inhibiting the binding of MCH to MCH receptors comprising contacting a compound of Formula I with cells expressing MCH receptors, wherein the compound is present at a concentration sufficient to inhibit MCH binding to MCH receptors *in vitro*. This method includes inhibiting the binding of MCH to MCH receptors *in vivo*, e.g., in a subject given an amount of a compound of Formula I that would be sufficient to inhibit the binding of MCH to the MCH receptors *in vitro*. The amount of a compound of Formula I that would be sufficient to inhibit the

binding of MCH to the MCH receptor *in vitro* may be readily determined via a MCH receptor binding assay, such as the assay described hereinbelow in Example 24.

[0017] The present invention is also directed to methods for altering the signal-transducing activity of MCH receptors, particularly the MCH receptor-mediated release of intracellular calcium, said method comprising exposing cells expressing such receptors to an effective amount of a compound of the invention. This method includes altering the signal-transducing activity of MCH receptors *in vivo*, e.g., in a subject given an amount of a compound of Formula I that would be sufficient to alter the signal-transducing activity of MCH receptors *in vitro*. The amount of a compound that would be sufficient to alter the signal-transducing activity of MCH receptors may be determined via a MCH receptor signal transduction assay, such as the calcium mobilization assay described hereinbelow in Example 23.

[0018] The present invention is also directed to methods of using compounds of Formula I and appropriately labeled derivatives thereof as standards and reagents in determining the ability of a potential pharmaceutical to bind to MCH receptor.

[0019] The present invention is also directed to methods of treating, preventing, or otherwise ameliorating melanin concentrating hormone-mediated disorders in a subject, the method comprising administering a compound of Formula I or a pharmaceutical composition comprising a compound of Formula I and a pharmaceutically-acceptable carrier, adjuvant, or diluent to said subject.

[0020] The present invention is also directed to methods of treating or preventing obesity in a subject, the method comprising administering a compound of Formula I or a pharmaceutical composition comprising a compound of Formula I and a pharmaceutically-acceptable carrier, adjuvant, or diluent to said subject.

[0021] The present invention is also directed to methods of treating or preventing conditions such as feeding disorders, including obesity, bulimia and bulimia nervosa; sexual or reproductive disorders; depression and anxiety; epileptic seizure; hypertension; cerebral hemorrhage; congestive heart failure; sleep disturbances; or any condition in which antagonism of an MCH receptor is beneficial.

[0022] The present invention is also directed to methods of treating eating disorders, particularly obesity and bulimia nervosa, comprising administering to a subject in need of such treatment a compound of Formula I in combination with leptin, a leptin receptor agonist, or a melanocortin receptor 4 (MC4) agonist.

[0023] The present invention is also directed to methods of using compounds of Formula I as positive controls in assays for activity of GPCRs, particularly MCH.

[0024] The present invention is also directed to methods of using appropriately labeled compounds of Formula I as probes for the localization of GPCRs, particularly MCH, in tissue sections.

[0025] Other objects and features will be in part apparent and in part pointed out hereinafter.

Abbreviations and Definitions

[0026] The term "alkyl", where used alone or within other terms such as "haloalkyl", "alkylsulfonyl", "alkoxyalkyl" and "hydroxyalkyl", is a linear or branched radical having one to about twenty carbon atoms or, preferably, one to about twelve carbon atoms. More preferred alkyl radicals are "lower alkyl" radicals having one to about ten carbon atoms. Most preferred are lower alkyl radicals having one to about six carbon atoms. Examples of such radicals include methyl, ethyl, propyl (e.g., n-propyl and isopropyl), butyl (e.g., n-butyl, isobutyl, sec-butyl, and tert-butyl), pentyl (e.g., n-pentyl and iso-amyl), hexyl, and the like.

[0027] The term "cycloalkyl" is a saturated carbocyclic radical having three to twelve carbon atoms. The cycloalkyl radical may be mono-, bi-, or tricyclic. More preferred cycloalkyl radicals are "lower cycloalkyl" radicals having three to about eight carbon atoms. Examples of such radicals include cyclopropyl, cyclobutyl, cyclopentyl, and cyclohexyl.

[0028] The term "alkenyl" is a linear or branched radical having at least one carbon-carbon double bond and having two to about twenty carbon atoms or, preferably, two to about twelve carbon atoms. More preferred alkyl radicals are "lower alkenyl" radicals having two to about six carbon atoms. Examples of alkenyl radicals include ethenyl, propenyl, allyl, butenyl and 4-methylbutenyl. The terms "alkenyl" and "lower alkenyl" also are radicals having "cis" and "trans" orientations, or alternatively, "E" and "Z" orientations.

[0029] The term "cycloalkenyl" is a partially unsaturated carbocyclic radical having three to twelve carbon atoms. The cycloalkenyl radicals may be mono-, bi-, or tricyclic. More preferred cycloalkenyl radicals are "lower cycloalkenyl" radicals having four to about eight carbon atoms. Examples of such radicals include cyclobutenyl, cyclopentenyl, cyclopentadienyl, and cyclohexenyl.

[0030] The term "alkynyl" is a linear or branched radical having at least one carbon-carbon triple bond and having two to about twenty carbon atoms or, preferably, two to about twelve carbon atoms. More preferred alkynyl radicals are "lower alkynyl" radicals having two to about ten carbon atoms. Most preferred are lower alkynyl radicals having two to about six carbon atoms. Examples of such radicals include propargyl, butynyl, and the like.

[0031] The terms "carboxy" or "carboxyl", whether used alone or with other terms, such as "carboxyalkyl", is $-CO_2H$.

[0032] The term "carboxyalkyl" is an alkyl radical as defined above substituted with a carboxy radical. More preferred

are "lower carboxyalkyl" radicals, which are lower alkyl radicals as defined above substituted with a carboxy radical, and may be additionally substituted on the alkyl radical with halo. Examples of such lower carboxyalkyl radicals include carboxymethyl, carboxyethyl and carboxypropyl.

[0033] The term "halo" is a halogen such as fluorine, chlorine, bromine or iodine.

[0034] The term "haloalkyl" is an alkyl radical as defined above wherein any one or more of the carbon atoms is substituted with halo as defined above. Specifically included are monohaloalkyl, dihaloalkyl and polyhaloalkyl radicals. A monohaloalkyl radical, for one example, may have either an iodo, bromo, chloro or fluoro atom within the radical. Dihalo and polyhaloalkyl radicals may have two or more of the same halo atoms or a combination of different halo radicals. More preferred haloalkyl radicals are "lower haloalkyl" having one to six carbon atoms. Examples of lower haloalkyl radicals include fluoromethyl, difluoromethyl, trifluoromethyl, chloromethyl, dichloromethyl, trichloromethyl, trichloromethyl, pentafluoroethyl, heptafluoropropyl, difluorochloromethyl, dichlorofluoromethyl, difluoroethyl, difluoropropyl, dichloroethyl and dichloropropyl.

[0035] The terms "alkoxy" and "alkyloxy" are linear or branched oxy-containing radicals each having alkyl portions of one to about ten carbon atoms. More preferred alkoxy radicals are "lower alkoxy" radicals having one to six carbon atoms. Examples of such radicals include methoxy, ethoxy, propoxy, butoxy and tert-butoxy. The "alkoxy" radicals may be further substituted with one or more halo atoms, such as fluoro, chloro or bromo, to provide haloalkoxy radicals. More preferred haloalkoxy radicals are "lower haloalkoxy" radicals having one to six carbon atoms and one or more halo radicals. Examples of such radicals include fluoromethoxy, chloromethoxy,

trifluoromethoxy, trifluoroethoxy, fluoroethoxy and fluoropropoxy.

[0036] The term "alkoxyalkyl" is an alkyl radical having one or more alkoxy radicals attached to the alkyl radical, that is, to form monoalkoxyalkyl and polyalkoxyalkyl radicals. More preferred alkoxyalkyl radicals are "lower alkoxyalkyl" radicals having two to twelve carbon atoms. Examples of such radicals include methoxymethyl, methoxyethyl, methoxypropyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, dimethoxymethyl, dimethoxyethyl, methoxy(ethoxy)ethyl, dimethoxypropyl, and methoxy(ethoxy)propyl.

[0037] The term "alkoxycarbonyl" is a radical containing an alkoxy radical, as defined above, attached via an oxygen atom to a carbonyl radical, i.e., an ester radical. More preferred are "lower alkoxycarbonyl" radicals with alkyl portions having one to six carbons. Examples of such lower alkoxycarbonyl radicals include substituted or unsubstituted methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl and hexyloxycarbonyl.

[0038] The term "hydroxyalkyl" is a linear or branched alkyl radical having one to about ten carbon atoms, any one of which may be substituted with one or more hydroxyl radicals. More preferred hydroxyalkyl radicals are "lower hydroxyalkyl" radicals having one to six carbon atoms and one or more hydroxyl radicals. Examples of such radicals include hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl and hydroxyhexyl.

[0039] The term "alkylamino" is an amino group that has been substituted with one or two alkyl radicals. Preferred are "lower N-alkylamino" radicals having alkyl portions having one to six carbon atoms. Suitable lower alkylamino may be mono- or dialkylamino, such as N-methylamino, N-ethylamino, N,N-dimethylamino, N,N-diethylamino or the like.

[0040] The term "alkylaminoalkyl" is a radical having one or more alkyl radicals attached to the nitrogen atom of an aminoalkyl radical.

[0041] The term "alkylaminocarbonyl" is an aminocarbonyl group that has been substituted with one or two alkyl radicals on the amino nitrogen atom. Preferred are "N-alkylaminocarbonyl" "N,N-dialkylaminocarbonyl" radicals. More preferred are "lower N-alkylaminocarbonyl" and "lower N,N-dialkylaminocarbonyl" radicals with lower alkyl portions as defined above.

[0042] The term "alkylthio" is a radical containing an alkyl radical of one to about ten carbon atoms attached to a divalent sulfur atom. More preferred alkylthio radicals are "lower alkylthio" radicals having alkyl radicals of one to six carbon atoms. Examples of such lower alkylthio radicals are methylthio, ethylthio, propylthio, butylthio and hexylthio.

[0043] The term "alkylthioalkyl" is a radical containing an alkylthio radical attached through the divalent sulfur atom to an alkyl radical of one to about ten carbon atoms. More preferred alkylthioalkyl radicals are "lower alkylthioalkyl" radicals having alkyl radicals of one to six carbon atoms. Examples of such lower alkylthioalkyl radicals include methylthiomethyl, methylthioethyl, ethylthioethyl, and ethylthiopropyl.

[0044] The term "alkylsulfinyl" is a radical containing a linear or branched alkyl radical, of one to ten carbon atoms, attached to a divalent -S(=O)- radical. More preferred alkylsulfinyl radicals are "lower alkylsulfinyl" radicals having alkyl radicals of one to six carbon atoms. Examples of such lower alkylsulfinyl radicals include methylsulfinyl, ethylsulfinyl, butylsulfinyl and hexylsulfinyl.

[0045] The term "aminoalkyl" is an alkyl radical substituted with one or more amino radicals. More preferred are "lower aminoalkyl" radicals of one to six carbon atoms. Examples of such radicals include aminomethyl, aminoethyl, and the like.

[0046] The term "aminocarbonyl" is an amide group of the formula $-C(=O)NH_2$.

[0047] The term "carbonyl", whether used alone or with other terms, such as "alkoxycarbonyl", is -(C=O)-.

[0048] The term "aryl", alone or in combination, is a carbocyclic aromatic system containing one, two or three rings wherein such rings may be attached together in a pendent manner or may be fused, and wherein at least one of the rings is aromatic. The term "aryl" includes aromatic radicals such as phenyl, naphthyl, tetrahydronaphthyl, indane and biphenyl. Aryl moieties may also be substituted at a substitutable position with one or more substituents selected independently from alkyl, alkoxyalkyl, alkylaminoalkyl, carboxyalkyl, alkoxycarbonylalkyl, aminocarbonylalkyl, alkoxy, aralkoxy, hydroxyl, amino, halo, nitro, alkylamino, acyl, cyano, carboxy, aminocarbonyl, alkoxycarbonyl and aralkoxycarbonyl.

[0049] The terms "heterocyclyl" and "heterocyclo" are saturated or partially unsaturated heteroatom-containing ring-shaped radicals having one, two, or three rings wherein such rings may be attached together in a pendent manner or may be fused, where the heteroatoms may be selected from nitrogen, sulfur and oxygen. Examples of saturated heterocyclyl and heterocyclo radicals include saturated 3- to 6-membered heteromonocylic radicals containing one to four nitrogen atoms (e.g., pyrrolidinyl, imidazolidinyl, piperidino, piperazinyl, etc.); saturated 3- to 6-membered heteromonocyclic group containing one to two oxygen atoms and one to three nitrogen atoms (e.g., morpholinyl, etc.); saturated 3- to 6-membered heteromonocyclic group containing one to two sulfur atoms and one to three nitrogen atoms (e.g., thiazolidinyl, etc.). Examples of partially unsaturated heterocyclyl and heterocyclo radicals include dihydrothiophene, dihydropyran, dihydrofuran and dihydrothiazole.

[0050] The term "heteroaryl" is an aromatic heteroatom-containing ring-shaped radical having one, two, or three rings wherein at least one ring is aromatic. Examples of heteroaryl radicals include unsaturated 3- to 6- membered heteromonocyclic group containing one to four nitrogen atoms, e.g., pyrrolyl, pyrrolinyl, imidazolyl, pyrazolyl, pyridyl, pyrimidyl, pyrazinyl, pyridazinyl, triazolyl (e.g., 4H-1,2,4-triazolyl, 1H-1,2,3-triazolyl, 2H-1,2,3-triazolyl, etc.) tetrazolyl (e.g. 1H-tetrazolyl, 2H-tetrazolyl, etc.), etc.; unsaturated condensed heterocyclyl group containing one to five nitrogen atoms, e.g., indolyl, isoindolyl, indolizinyl, benzimidazolyl, quinolyl, isoquinolyl, indazolyl, benzotriazolyl, tetrazolopyridazinyl (e.g., tetrazolo[1,5-b]pyridazinyl, etc.), etc.; unsaturated 3- to 6-membered heteromonocyclic group containing an oxygen atom, e.g., pyranyl, furyl, etc.; unsaturated 3- to 6-membered heteromonocyclic group containing a sulfur atom, e.g., thienyl, etc.; unsaturated 3- to 6-membered heteromonocyclic group containing one to two oxygen atoms and one to three nitrogen atoms, e.g., oxazolyl, isoxazolyl, oxadiazolyl (e.g., 1,2,4-oxadiazolyl, 1,3,4-oxadiazolyl, 1,2,5-oxadiazolyl, etc.) etc.; unsaturated condensed heterocyclyl group containing one to two oxygen atoms and one to three nitrogen atoms (e.g., benzoxazolyl, benzoxadiazolyl, etc.); unsaturated 3- to 6-membered heteromonocyclic group containing one to two sulfur atoms and one to three nitrogen atoms, e.g., thiazolyl, thiadiazolyl (e.g., 1,2,4-thiadiazolyl, 1,3,4-thiadiazolyl, 1,2,5-thiadiazolyl, etc.) etc.; unsaturated condensed heterocyclyl group containing one to two sulfur atoms and one to three nitrogen atoms (e.g., benzothiazolyl, benzothiadiazolyl, etc.) and the like. The term "heteroaryl" also includes radicals where heteroaryl radicals are fused with aryl radicals. Examples of such fused bicyclic radicals include benzofuran, benzothiophene, and the like. Said heterocyclyl group may be substituted at a substitutable position with one or more

substituents selected independently from alkyl, hydroxyl, halo, alkoxy, oxo, amino and alkylamino.

[0051] The terms "heterocyclylalkyl" and "heterocycloalkyl" are saturated and partially unsaturated heterocyclyl-substituted alkyl radicals, such as pyrrolidinylmethyl, and heteroaryl-substituted alkyl radicals, such as pyridylmethyl, quinolylmethyl, thienylmethyl, furylethyl, and quinolylethyl. The heteroaryl in said heteroaralkyl may be additionally substituted with halo, alkyl, alkoxy, halkoalkyl and haloalkoxy.

[0052] The term "acyl" is a radical provided by the residue after removal of hydroxyl from an organic acid. Examples of such acyl radicals include alkanoyl and aroyl radicals.

[0053] The term "alkanoyl" or "alkylcarbonyl" are alkyl radicals as defined herein attached to a carbonyl radical. Examples of such alkanoyl radicals include formyl, acetyl, propionyl, butyryl, isobutyryl, valeryl, isovaleryl, pivaloyl, hexanoyl, and trifluoroacetyl.

[0054] The terms "arylcarbonyl" (also called "aroyl") and "aralkylcarbonyl" include radicals having aryl or aralkyl radicals, as defined herein, attached to a carbonyl radical. Examples of such radicals include substituted or unsubstituted phenylcarbonyl, naththoyl, and benzylcarbonyl. The aryl in said aroyl and aralkylcarbonyl radicals may be additionally substituted.

[0055] The term "aralkoxy" is an aralkyl radical as defined herein attached through an oxygen atom to other radicals.

[0056] The term "aralkoxyalkyl" is an aralkoxy radical as defined herein attached through an oxygen atom to an alkyl radical.

[0057] The terms "aralkyl" and "arylalkyl" are aryl-substituted alkyl radicals such as benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, and diphenylethyl. The aryl in said aralkyl may be additionally substituted with halo, alkyl,

alkoxy, halkoalkyl and haloalkoxy. The terms benzyl and phenylmethyl are interchangeable.

[0058] The term "aralkylamino" is an aralkyl radical as defined herein attached through an amino nitrogen atom to other radicals. The terms "N-arylaminoalkyl" and "N-aryl-N-alkyl-aminoalkyl" are amino groups which have been substituted with one aryl radical or one aryl and one alkyl radical, respectively, and having the amino group attached to an alkyl radical. Examples of such radicals include N-phenylaminomethyl and N-phenyl-N-methylaminomethyl.

[0059] The term "aralkylthio" is an aralkyl radical attached to a sulfur atom.

[0060] The term "aralkylthioalkyl" is an aralkylthio radical attached through a sulfur atom to an alkyl radical.

[0061] The term "arylamino" is an amino group that has been substituted with one or two aryl radicals. An example of such arylamino radicals is N-phenylamino. The "arylamino" radicals may be further substituted on the aryl ring portion of the radical.

[0062] The term "aryloxyalkyl" is a radical having an aryl radical attached to an alkyl radical through a divalent oxygen atom.

[0063] The term "arylthioalkyl" is a radical having an aryl radical attached to an alkyl radical through a divalent sulfur atom.

[0064] The term "sulfonyl", whether used alone or linked to other terms such as alkylsulfonyl, is a divalent $-SO_2-$ radical.

[0065] The term "alkylsulfonyl" is an alkyl radical attached to a sulfonyl radical, where alkyl is defined as above. More preferred alkylsulfonyl radicals are "lower alkylsulfonyl" radicals having one to six carbon atoms. Examples of such lower alkylsulfonyl radicals include methylsulfonyl, ethylsulfonyl and propylsulfonyl. The "alkylsulfonyl" radicals may be further

substituted with one or more halo atoms, such as fluoro, chloro or bromo, to provide haloalkylsulfonyl radicals.

[0066] The terms "sulfamyl", "aminosulfonyl" and "sulfonamidyl" are $-SO_2NH_2$.

[0067] The term "pharmaceutically acceptable" is used adjectivally herein to mean that the modified noun is appropriate for use in a pharmaceutical product; that is the "pharmaceutically-acceptable" material is relatively safe and/or non-toxic, though not necessarily providing a separable therapeutic benefit by itself. Pharmaceutically-acceptable cations include metallic ions and organic ions. More preferred metallic ions include, but are not limited to, appropriate alkali metal salts, alkaline earth metal salts and other physiologically-acceptable metal ions. Exemplary ions include aluminum, calcium, lithium, magnesium, potassium, sodium and zinc, in their usual valences. Preferred organic ions include protonated tertiary amines and quaternary ammonium cations, including in part, trimethylamine, diethylamine, N,N'-dibenzylethylenediamine, chloroprocaine, choline, diethanolamine, ethylenediamine, meglumine (N-methylglucamine) and procaine. Exemplary pharmaceutically acceptable acids include without limitation hydrochloric acid, hydrobromic acid, phosphoric acid, sulfuric acid, methanesulfonic acid, acetic acid, formic acid, tartaric acid, maleic acid, malic acid, citric acid, isocitric acid, succinic acid, lactic acid, gluconic acid, glucuronic acid, pyruvic acid, oxalacetic acid, fumaric acid, propionic acid, aspartic acid, glutamic acid, benzoic acid, and the like.

[0068] The term "prodrug" refers to a chemical compound that can be converted into a therapeutic compound by metabolic or simple chemical processes within the body of the subject.

[0069] The term "subject" for purposes of treatment or prevention includes any human or animal subject who is in need of treatment. The subject can be a domestic livestock species, a

laboratory animal species, a zoo animal or a companion animal. In one embodiment, the subject is a mammal. In another embodiment, the mammal is a human being.

[0070] The term "PBS" stands for phosphate buffered saline.

[0071] The term "HEPES" stands for N-2-hydroxyethylpiperazine-N'-2-ethanesulfonic acid.

[0072] The term "BSA" stands for bovine serum albumin.

[0073] The term "STI" stands for soybean trypsin inhibitor.

[0074] The term "Pefabloc" stands for (4-(2-aminoethyl)benzenesulfonylfluoride, HCl salt.

[0075] The term "Phosphoramidon" stands for N-α-L-rhamnopyranosyloxy(hydroxyphosphinyl)-L-leucyl-L-tryptophan.

[0076] The term "FCC" stands for flash column chromatography.

[0077] The term "K_i" stands for inhibitory rate constant.

[0078] The term "FLIPR" stands for fluorometric imaging plate reader.

[0079] The term "HEK 293" stands for the human embryonic kidney 293 cell line.

[0080] The term "Boc" stands for tert-butoxycarbonyl.

[0081] The term "DIC" stands for diisopropylcarbodiimide.

[0082] The term "DCM" stands for dichloromethane.

[0083] The term "DBU" stands for 1,8-diazabicyclo[5.4.0]undec-7-ene.

[0084] The term "phosgene" stands for $COCl_2$.

[0085] The term "DCE" stands for dichloroethane.

[0086] The term "DMF" stands for dimethylformamide.

[0087] The term "EtOAc" stands for ethyl acetate.

[0088] The term "HOBt" stands for 1-Hydroxybenzotriazole hydrate.

[0089] The term "MeOH" stands for methanol.

[0090] The term "TFA" stands for trifluoroacetic acid.

[0091] The MCH receptor antagonists employed in the present invention can exist in tautomeric, geometric or stereoisomeric

forms. The present invention contemplates all such compounds, including cis- and trans-geometric isomers, E- and Z-geometric isomers, R- and S-enantiomers, diastereomers, d- and l-isomers, the racemic mixtures thereof and other mixtures thereof. Pharmaceutically acceptable salts of such tautomeric, geometric or stereoisomeric forms are also included within the invention. The terms "cis" and "trans", as used herein, denote a form of geometric isomerism in which two carbon atoms connected by a double bond and each substituted by a hydrogen and another group, will each have a hydrogen atom on the same side of the double bond ("cis") or on opposite sides of the double bond ("trans"). Some of the compounds described herein contain alkenyl groups, and are meant to include both cis and trans or "E" and "Z" geometric forms. Furthermore, some of the compounds described herein contain one or more stereocenters and are meant to include R, S, and mixtures or R and S forms for each stereocenter present.

[0092] The MCH receptor antagonists utilized in the present invention may be in the form of free bases or pharmaceutically-acceptable acid addition salts thereof. The term "pharmaceutically-acceptable salts" are salts commonly used to form alkali metal salts and to form addition salts of free acids or free bases. The nature of the salt may vary, provided that it is pharmaceutically acceptable. Suitable pharmaceutically-acceptable acid addition salts of compounds for use in the present methods may be prepared from an inorganic acid or from an organic acid. Examples of such inorganic acids are hydrochloric, hydrobromic, hydroiodic, nitric, carbonic, sulfuric and phosphoric acid. Appropriate organic acids may be selected from aliphatic, cycloaliphatic, aromatic, araliphatic, heterocyclic, carboxylic and sulfonic classes of organic acids, examples of which are formic, acetic, propionic, succinic, glycolic, gluconic, lactic, malic, tartaric, citric, ascorbic, glucuronic, maleic, fumaric, pyruvic, aspartic, glutamic,

benzoic, anthranilic, mesylic, 4-hydroxybenzoic, phenylacetic, mandelic, embonic (pamoic), methanesulfonic, ethanesulfonic, benzenesulfonic, pantothenic, 2-hydroxyethanesulfonic, toluenesulfonic, sulfanilic, cyclohexylaminosulfonic, stearic, algenic, hydroxybutyric, salicylic, galactaric and galacturonic acid. Suitable pharmaceutically-acceptable base addition salts of compounds of use in the present methods include metallic salts made from aluminum, calcium, lithium, magnesium, potassium, sodium and zinc or organic salts made from N,N'-dibenzylethylenediamine, chloroprocaine, choline, diethanolamine, ethylenediamine, meglumine (N-methylglucamine), and procaine. All of these salts may be prepared by conventional means from the corresponding compound by reacting, for example, the appropriate acid or base with the compound of any Formula set forth herein.

[0093] The MCH receptor antagonists useful in the practice of the present invention can be formulated into pharmaceutical compositions and administered by any means that will deliver a therapeutically effective dose. Such compositions can be administered orally, parenterally, by inhalation spray, rectally, intradermally, transdermally, or topically, in dosage unit formulations containing conventional nontoxic pharmaceutically-acceptable carriers, adjuvants, and vehicles as desired. Topical administration may also involve the use of transdermal administration such as transdermal patches or iontophoresis devices. The term parenteral as used herein includes subcutaneous, intravenous, intramuscular, or intrasternal injection, or infusion techniques. Formulation of drugs is discussed in, e.g., Hoover, Remington's Pharmaceutical Sciences, (1975), and Liberman & Lachman, Eds., Pharmaceutical Dosage Forms, (1980).

[0094] Injectable preparations, for example, sterile injectable aqueous or oleaginous suspensions, can be formulated according to the known art using suitable dispersing or wetting

agents and suspending agents. The sterile injectable preparation may also be a sterile injectable solution or suspension in a nontoxic parenterally-acceptable diluent or solvent. Among the acceptable vehicles and solvents that may be employed are water, Ringer's solution, and isotonic sodium chloride solution. In addition, sterile, fixed oils are conventionally employed as a solvent or suspending medium. For this purpose, any bland fixed oil may be employed, including synthetic mono- or diglycerides. In addition, fatty acids such as oleic acid are useful in the preparation of injectables. Dimethyl acetamide, surfactants including ionic and non-ionic detergents, and polyethylene glycols can be used. Mixtures of solvents and wetting agents such as those discussed above are also useful.

[0095] Suppositories for rectal administration of the compounds discussed herein can be prepared by mixing the active agent with a suitable non-irritating excipient such as cocoa butter, synthetic mono-, di-, or triglycerides, fatty acids, or polyethylene glycols, which are solid at ordinary temperatures but liquid at the rectal temperature, and which will therefore melt in the rectum and release the drug.

[0096] Solid dosage forms for oral administration may include capsules, tablets, pills, powders, and granules. In such solid dosage forms, the compounds are ordinarily combined with one or more adjuvants appropriate to the indicated route of administration. If administered per os, the compounds can be admixed with lactose, sucrose, starch powder, cellulose esters of alkanoic acids, cellulose alkyl esters, talc, stearic acid, magnesium stearate, magnesium oxide, sodium and calcium salts of phosphoric and sulfuric acids, gelatin, acacia gum, sodium alginate, polyvinylpyrrolidone, and/or polyvinyl alcohol, and then tableted or encapsulated for convenient administration. Such capsules or tablets can contain a controlled-release formulation as can be provided in a dispersion of active compound in hydroxypropylmethyl cellulose. In the case of

capsules, tablets, and pills, the dosage forms can also comprise buffering agents such as sodium citrate, or magnesium or calcium carbonate or bicarbonate. Tablets and pills can additionally be prepared with enteric coatings.

[0097] For therapeutic purposes, formulations for parenteral administration can be in the form of aqueous or non-aqueous isotonic sterile injection solutions or suspensions. These solutions and suspensions can be prepared from sterile powders or granules having one or more of the carriers or diluents mentioned for use in the formulations for oral administration. The compounds can be dissolved in water, polyethylene glycol, propylene glycol, ethanol, corn oil, cottonseed oil, peanut oil, sesame oil, benzyl alcohol, sodium chloride, and/or various buffers. Other adjuvants and modes of administration are well and widely known in the pharmaceutical art.

[0098] Liquid dosage forms for oral administration can include pharmaceutically acceptable emulsions, solutions, suspensions, syrups, and elixirs containing inert diluents commonly used in the art, such as water. Such compositions can also comprise adjuvants, such as wetting agents, emulsifying and suspending agents, and sweetening, flavoring, and perfuming agents.

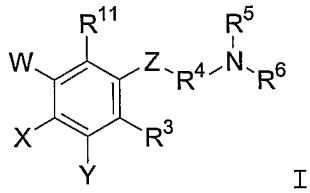
[0099] The amount of active ingredient that can be combined with the carrier materials to produce a single dosage of the MCH receptor antagonist will vary depending upon the patient and the particular mode of administration. In general, the pharmaceutical compositions may contain an MCH receptor antagonist in the range of about 1 to about 250 mg, more typically, in the range of about 10 to about 200 mg and still more typically, between about 25 to about 150 mg. A daily dose of about 0.01 to about 80 mg/kg body weight, or more typically, between about 0.5 to about 50 mg/kg body weight and even more typically, from about 1 to about 25 mg/kg body weight, may be

appropriate. The daily dose can be administered in one to about four doses per day.

[0100] The MCH receptor antagonists are administered in such amount as will be therapeutically effective in the treatment or control of the disorder or condition being treated. It will be appreciated that the amount of active ingredients contained in an individual dose of each dosage form need not in itself constitute an effective amount, as the necessary effective amount could be reached by administration of a number of individual doses. Those skilled in the art will appreciate that the quantity of active MCH receptor antagonist to be administered will vary depending upon the age, sex, and body weight of the subject to be treated, the type of disease, or syndrome to be treated, the particular method and scheduling of administration, and what other MCH receptor antagonist, if any, is co-administered. Dosage amounts for an individual patient may thus be above or below the typical dosage ranges. Generally speaking, the MCH receptor antagonist can be employed in any amount known to be effective at treating, preventing or controlling the disorder or condition being treated. The doses may be single doses or multiple doses per day, with the number of doses taken per day and the time allowed between doses varying depending on the individual needs of the patient. Optimization of treatment, including dosage amount, method and time of administration, is thus best determined by a skilled practitioner through close monitoring of patients on an individual basis. Those skilled in the art will appreciate that dosages may also be determined with guidance from Goodman & Goldman, The Pharmacological Basis of Therapeutics, 9th Ed. (1996), App. II, pp. 1707-1711 and from Goodman & Goldman, The Pharmacological Basis of Therapeutics, 10th Ed. (2001), App. II, pp. 475-493.

Description of the Preferred Embodiments

[0101] In one embodiment of the present invention, the MCH receptor antagonist is a compound of Formula I, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, having the following structure:



I

[0102] wherein:

[0103] W is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0104] X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

[0105] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0106] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)-$, $-CH_2N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0107] R^1 is selected from the group consisting of alkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, and heteroarylalkyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0108] R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, arylcycloalkyl, and heteroarylalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the

group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0109] R^3 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0110] R^4 is selected from the group consisting of a bond, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and heteroarylalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, alkoxycarbonyl, and halo;

[0111] R^5 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0112] R^6 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0113] R^7 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0114] R^8 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl,

carboxyalkyl, and cyano, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0115] R^9 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0116] R^{10} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0117] R^{11} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano; and

[0118] R^{12} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano.

[0119] In another embodiment, the MCH receptor antagonist consists of compounds of Formula I, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0120] W is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0121] X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

[0122] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0123] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, -C(O)-, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0124] R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, lower cycloalkylalkyl, aryl, lower aralkyl, heteroaryl, and lower heteroarylalkyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0125] R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, lower arylcycloalkyl, and lower heteroarylalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0126] R^3 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0127] R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, lower alkynyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower heteroarylalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, lower alkoxycarbonyl, and halo;

[0128] R^5 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower

aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0129] R^6 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0130] R^7 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0131] R^8 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0132] R^9 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0133] R^{10} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0134] R^{11} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano; and

[0135] R^{12} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano.

[0136] In another embodiment, the MCH receptor antagonist consists of compounds of Formula I, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0137] W is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0138] X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

[0139] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0140] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, -C(O)-, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0141] R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0142] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl,

cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0143] R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy,

naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0144] R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

[0145] R^5 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl,

triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0146] R^6 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0147] R^7 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0148] R^8 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^8 together with R^2

and the nitrogen to which they are attached may form an isoindolinyl ring;

[0149] R^9 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0150] R^{10} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl,

pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0151] R^{11} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano; and

[0152] R^{12} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl,

pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano.

[0153] In another embodiment, the MCH receptor antagonist consists of compounds of Formula I, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0154] W is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0155] X is $-OR^1$;

[0156] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $--N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0157] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)-$, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0158] R^1 is selected from the group consisting of alkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, and heteroarylalkyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0159] R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, arylcycloalkyl, and heteroarylalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0160] R^3 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0161] R^4 is selected from the group consisting of a bond, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and heteroarylalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, alkoxycarbonyl, and halo;

[0162] R^5 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0163] R^6 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0164] R^7 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0165] R^8 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0166] R^9 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl,

carboxyalkyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0167] R^{10} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

[0168] R^{11} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano; and

[0169] R^{12} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano.

[0170] In another embodiment, the MCH receptor antagonist consists of compounds of Formula I, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0171] W is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0172] X is $-OR^1$;

[0173] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0174] Z is selected from the group consisting of $-CH=CH-$, $-CH_2N(R^9)-$, $-C(O)-$, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0175] R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, lower cycloalkylalkyl, aryl, lower aralkyl, heteroaryl, and lower heteroarylalkyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0176] R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, lower arylcycloalkyl, and lower heteroarylalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0177] R^3 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0178] R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, lower alkynyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower heteroarylalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, lower alkoxycarbonyl, and halo;

[0179] R^5 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0180] R^6 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower

alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0181] R^7 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0182] R^8 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0183] R^9 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0184] R^{10} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

[0185] R^{11} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano; and

[0186] R^{12} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano.

[0187] In another embodiment, the MCH receptor antagonist consists of compounds of Formula I, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0188] W is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0189] X is $-OR^1$;

[0190] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0191] Z is selected from the group consisting of $-CH=CH-$, $-CH_2N(R^9)-$, $-C(O)-$, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0192] R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenyl,

naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0193] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl,

tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0194] R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0195] R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl,

benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

[0196] R^5 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl,

carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0197] R^6 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0198] R^7 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl,

propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0199] R^8 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

[0200] R^9 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl,

ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

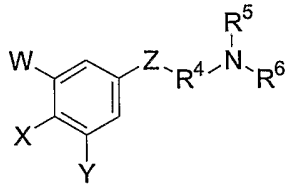
[0201] R^{10} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0202] R^{11} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl,

hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano; and

[0203] R^{12} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano.

[0204] In another embodiment, the MCH receptor antagonist is selected from a subclass of compounds of Formula I represented by Formula II:



II

[0205] wherein:

[0206] W is selected from the group consisting of hydrogen, hydroxy, alkyl, and alkoxy;

[0207] X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

[0208] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0209] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)-$, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0210] R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0211] R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0212] R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

[0213] R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0214] R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0215] R^7 is selected from the group consisting of hydrogen, alkyl, and aryl;

[0216] R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0217] R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0218] R^{10} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl; and

[0219] R^{12} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl;

[0220] or a pharmaceutically-acceptable salt, tautomer or prodrug thereof.

[0221] In another embodiment, the MCH receptor antagonist consists of compounds of Formula II, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0222] W is selected from the group consisting of hydrogen, hydroxy, lower alkyl, and lower alkoxy;

[0223] X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

[0224] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0225] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, -C(O)-, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0226] R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0227] R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0228] R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

[0229] R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0230] R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0231] R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

[0232] R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0233] R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0234] R^{10} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl; and

[0235] R^{12} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl.

[0236] In another embodiment, the MCH receptor antagonist consists of compounds of Formula II, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0237] W is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, methoxy, ethoxy, propoxy, butoxy, pentyloxy, and hexyloxy;

[0238] X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

[0239] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0240] Z is selected from the group consisting of $-CH=CH-$, $-CH_2N(R^9)-$, $-C(O)-$, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

[0241] R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0242] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl,

dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0243] R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0244] R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl,

oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

[0245] R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0246] R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl,

naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0247] R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

[0248] R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

[0249] R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl,

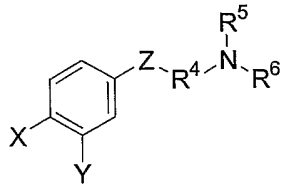
methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0250] R^{10} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl; and

[0251] R^{12} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl,

butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl.

[0252] In another embodiment, the MCH receptor antagonist is selected from a subclass of compounds of Formula I represented by Formula III:



III

[0253] wherein:

[0254] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0255] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0256] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0257] R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0258] R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0259] R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

[0260] R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0261] R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0262] R^7 is selected from the group consisting of hydrogen, alkyl, and aryl;

[0263] R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0264] R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0265] R^{10} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl; and

[0266] R^{12} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl;

[0267] or a pharmaceutically-acceptable salt, tautomer or prodrug thereof.

[0268] In another embodiment, the MCH receptor antagonist consists of compounds of Formula III, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0269] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0270] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0271] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0272] R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0273] R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0274] R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

[0275] R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to

which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0276] R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0277] R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

[0278] R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0279] R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0280] R^{10} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl; and

[0281] R^{12} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl.

[0282] In another embodiment, the MCH receptor antagonist consists of compounds of Formula III, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0283] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0284] Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

[0285] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0286] R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0287] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl,

biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0288] R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0289] R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl,

allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

[0290] R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl,

wherein R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0291] R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0292] R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

[0293] R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

[0294] R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl,

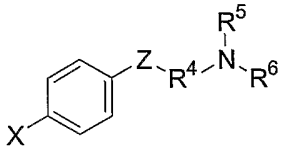
cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0295] R^{10} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl; and

[0296] R^{12} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl,

hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl.

[0297] In another embodiment, the MCH receptor antagonist is selected from a subclass of compounds of Formula I represented by Formula IV:



IV

[0298] wherein:

[0299] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0300] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0301] R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0302] R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0303] R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

[0304] R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0305] R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0306] R^7 is selected from the group consisting of hydrogen, alkyl, and aryl;

[0307] R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0308] R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0309] R^{10} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl; and

[0310] R^{12} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl;

[0311] or a pharmaceutically-acceptable salt, tautomer or prodrug thereof.

[0312] In another embodiment, the MCH receptor antagonist consists of compounds of Formula IV, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0313] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0314] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0315] R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0316] R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0317] R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

[0318] R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0319] R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0320] R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

[0321] R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0322] R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0323] R^{10} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl; and

[0324] R^{12} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl.

[0325] In another embodiment, the MCH receptor antagonist consists of compounds of Formula IV, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0326] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0327] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0328] R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl,

cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0329] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl,

octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0330] R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

[0331] R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl,

diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

[0332] R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0333] R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl,

methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0334] R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

[0335] R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

[0336] R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl,

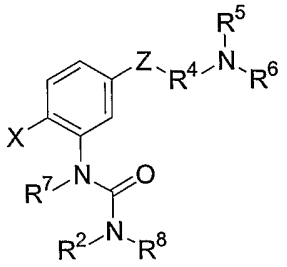
propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0337] R^{10} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl; and

[0338] R^{12} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl,

pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl.

[0339] In another embodiment, the MCH receptor antagonist is selected from a subclass of compounds of Formula I represented by Formula V:



V

[0340] wherein:

[0341] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0342] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0343] R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0344] R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0345] R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with

R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

[0346] R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0347] R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0348] R^7 is selected from the group consisting of hydrogen, alkyl, and aryl;

[0349] R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system; and

[0350] R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0351] or a pharmaceutically-acceptable salt, tautomer or prodrug thereof.

[0352] In another embodiment, the MCH receptor antagonist consists of compounds of Formula V, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0353] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0354] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0355] R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected

from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0356] R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0357] R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

[0358] R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0359] R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0360] R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

[0361] R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are

attached may form an unsaturated fused heterocyclic ring system; and

[0362] R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring.

[0363] In another embodiment, the MCH receptor antagonist consists of compounds of Formula V, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0364] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0365] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0366] R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0367] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl,

phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0368] R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl,

diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

[0369] R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0370] R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl,

methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

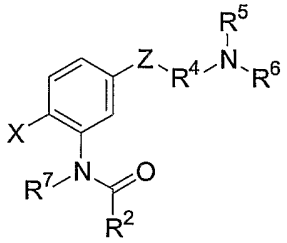
[0371] R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

[0372] R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring; and

[0373] R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl,

propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring.

[0374] In another embodiment, the MCH receptor antagonist is selected from a subclass of compounds of Formula I represented by Formula VI:



VI

[0375] wherein:

[0376] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0377] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0378] R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0379] R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

[0380] R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

[0381] R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0382] R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0383] R^7 is selected from the group consisting of hydrogen, alkyl, and aryl; and

[0384] R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0385] or a pharmaceutically-acceptable salt, tautomer or prodrug thereof.

[0386] In another embodiment, the MCH receptor antagonist consists of compounds of Formula VI, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0387] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0388] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0389] R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected

from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0390] R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

[0391] R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

[0392] R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0393] R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0394] R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

[0395] R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are

attached may form an unsaturated fused heterocyclic ring system; and

[0396] R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring.

[0397] In another embodiment, the MCH receptor antagonist consists of compounds of Formula VI, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0398] X is selected from the group consisting of $-OR^1$ and $-SR^1$;

[0399] Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-C(O)N(R^9)-$, and $-NHC(O)NR^9-$;

[0400] R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0401] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl,

phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

[0402] R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl,

diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

[0403] R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0404] R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl,

methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

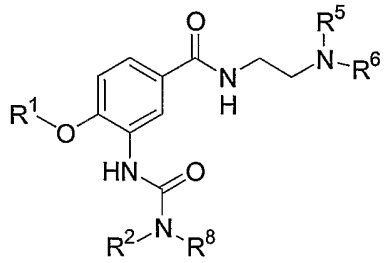
[0405] R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

[0406] R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring; and

[0407] R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl,

propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring.

[0408] In another embodiment, the MCH receptor antagonist is selected from a subclass of compounds of Formula I represented by Formula VII:



VII

[0409] wherein:

[0410] R^1 is selected from the group consisting of cycloalkyl and aryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, and halo;

[0411] R^2 is selected from the group consisting of alkyl, aryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, aryloxy, and halo;

[0412] R^5 is selected from the group consisting of hydrogen and alkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0413] R^6 is selected from the group consisting of hydrogen and alkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring; and

[0414] R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, and aryl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

[0415] or a pharmaceutically-acceptable salt, tautomer or prodrug thereof.

[0416] In another embodiment, the MCH receptor antagonist consists of compounds of Formula VII, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0417] R^1 is selected from the group consisting of lower cycloalkyl and aryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, and halo;

[0418] R^2 is selected from the group consisting of lower alkyl, aryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, aryloxy, and halo;

[0419] R^5 is selected from the group consisting of hydrogen and lower alkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

[0420] R^6 is selected from the group consisting of hydrogen and lower alkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring; and

[0421] R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, and aryl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system.

[0422] In another embodiment, the MCH receptor antagonist consists of compounds of Formula VII, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0423] R^1 is selected from the group consisting of cyclopentyl, cyclohexyl, phenyl, naphthyl, and biphenyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, hydroxy, methoxy, ethoxy, propoxy, chloro, bromo, and fluoro;

[0424] R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, phenylethyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, phenylethenyl, phenylpropenyl, phenylcyclopropyl, biphenylcyclopropyl, and naphthylcyclopropyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of dihydroisoindolyl, dihydroindolyl, tetrahydroisoquinolinyl, and tetrahydroquinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, hydroxy, methoxy, ethoxy, propoxy, phenoxy, naphthyloxy, biphenylyloxy, chloro, bromo, and fluoro;

[0425] R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, and hexyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

[0426] R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, and hexyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring; and

[0427] R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, and biphenyl, or R^8 together with R^2 and the nitrogen to which they are attached may form a ring selected from the group consisting of dihydroisoindolyl, dihydroindolyl, tetrahydroisoquinolinyl, and tetrahydroquinolinyl.

[0428] In another embodiment, the MCH receptor antagonist consists of compounds of Formula VII, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein:

[0429] R^1 is selected from the group consisting of phenyl, and naphthyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, chloro, and fluoro;

[0430] R^2 is selected from the group consisting of methyl, ethyl, phenyl, naphthyl, biphenyl, benzyl, phenylethyl, cyclopentylethyl, phenylethenyl, phenylcyclopropyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a dihydroisoindolyl ring, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, propyl, methoxy, phenoxy, chloro, bromo, and fluoro;

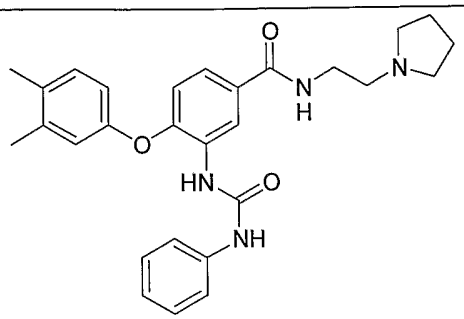
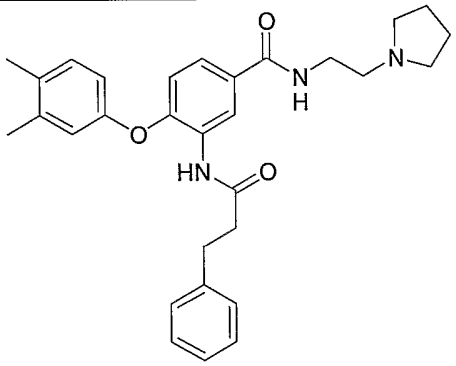
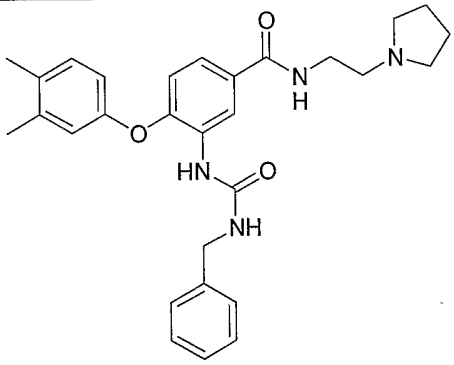
[0431] R^5 is hydrogen or R^5 together with R^6 and the nitrogen to which they are attached form a pyrrolidinyl ring;

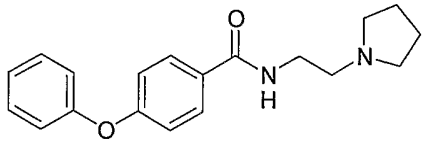
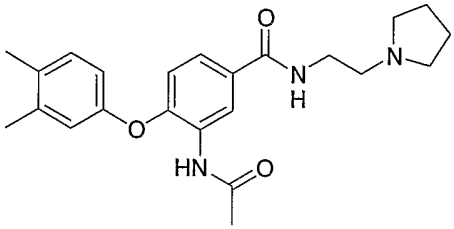
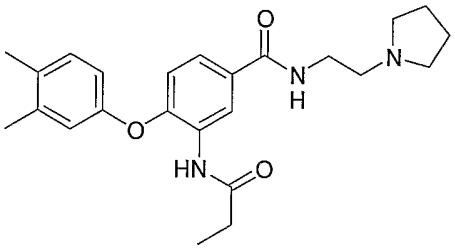
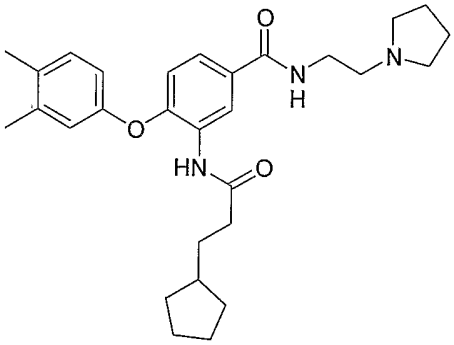
[0432] R^6 is hydrogen or R^6 together with R^5 and the nitrogen to which they are attached form a pyrrolidinyl ring; and

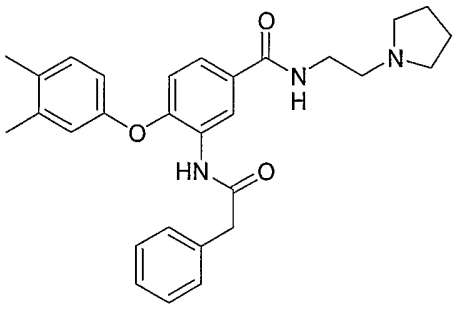
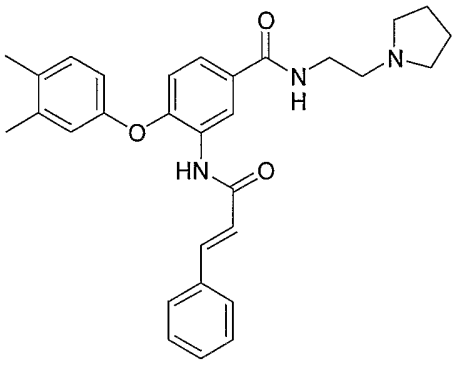
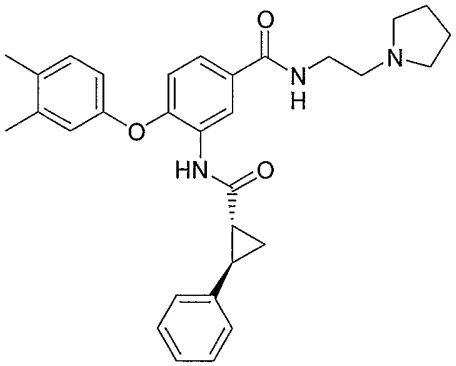
[0433] R^8 is selected from the group consisting of hydrogen, methyl, and phenyl, or R^8 together with R^2 and the nitrogen to which they are attached may form a dihydroisoindolyl ring.

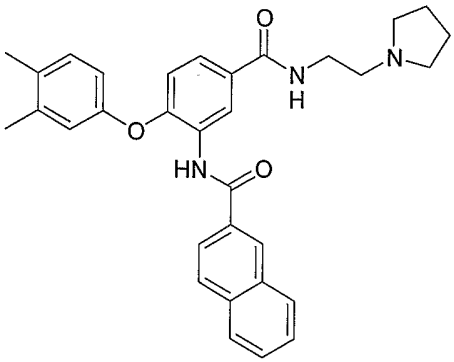
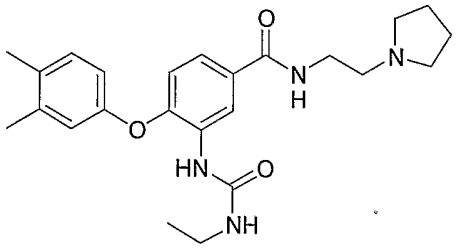
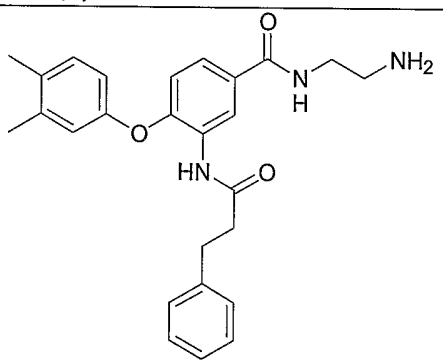
[0434] In another embodiment, the compound of Formula I is selected from the group of compounds listed in Table 1.

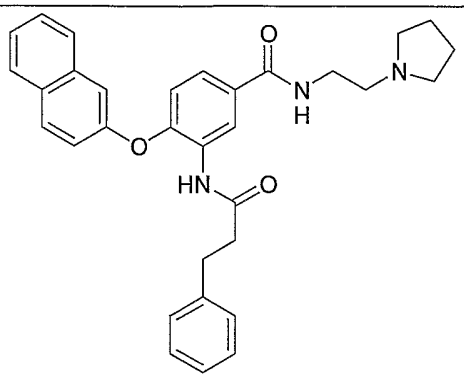
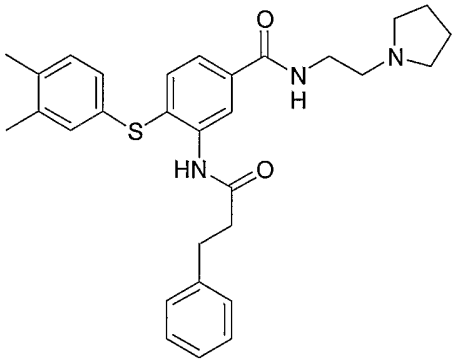
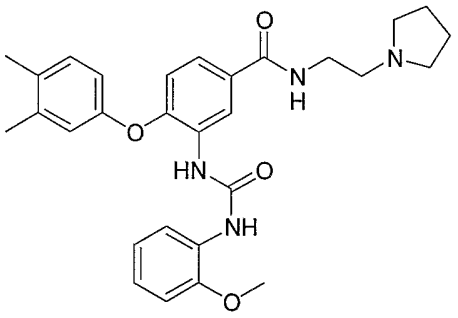
TABLE 1

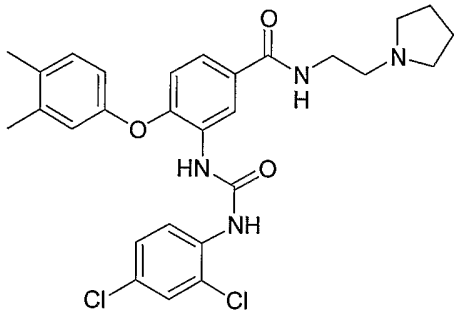
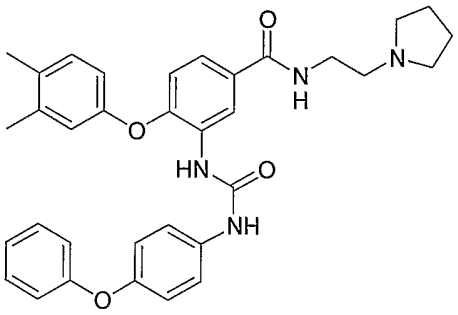
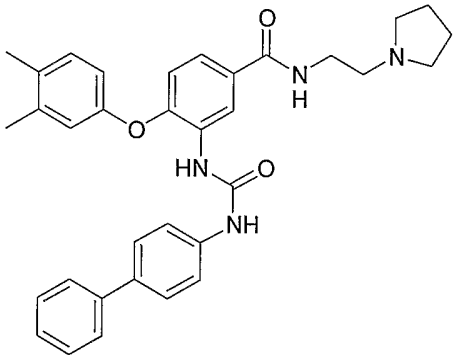
Compound No.	Structure
1	 4-[(3,4-dimethylphenyl)oxy]-3-{[(phenylamino)carbonyl]amino}-N-(2-(1-pyrrolidinyl)ethyl)benzamide MS *m/z* 473 (M+H); MW 472
5	 4-[(3,4-dimethylphenyl)oxy]-3-[(3-phenylpropanoyl)amino]-N-(2-(1-pyrrolidinyl)ethyl)benzamide MS *m/z* 486 (M+H); MW 485
6	 4-[(3,4-dimethylphenyl)oxy]-3-({[(phenylmethyl)amino]carbonyl}amino)-N-(2-(1-pyrrolidinyl)ethyl)benzamide MS *m/z* 487 (M+H); MW 486

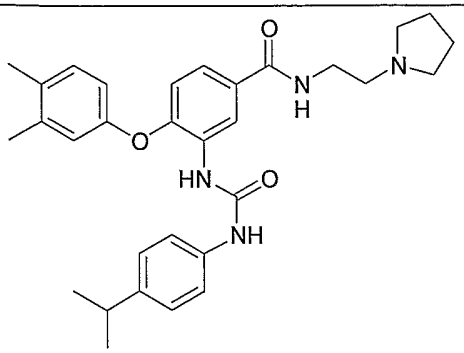
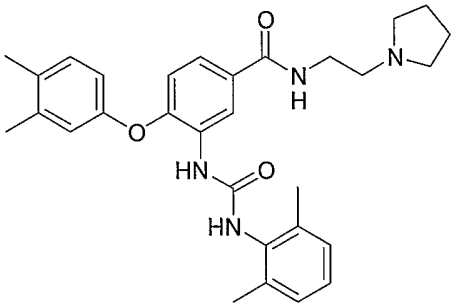
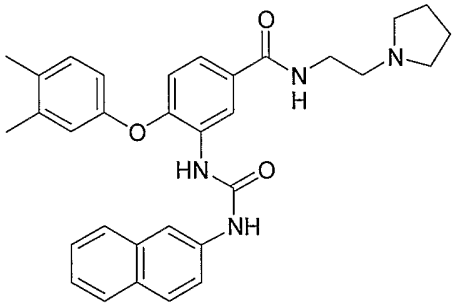
Compound No.	Structure
8	 4-(phenyloxy)-N-(2-(1-pyrrolidinyl)ethyl)benzamide MS *m/z* 311.4 (M+H); MW 310.4
10	 3-acetylamino-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 396 (M+H); MW 395
11	 4-(3,4-dimethylphenoxy)-3-propionylamino-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 400 (M+H); MW 409
12	 3-(3-cyclopentylpropionylamino)-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 478 (M+H); MW 477

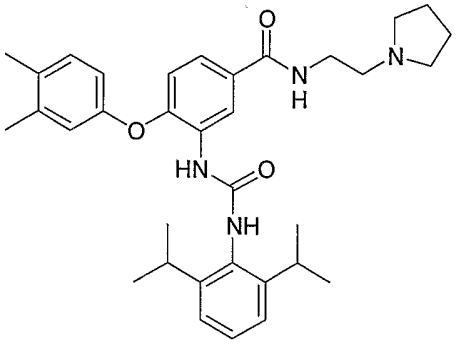
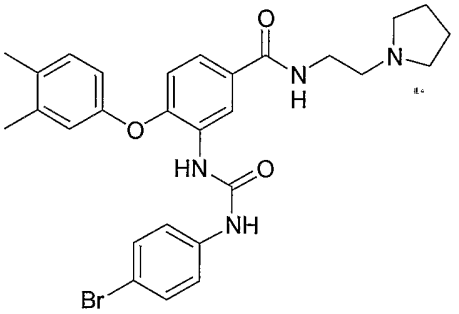
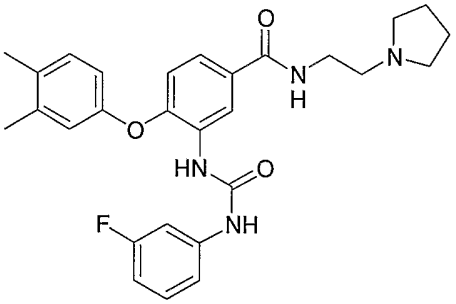
Compound No.	Structure
13	 4-(3,4-dimethylphenoxy)-3-phenylacetylamino-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 472 (M+H); MW 471
15	 4-(3,4-dimethylphenoxy)-3-(3-phenyl-acryloylamino)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 484 (M+H); MW 483
16	 4-(3,4-dimethylphenoxy)-3-[(2-phenyl-cyclopropanecarbonyl)amino]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 498 (M+H); MW 497

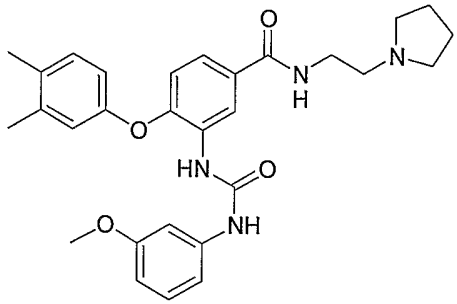
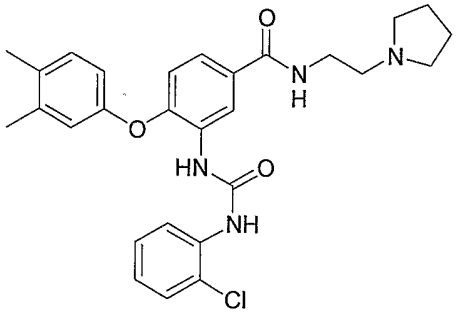
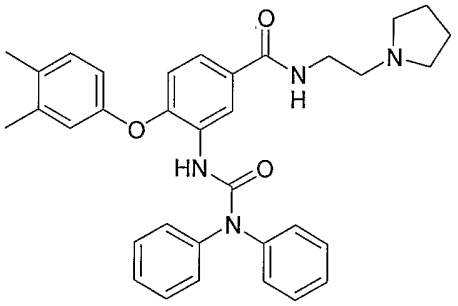
Compound No.	Structure
17	 naphthalene-2-carboxylic acid [2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-ethylcarbamoyl)phenyl]amide MS *m/z* 508 (M+H); MW 507
18	 4-(3,4-dimethylphenoxy)-3-(3-ethylureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 425 (M+H); MW 424
20	 N-(2-aminoethyl)-4-(3,4-dimethylphenoxy)-3-(3-phenylpropionylamino)benzamide MS *m/z* 432 (M+H); MW 431

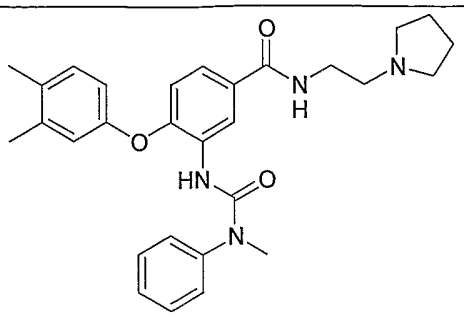
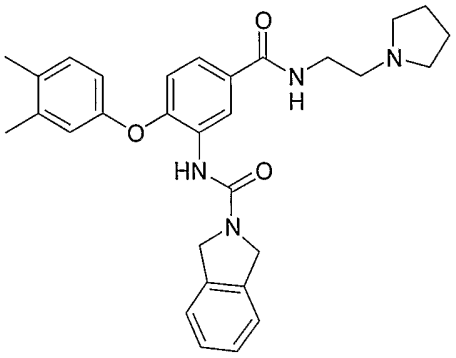
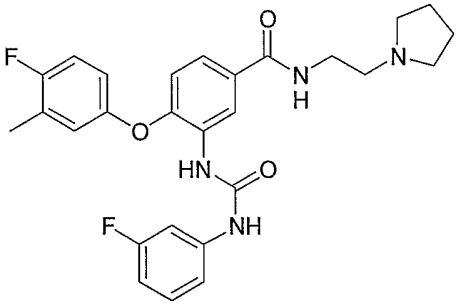
Compound No.	Structure
22	 4-methoxy-3-(3-phenylpropionylamino)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 508 (M+H); MW 507
27	 4-(naphthalen-2-yl-oxy)-3-(3-phenylpropionylamino)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 502 (M+H); MW 501
30	 4-(3,4-dimethylphenoxy)-3-[3-(2-methoxyphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 503 (M+H); MW 502

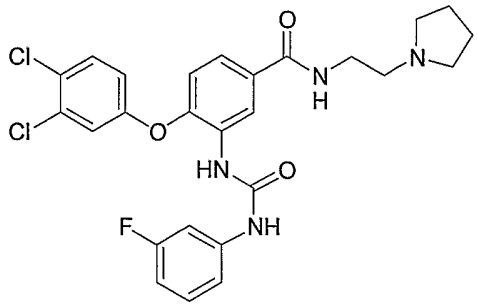
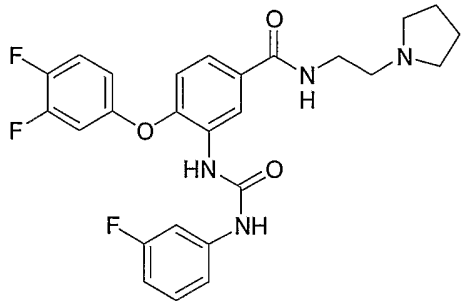
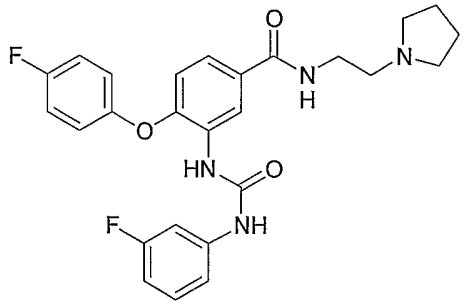
Compound No.	Structure
31	 3-[3-(2,4-dichlorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 542 (M+H); MW 541
32	 4-(3,4-dimethylphenoxy)-3-[3-(4-phenoxyphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 565 (M+H); MW 564
33	 3-(3-biphenyl-4-yl-ureido)-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 549 (M+H); MW 548

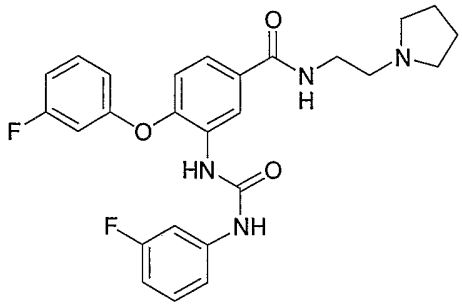
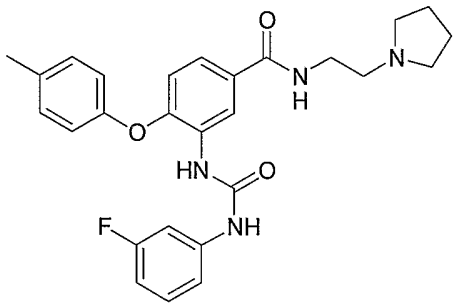
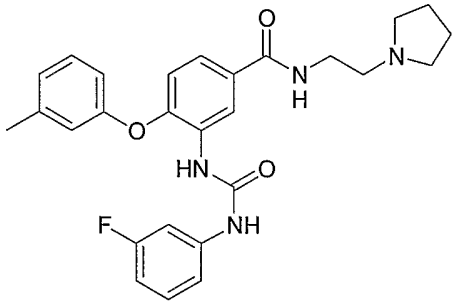
Compound No.	Structure
34	 4-(3,4-dimethylphenoxy)-3-[3-(4-isopropylphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 515 (M+H); MW 514
35	 4-(3,4-dimethylphenoxy)-3-[3-(2,6-dimethylphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 501 (M+H); MW 500
36	 4-(3,4-dimethylphenoxy)-3-(3-naphthalen-1-yl-ureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 523 (M+H); MW 522

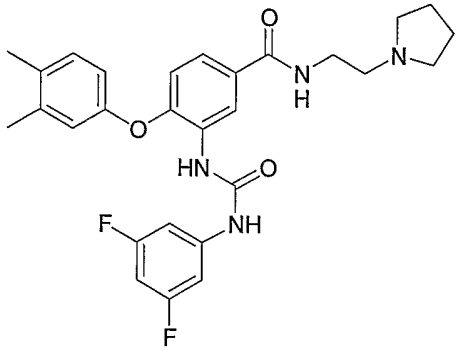
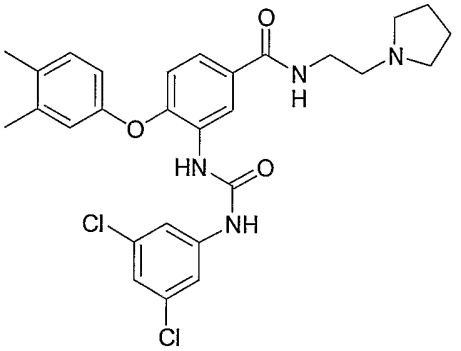
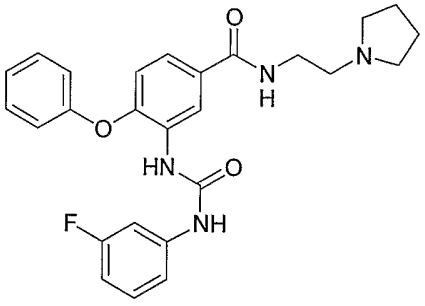
Compound No.	Structure
37	 3-[3-(2,6-diisopropylphenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 557 (M+H); MW 556
38	 3-[3-(4-bromophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 553 (M+H); MW 552
39	 4-(3,4-dimethylphenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 491 (M+H); MW 490

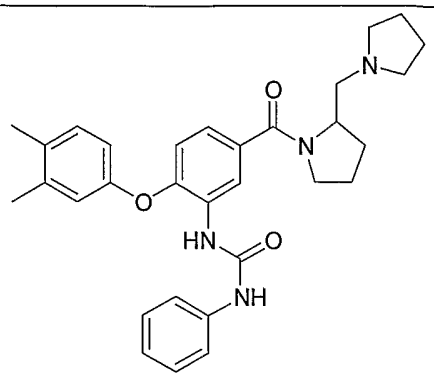
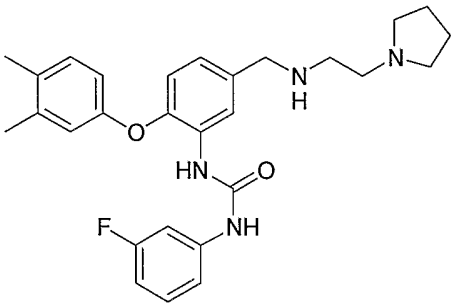
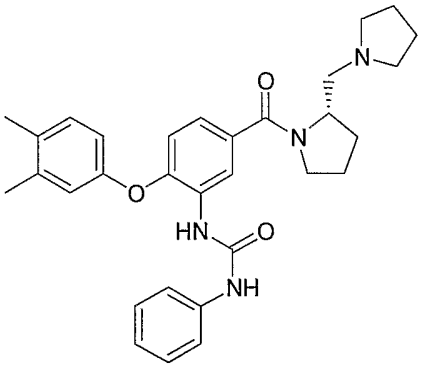
Compound No.	Structure
40	 4-(3,4-dimethylphenoxy)-3-[3-(3-methoxyphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 503 (M+H); MW 502
41	 3-[3-(2-chlorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 507 (M+H); MW 506
42	 4-(3,4-dimethylphenoxy)-3-(3,3-diphenylureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 549 (M+H); MW 548

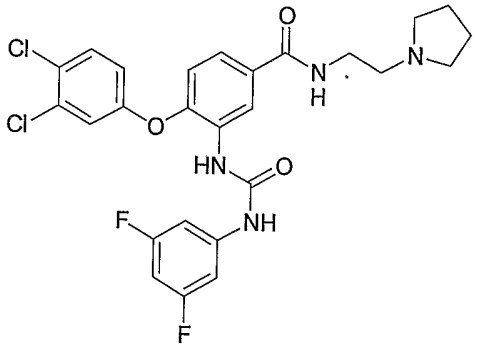
Compound No.	Structure
43	 4-(3,4-dimethylphenoxy)-3-(3-methyl-3-phenylureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 487 (M+H); MW 486
50	 1,3-dihydroisoindole-2-carboxylic acid [2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-ethylcarbamoyl)phenyl]amide MS *m/z* 499 (M+H); MW 498
51	 4-(4-fluoro-3-methylphenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 495 (M+H); MW 494

Compound No.	Structure
52	 4-(3,4-dichlorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 531 (M+H); MW 530
53	 4-(3,4-difluorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 499 (M+H); MW 498
54	 4-(4-fluorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 481 (M+H); MW 480

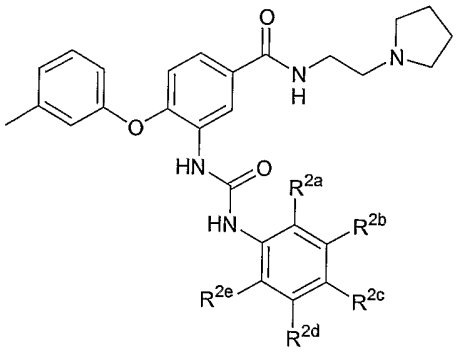
Compound No.	Structure
55	 4-(3-fluorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 481 (M+H); MW 480
56	 3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)-4-p-tolyloxybenzamide MS *m/z* 477 (M+H); MW 476
57	 3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)-4-m-tolyloxybenzamide MS *m/z* 477 (M+H); MW 476

Compound No.	Structure
58	 3-[3-(3,5-difluorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 509 (M+H); MW 508
59	 3-[3-(3,5-dichlorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 541 (M+H); MW 540
61	 3-[3-(3-fluorophenyl)ureido]-4-phenoxy-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 463 (M+H); MW 462

Compound No.	Structure
63	 1-[2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-methylpyrrolidine-1-carbonyl)phenyl]-3-phenylurea MS *m/z* 513 (M+H); MW 512
64	 1-{2-(3,4-dimethylphenoxy)-5-[(2-pyrrolidin-1-yl-ethylamino)-methyl]phenyl}-3-(3-fluorophenyl)urea MS *m/z* 477 (M+H); MW 476
65	 1-[2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-methylpyrrolidine-1-carbonyl)phenyl]-3-phenylurea MS *m/z* 513 (M+H); MW 512

Compound No.	Structure
66	 4-(3,4-dichlorophenoxy)-3-[3-(3,5-difluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide MS *m/z* 549 (M+H); MW 548

[0435] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



[0436] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

Table 2

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
200	H	CH_3	CH_3	H	H
201	H	CH_3	CH_3	CH_3	H
202	H	CH_3	CH_3	OCH_3	H
203	H	CH_3	CH_3	Cl	H
204	H	CH_3	CH_3	Br	H
205	H	CH_3	CH_3	F	H
206	H	CH_3	CH_3	H	CH_3
207	H	CH_3	CH_3	CH_3	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
208	H	CH_3	CH_3	H	OCH_3
209	H	CH_3	CH_3	CH_3	OCH_3
210	H	CH_3	CH_3	OCH_3	OCH_3
211	H	CH_3	CH_3	Cl	OCH_3
212	H	CH_3	CH_3	Br	OCH_3
213	H	CH_3	CH_3	F	OCH_3
214	H	CH_3	CH_3	H	Cl
215	H	CH_3	CH_3	CH_3	Cl
216	H	CH_3	CH_3	OCH_3	Cl
217	H	CH_3	CH_3	Cl	Cl
218	H	CH_3	CH_3	Br	Cl
219	H	CH_3	CH_3	F	Cl
220	H	CH_3	CH_3	H	Br
221	H	CH_3	CH_3	CH_3	Br
222	H	CH_3	CH_3	OCH_3	Br
223	H	CH_3	CH_3	Cl	Br
224	H	CH_3	CH_3	Br	Br
225	H	CH_3	CH_3	F	Br
226	H	CH_3	CH_3	H	F
227	H	CH_3	CH_3	CH_3	F
228	H	CH_3	CH_3	OCH_3	F
229	H	CH_3	CH_3	Cl	F
230	H	CH_3	CH_3	Br	F
231	H	CH_3	CH_3	F	F
232	H	CH_3	OCH_3	H	H
233	H	CH_3	OCH_3	CH_3	H
234	H	CH_3	OCH_3	OCH_3	H
235	H	CH_3	OCH_3	Cl	H
236	H	CH_3	OCH_3	Br	H
237	H	CH_3	OCH_3	F	H
238	H	CH_3	OCH_3	H	CH_3
239	H	CH_3	OCH_3	CH_3	CH_3
240	H	CH_3	OCH_3	OCH_3	CH_3
241	H	CH_3	OCH_3	Cl	CH_3
242	H	CH_3	OCH_3	Br	CH_3
243	H	CH_3	OCH_3	F	CH_3
244	H	CH_3	OCH_3	H	OCH_3
245	H	CH_3	OCH_3	OCH_3	OCH_3
246	H	CH_3	OCH_3	H	Cl
247	H	CH_3	OCH_3	CH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
248	H	CH_3	OCH_3	OCH_3	Cl
249	H	CH_3	OCH_3	Cl	Cl
250	H	CH_3	OCH_3	Br	Cl
251	H	CH_3	OCH_3	F	Cl
252	H	CH_3	OCH_3	H	Br
253	H	CH_3	OCH_3	CH_3	Br
254	H	CH_3	OCH_3	OCH_3	Br
255	H	CH_3	OCH_3	Cl	Br
256	H	CH_3	OCH_3	Br	Br
257	H	CH_3	OCH_3	F	Br
258	H	CH_3	OCH_3	H	F
259	H	CH_3	OCH_3	CH_3	F
260	H	CH_3	OCH_3	OCH_3	F
261	H	CH_3	OCH_3	Cl	F
262	H	CH_3	OCH_3	Br	F
263	H	CH_3	OCH_3	F	F
264	H	CH_3	Cl	H	H
265	H	CH_3	Cl	CH_3	H
266	H	CH_3	Cl	OCH_3	H
267	H	CH_3	Cl	Cl	H
268	H	CH_3	Cl	Br	H
269	H	CH_3	Cl	F	H
270	H	CH_3	Cl	H	CH_3
271	H	CH_3	Cl	CH_3	CH_3
272	H	CH_3	Cl	OCH_3	CH_3
273	H	CH_3	Cl	Cl	CH_3
274	H	CH_3	Cl	Br	CH_3
275	H	CH_3	Cl	F	CH_3
276	H	CH_3	Cl	H	OCH_3
277	H	CH_3	Cl	CH_3	OCH_3
278	H	CH_3	Cl	OCH_3	OCH_3
279	H	CH_3	Cl	Cl	OCH_3
280	H	CH_3	Cl	Br	OCH_3
281	H	CH_3	Cl	F	OCH_3
282	H	CH_3	Cl	H	Cl
283	H	CH_3	Cl	Cl	Cl
284	H	CH_3	Cl	H	Br
285	H	CH_3	Cl	CH_3	Br
286	H	CH_3	Cl	OCH_3	Br
287	H	CH_3	Cl	Cl	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
288	H	CH_3	Cl	Br	Br
289	H	CH_3	Cl	F	Br
290	H	CH_3	Cl	H	F
291	H	CH_3	Cl	CH_3	F
292	H	CH_3	Cl	OCH_3	F
293	H	CH_3	Cl	Cl	F
294	H	CH_3	Cl	F	F
295	H	CH_3	Br	H	H
296	H	CH_3	Br	CH_3	H
297	H	CH_3	Br	OCH_3	H
298	H	CH_3	Br	Cl	H
299	H	CH_3	Br	Br	H
300	H	CH_3	Br	F	H
301	H	CH_3	Br	H	CH_3
302	H	CH_3	Br	CH_3	CH_3
303	H	CH_3	Br	OCH_3	CH_3
304	H	CH_3	Br	Cl	CH_3
305	H	CH_3	Br	Br	CH_3
306	H	CH_3	Br	F	CH_3
307	H	CH_3	Br	H	OCH_3
308	H	CH_3	Br	CH_3	OCH_3
309	H	CH_3	Br	OCH_3	OCH_3
310	H	CH_3	Br	Cl	OCH_3
311	H	CH_3	Br	Br	OCH_3
312	H	CH_3	Br	F	OCH_3
313	H	CH_3	Br	H	Cl
314	H	CH_3	Br	CH_3	Cl
315	H	CH_3	Br	OCH_3	Cl
316	H	CH_3	Br	Cl	Cl
317	H	CH_3	Br	Br	Cl
318	H	CH_3	Br	F	Cl
319	H	CH_3	Br	H	Br
320	H	CH_3	Br	Br	Br
321	H	CH_3	Br	H	F
322	H	CH_3	Br	CH_3	F
323	H	CH_3	Br	OCH_3	F
324	H	CH_3	Br	Cl	F
325	H	CH_3	Br	Br	F
326	H	CH_3	Br	F	F
327	H	CH_3	F	H	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
328	H	CH_3	F	CH_3	H
329	H	CH_3	F	OCH_3	H
330	H	CH_3	F	Cl	H
331	H	CH_3	F	Br	H
332	H	CH_3	F	F	H
333	H	CH_3	F	H	CH_3
334	H	CH_3	F	CH_3	CH_3
335	H	CH_3	F	OCH_3	CH_3
336	H	CH_3	F	Cl	CH_3
337	H	CH_3	F	Br	CH_3
338	H	CH_3	F	F	CH_3
339	H	CH_3	F	H	OCH_3
340	H	CH_3	F	CH_3	OCH_3
341	H	CH_3	F	OCH_3	OCH_3
342	H	CH_3	F	Cl	OCH_3
343	H	CH_3	F	Br	OCH_3
344	H	CH_3	F	F	OCH_3
345	H	CH_3	F	H	Cl
346	H	CH_3	F	CH_3	Cl
347	H	CH_3	F	OCH_3	Cl
348	H	CH_3	F	Cl	Cl
349	H	CH_3	F	Br	Cl
350	H	CH_3	F	F	Cl
351	H	CH_3	F	H	Br
352	H	CH_3	F	CH_3	Br
353	H	CH_3	F	OCH_3	Br
354	H	CH_3	F	Cl	Br
355	H	CH_3	F	Br	Br
356	H	CH_3	F	F	Br
357	H	CH_3	F	H	F
358	H	CH_3	F	F	F
359	H	OCH_3	CH_3	H	H
360	H	OCH_3	CH_3	H	CH_3
361	H	OCH_3	CH_3	H	OCH_3
362	H	OCH_3	CH_3	H	Cl
363	H	OCH_3	CH_3	H	Br
364	H	OCH_3	CH_3	H	F
365	H	OCH_3	CH_3	CH_3	H
366	H	OCH_3	CH_3	CH_3	CH_3
367	H	OCH_3	CH_3	CH_3	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
368	H	OCH_3	CH_3	CH_3	Cl
369	H	OCH_3	CH_3	CH_3	Br
370	H	OCH_3	CH_3	CH_3	F
371	H	OCH_3	CH_3	OCH_3	H
372	H	OCH_3	CH_3	OCH_3	OCH_3
373	H	OCH_3	CH_3	OCH_3	Cl
374	H	OCH_3	CH_3	OCH_3	Br
375	H	OCH_3	CH_3	OCH_3	F
376	H	OCH_3	CH_3	Cl	H
377	H	OCH_3	CH_3	Cl	OCH_3
378	H	OCH_3	CH_3	Cl	Cl
379	H	OCH_3	CH_3	Cl	Br
380	H	OCH_3	CH_3	Cl	F
381	H	OCH_3	CH_3	Br	H
382	H	OCH_3	CH_3	Br	OCH_3
383	H	OCH_3	CH_3	Br	Cl
384	H	OCH_3	CH_3	Br	Br
385	H	OCH_3	CH_3	Br	F
386	H	OCH_3	CH_3	F	H
387	H	OCH_3	CH_3	F	OCH_3
388	H	OCH_3	CH_3	F	Cl
389	H	OCH_3	CH_3	F	Br
390	H	OCH_3	CH_3	F	F
391	H	OCH_3	OCH_3	H	H
392	H	OCH_3	OCH_3	H	CH_3
393	H	OCH_3	OCH_3	H	OCH_3
394	H	OCH_3	OCH_3	H	Cl
395	H	OCH_3	OCH_3	H	Br
396	H	OCH_3	OCH_3	H	F
397	H	OCH_3	OCH_3	CH_3	H
398	H	OCH_3	OCH_3	CH_3	CH_3
399	H	OCH_3	OCH_3	CH_3	Cl
400	H	OCH_3	OCH_3	CH_3	Br
401	H	OCH_3	OCH_3	CH_3	F
402	H	OCH_3	OCH_3	OCH_3	H
403	H	OCH_3	OCH_3	OCH_3	CH_3
404	H	OCH_3	OCH_3	OCH_3	OCH_3
405	H	OCH_3	OCH_3	OCH_3	Cl
406	H	OCH_3	OCH_3	OCH_3	Br
407	H	OCH_3	OCH_3	OCH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
408	H	OCH_3	OCH_3	Cl	H
409	H	OCH_3	OCH_3	Cl	CH_3
410	H	OCH_3	OCH_3	Cl	Cl
411	H	OCH_3	OCH_3	Cl	Br
412	H	OCH_3	OCH_3	Cl	F
413	H	OCH_3	OCH_3	Br	H
414	H	OCH_3	OCH_3	Br	CH_3
415	H	OCH_3	OCH_3	Br	Cl
416	H	OCH_3	OCH_3	Br	Br
417	H	OCH_3	OCH_3	Br	F
418	H	OCH_3	OCH_3	F	H
419	H	OCH_3	OCH_3	F	CH_3
420	H	OCH_3	OCH_3	F	Cl
421	H	OCH_3	OCH_3	F	Br
422	H	OCH_3	OCH_3	F	F
423	H	OCH_3	Cl	H	H
424	H	OCH_3	Cl	H	CH_3
425	H	OCH_3	Cl	H	OCH_3
426	H	OCH_3	Cl	H	Cl
427	H	OCH_3	Cl	H	Br
428	H	OCH_3	Cl	H	F
429	H	OCH_3	Cl	CH_3	H
430	H	OCH_3	Cl	CH_3	CH_3
431	H	OCH_3	Cl	CH_3	OCH_3
432	H	OCH_3	Cl	CH_3	Br
433	H	OCH_3	Cl	CH_3	F
434	H	OCH_3	Cl	OCH_3	H
435	H	OCH_3	Cl	OCH_3	CH_3
436	H	OCH_3	Cl	OCH_3	OCH_3
437	H	OCH_3	Cl	OCH_3	Br
438	H	OCH_3	Cl	OCH_3	F
439	H	OCH_3	Cl	Cl	H
440	H	OCH_3	Cl	Cl	CH_3
441	H	OCH_3	Cl	Cl	OCH_3
442	H	OCH_3	Cl	Cl	Cl
443	H	OCH_3	Cl	Cl	Br
444	H	OCH_3	Cl	Cl	F
445	H	OCH_3	Cl	Br	H
446	H	OCH_3	Cl	Br	CH_3
447	H	OCH_3	Cl	Br	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
448	H	OCH_3	Cl	Br	Br
449	H	OCH_3	Cl	F	H
450	H	OCH_3	Cl	F	CH_3
451	H	OCH_3	Cl	F	OCH_3
452	H	OCH_3	Cl	F	Br
453	H	OCH_3	Cl	F	F
454	H	OCH_3	Br	H	H
455	H	OCH_3	Br	H	CH_3
456	H	OCH_3	Br	H	OCH_3
457	H	OCH_3	Br	H	Cl
458	H	OCH_3	Br	H	Br
459	H	OCH_3	Br	H	F
460	H	OCH_3	Br	CH_3	H
461	H	OCH_3	Br	CH_3	CH_3
462	H	OCH_3	Br	CH_3	OCH_3
463	H	OCH_3	Br	CH_3	Cl
464	H	OCH_3	Br	CH_3	F
465	H	OCH_3	Br	OCH_3	H
466	H	OCH_3	Br	OCH_3	CH_3
467	H	OCH_3	Br	OCH_3	OCH_3
468	H	OCH_3	Br	OCH_3	Cl
469	H	OCH_3	Br	OCH_3	F
470	H	OCH_3	Br	Cl	H
471	H	OCH_3	Br	Cl	CH_3
472	H	OCH_3	Br	Cl	OCH_3
473	H	OCH_3	Br	Cl	Cl
474	H	OCH_3	Br	Cl	F
475	H	OCH_3	Br	Br	H
476	H	OCH_3	Br	Br	CH_3
477	H	OCH_3	Br	Br	OCH_3
478	H	OCH_3	Br	Br	Cl
479	H	OCH_3	Br	Br	Br
480	H	OCH_3	Br	Br	F
481	H	OCH_3	Br	F	H
482	H	OCH_3	Br	F	CH_3
483	H	OCH_3	Br	F	OCH_3
484	H	OCH_3	Br	F	Cl
485	H	OCH_3	Br	F	F
486	H	OCH_3	F	H	H
487	H	OCH_3	F	H	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
488	H	OCH_3	F	H	OCH_3
489	H	OCH_3	F	H	Cl
490	H	OCH_3	F	H	Br
491	H	OCH_3	F	H	F
492	H	OCH_3	F	CH_3	H
493	H	OCH_3	F	CH_3	CH_3
494	H	OCH_3	F	CH_3	OCH_3
495	H	OCH_3	F	CH_3	Cl
496	H	OCH_3	F	CH_3	Br
497	H	OCH_3	F	OCH_3	H
498	H	OCH_3	F	OCH_3	CH_3
499	H	OCH_3	F	OCH_3	OCH_3
500	H	OCH_3	F	OCH_3	Cl
501	H	OCH_3	F	OCH_3	Br
502	H	OCH_3	F	Cl	H
503	H	OCH_3	F	Cl	CH_3
504	H	OCH_3	F	Cl	OCH_3
505	H	OCH_3	F	Cl	Cl
506	H	OCH_3	F	Cl	Br
507	H	OCH_3	F	Br	H
508	H	OCH_3	F	Br	CH_3
509	H	OCH_3	F	Br	OCH_3
510	H	OCH_3	F	Br	Cl
511	H	OCH_3	F	Br	Br
512	H	OCH_3	F	F	H
513	H	OCH_3	F	F	CH_3
514	H	OCH_3	F	F	OCH_3
515	H	OCH_3	F	F	Cl
516	H	OCH_3	F	F	Br
517	H	OCH_3	F	F	F
518	H	Cl	CH_3	H	H
519	H	Cl	CH_3	H	CH_3
520	H	Cl	CH_3	H	OCH_3
521	H	Cl	CH_3	H	Cl
522	H	Cl	CH_3	H	Br
523	H	Cl	CH_3	H	F
524	H	Cl	CH_3	CH_3	H
525	H	Cl	CH_3	CH_3	CH_3
526	H	Cl	CH_3	CH_3	OCH_3
527	H	Cl	CH_3	CH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
528	H	Cl	CH_3	CH_3	Br
529	H	Cl	CH_3	CH_3	F
530	H	Cl	CH_3	OCH_3	H
531	H	Cl	CH_3	OCH_3	OCH_3
532	H	Cl	CH_3	OCH_3	Cl
533	H	Cl	CH_3	OCH_3	Br
534	H	Cl	CH_3	OCH_3	F
535	H	Cl	CH_3	Cl	H
536	H	Cl	CH_3	Cl	OCH_3
537	H	Cl	CH_3	Cl	Cl
538	H	Cl	CH_3	Cl	Br
539	H	Cl	CH_3	Cl	F
540	H	Cl	CH_3	Br	H
541	H	Cl	CH_3	Br	OCH_3
542	H	Cl	CH_3	Br	Cl
543	H	Cl	CH_3	Br	Br
544	H	Cl	CH_3	Br	F
545	H	Cl	CH_3	F	H
546	H	Cl	CH_3	F	OCH_3
547	H	Cl	CH_3	F	Cl
548	H	Cl	CH_3	F	Br
549	H	Cl	CH_3	F	F
550	H	Cl	OCH_3	H	H
551	H	Cl	OCH_3	H	CH_3
552	H	Cl	OCH_3	H	OCH_3
553	H	Cl	OCH_3	H	Cl
554	H	Cl	OCH_3	H	Br
555	H	Cl	OCH_3	H	F
556	H	Cl	OCH_3	CH_3	H
557	H	Cl	OCH_3	CH_3	CH_3
558	H	Cl	OCH_3	CH_3	Cl
559	H	Cl	OCH_3	CH_3	Br
560	H	Cl	OCH_3	CH_3	F
561	H	Cl	OCH_3	OCH_3	H
562	H	Cl	OCH_3	OCH_3	CH_3
563	H	Cl	OCH_3	OCH_3	OCH_3
564	H	Cl	OCH_3	OCH_3	Cl
565	H	Cl	OCH_3	OCH_3	Br
566	H	Cl	OCH_3	OCH_3	F
567	H	Cl	OCH_3	Cl	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
568	H	Cl	OCH_3	Cl	CH_3
569	H	Cl	OCH_3	Cl	Cl
570	H	Cl	OCH_3	Cl	Br
571	H	Cl	OCH_3	Cl	F
572	H	Cl	OCH_3	Br	H
573	H	Cl	OCH_3	Br	CH_3
574	H	Cl	OCH_3	Br	Cl
575	H	Cl	OCH_3	Br	Br
576	H	Cl	OCH_3	Br	F
577	H	Cl	OCH_3	F	H
578	H	Cl	OCH_3	F	CH_3
579	H	Cl	OCH_3	F	Cl
580	H	Cl	OCH_3	F	Br
581	H	Cl	OCH_3	F	F
582	H	Cl	Cl	H	H
583	H	Cl	Cl	H	CH_3
584	H	Cl	Cl	H	OCH_3
585	H	Cl	Cl	H	Cl
586	H	Cl	Cl	H	Br
587	H	Cl	Cl	H	F
588	H	Cl	Cl	CH_3	H
589	H	Cl	Cl	CH_3	CH_3
590	H	Cl	Cl	CH_3	OCH_3
591	H	Cl	Cl	CH_3	Br
592	H	Cl	Cl	CH_3	F
593	H	Cl	Cl	OCH_3	H
594	H	Cl	Cl	OCH_3	CH_3
595	H	Cl	Cl	OCH_3	OCH_3
596	H	Cl	Cl	OCH_3	Br
597	H	Cl	Cl	OCH_3	F
598	H	Cl	Cl	Cl	H
599	H	Cl	Cl	Cl	CH_3
600	H	Cl	Cl	Cl	OCH_3
601	H	Cl	Cl	Cl	Cl
602	H	Cl	Cl	Cl	Br
603	H	Cl	Cl	Cl	F
604	H	Cl	Cl	Br	H
605	H	Cl	Cl	Br	CH_3
606	H	Cl	Cl	Br	OCH_3
607	H	Cl	Cl	Br	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
608	H	Cl	Cl	F	H
609	H	Cl	Cl	F	CH_3
610	H	Cl	Cl	F	OCH_3
611	H	Cl	Cl	F	Br
612	H	Cl	Cl	F	F
613	H	Cl	Br	H	H
614	H	Cl	Br	H	CH_3
615	H	Cl	Br	H	OCH_3
616	H	Cl	Br	H	Cl
617	H	Cl	Br	H	Br
618	H	Cl	Br	H	F
619	H	Cl	Br	CH_3	H
620	H	Cl	Br	CH_3	CH_3
621	H	Cl	Br	CH_3	OCH_3
622	H	Cl	Br	CH_3	Cl
623	H	Cl	Br	CH_3	F
624	H	Cl	Br	OCH_3	H
625	H	Cl	Br	OCH_3	CH_3
626	H	Cl	Br	OCH_3	OCH_3
627	H	Cl	Br	OCH_3	Cl
628	H	Cl	Br	OCH_3	F
629	H	Cl	Br	Cl	H
630	H	Cl	Br	Cl	CH_3
631	H	Cl	Br	Cl	OCH_3
632	H	Cl	Br	Cl	Cl
633	H	Cl	Br	Cl	F
634	H	Cl	Br	Br	H
635	H	Cl	Br	Br	CH_3
636	H	Cl	Br	Br	OCH_3
637	H	Cl	Br	Br	Cl
638	H	Cl	Br	Br	Br
639	H	Cl	Br	Br	F
640	H	Cl	Br	F	H
641	H	Cl	Br	F	CH_3
642	H	Cl	Br	F	OCH_3
643	H	Cl	Br	F	Cl
644	H	Cl	Br	F	F
645	H	Cl	F	H	H
646	H	Cl	F	H	CH_3
647	H	Cl	F	H	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
648	H	Cl	F	H	Cl
649	H	Cl	F	H	Br
650	H	Cl	F	H	F
651	H	Cl	F	CH_3	H
652	H	Cl	F	CH_3	CH_3
653	H	Cl	F	CH_3	OCH_3
654	H	Cl	F	CH_3	Cl
655	H	Cl	F	CH_3	Br
656	H	Cl	F	OCH_3	H
657	H	Cl	F	OCH_3	CH_3
658	H	Cl	F	OCH_3	OCH_3
659	H	Cl	F	OCH_3	Cl
660	H	Cl	F	OCH_3	Br
661	H	Cl	F	Cl	H
662	H	Cl	F	Cl	CH_3
663	H	Cl	F	Cl	OCH_3
664	H	Cl	F	Cl	Cl
665	H	Cl	F	Cl	Br
666	H	Cl	F	Br	H
667	H	Cl	F	Br	CH_3
668	H	Cl	F	Br	OCH_3
669	H	Cl	F	Br	Cl
670	H	Cl	F	Br	Br
671	H	Cl	F	F	H
672	H	Cl	F	F	CH_3
673	H	Cl	F	F	OCH_3
674	H	Cl	F	F	Cl
675	H	Cl	F	F	Br
676	H	Cl	F	F	F
677	H	Br	CH_3	H	H
678	H	Br	CH_3	H	CH_3
679	H	Br	CH_3	H	OCH_3
680	H	Br	CH_3	H	Cl
681	H	Br	CH_3	H	Br
682	H	Br	CH_3	H	F
683	H	Br	CH_3	CH_3	H
684	H	Br	CH_3	CH_3	CH_3
685	H	Br	CH_3	CH_3	OCH_3
686	H	Br	CH_3	CH_3	Cl
687	H	Br	CH_3	CH_3	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
688	H	Br	CH_3	CH_3	F
689	H	Br	CH_3	OCH_3	H
690	H	Br	CH_3	OCH_3	OCH_3
691	H	Br	CH_3	OCH_3	Cl
692	H	Br	CH_3	OCH_3	Br
693	H	Br	CH_3	OCH_3	F
694	H	Br	CH_3	Cl	H
695	H	Br	CH_3	Cl	OCH_3
696	H	Br	CH_3	Cl	Cl
697	H	Br	CH_3	Cl	Br
698	H	Br	CH_3	Cl	F
699	H	Br	CH_3	Br	H
700	H	Br	CH_3	Br	OCH_3
701	H	Br	CH_3	Br	Cl
702	H	Br	CH_3	Br	Br
703	H	Br	CH_3	Br	F
704	H	Br	CH_3	F	H
705	H	Br	CH_3	F	OCH_3
706	H	Br	CH_3	F	Cl
707	H	Br	CH_3	F	Br
708	H	Br	CH_3	F	F
709	H	Br	OCH_3	H	H
710	H	Br	OCH_3	H	CH_3
711	H	Br	OCH_3	H	OCH_3
712	H	Br	OCH_3	H	Cl
713	H	Br	OCH_3	H	Br
714	H	Br	OCH_3	H	F
715	H	Br	OCH_3	CH_3	H
716	H	Br	OCH_3	CH_3	CH_3
717	H	Br	OCH_3	CH_3	Cl
718	H	Br	OCH_3	CH_3	Br
719	H	Br	OCH_3	CH_3	F
720	H	Br	OCH_3	OCH_3	H
721	H	Br	OCH_3	OCH_3	CH_3
722	H	Br	OCH_3	OCH_3	OCH_3
723	H	Br	OCH_3	OCH_3	Cl
724	H	Br	OCH_3	OCH_3	Br
725	H	Br	OCH_3	OCH_3	F
726	H	Br	OCH_3	Cl	H
727	H	Br	OCH_3	Cl	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
728	H	Br	OCH_3	Cl	Cl
729	H	Br	OCH_3	Cl	Br
730	H	Br	OCH_3	Cl	F
731	H	Br	OCH_3	Br	H
732	H	Br	OCH_3	Br	CH_3
733	H	Br	OCH_3	Br	Cl
734	H	Br	OCH_3	Br	Br
735	H	Br	OCH_3	Br	F
736	H	Br	OCH_3	F	H
737	H	Br	OCH_3	F	CH_3
738	H	Br	OCH_3	F	Cl
739	H	Br	OCH_3	F	Br
740	H	Br	OCH_3	F	F
741	H	Br	Cl	H	H
742	H	Br	Cl	H	CH_3
743	H	Br	Cl	H	OCH_3
744	H	Br	Cl	H	Cl
745	H	Br	Cl	H	Br
746	H	Br	Cl	H	F
747	H	Br	Cl	CH_3	H
748	H	Br	Cl	CH_3	CH_3
749	H	Br	Cl	CH_3	OCH_3
750	H	Br	Cl	CH_3	Br
751	H	Br	Cl	CH_3	F
752	H	Br	Cl	OCH_3	H
753	H	Br	Cl	OCH_3	CH_3
754	H	Br	Cl	OCH_3	OCH_3
755	H	Br	Cl	OCH_3	Br
756	H	Br	Cl	OCH_3	F
757	H	Br	Cl	Cl	H
758	H	Br	Cl	Cl	CH_3
759	H	Br	Cl	Cl	OCH_3
760	H	Br	Cl	Cl	Cl
761	H	Br	Cl	Cl	Br
762	H	Br	Cl	Cl	F
763	H	Br	Cl	Br	H
764	H	Br	Cl	Br	CH_3
765	H	Br	Cl	Br	OCH_3
766	H	Br	Cl	Br	Br
767	H	Br	Cl	F	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
768	H	Br	Cl	F	CH_3
769	H	Br	Cl	F	OCH_3
770	H	Br	Cl	F	Br
771	H	Br	Cl	F	F
772	H	Br	Br	H	H
773	H	Br	Br	H	CH_3
774	H	Br	Br	H	OCH_3
775	H	Br	Br	H	Cl
776	H	Br	Br	H	Br
777	H	Br	Br	H	F
778	H	Br	Br	CH_3	H
779	H	Br	Br	CH_3	CH_3
780	H	Br	Br	CH_3	OCH_3
781	H	Br	Br	CH_3	Cl
782	H	Br	Br	CH_3	F
783	H	Br	Br	OCH_3	H
784	H	Br	Br	OCH_3	CH_3
785	H	Br	Br	OCH_3	OCH_3
786	H	Br	Br	OCH_3	Cl
787	H	Br	Br	OCH_3	F
788	H	Br	Br	Cl	H
789	H	Br	Br	Cl	CH_3
790	H	Br	Br	Cl	OCH_3
791	H	Br	Br	Cl	Cl
792	H	Br	Br	Cl	F
793	H	Br	Br	Br	H
794	H	Br	Br	Br	CH_3
795	H	Br	Br	Br	OCH_3
796	H	Br	Br	Br	Cl
797	H	Br	Br	Br	Br
798	H	Br	Br	Br	F
799	H	Br	Br	F	H
800	H	Br	Br	F	CH_3
801	H	Br	Br	F	OCH_3
802	H	Br	Br	F	Cl
803	H	Br	Br	F	F
804	H	Br	F	H	H
805	H	Br	F	H	CH_3
806	H	Br	F	H	OCH_3
807	H	Br	F	H	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
808	H	Br	F	H	Br
809	H	Br	F	H	F
810	H	Br	F	CH_3	H
811	H	Br	F	CH_3	CH_3
812	H	Br	F	CH_3	OCH_3
813	H	Br	F	CH_3	Cl
814	H	Br	F	CH_3	Br
815	H	Br	F	OCH_3	H
816	H	Br	F	OCH_3	CH_3
817	H	Br	F	OCH_3	OCH_3
818	H	Br	F	OCH_3	Cl
819	H	Br	F	OCH_3	Br
820	H	Br	F	Cl	H
821	H	Br	F	Cl	CH_3
822	H	Br	F	Cl	OCH_3
823	H	Br	F	Cl	Cl
824	H	Br	F	Cl	Br
825	H	Br	F	Br	H
826	H	Br	F	Br	CH_3
827	H	Br	F	Br	OCH_3
828	H	Br	F	Br	Cl
829	H	Br	F	Br	Br
830	H	Br	F	F	H
831	H	Br	F	F	CH_3
832	H	Br	F	F	OCH_3
833	H	Br	F	F	Cl
834	H	Br	F	F	Br
835	H	Br	F	F	F
836	H	F	CH_3	H	H
837	H	F	CH_3	H	CH_3
838	H	F	CH_3	H	OCH_3
839	H	F	CH_3	H	Cl
840	H	F	CH_3	H	Br
841	H	F	CH_3	H	F
842	H	F	CH_3	CH_3	H
843	H	F	CH_3	CH_3	CH_3
844	H	F	CH_3	CH_3	OCH_3
845	H	F	CH_3	CH_3	Cl
846	H	F	CH_3	CH_3	Br
847	H	F	CH_3	CH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
848	H	F	CH_3	OCH_3	H
849	H	F	CH_3	OCH_3	OCH_3
850	H	F	CH_3	OCH_3	Cl
851	H	F	CH_3	OCH_3	Br
852	H	F	CH_3	OCH_3	F
853	H	F	CH_3	Cl	H
854	H	F	CH_3	Cl	OCH_3
855	H	F	CH_3	Cl	Cl
856	H	F	CH_3	Cl	Br
857	H	F	CH_3	Cl	F
858	H	F	CH_3	Br	H
859	H	F	CH_3	Br	OCH_3
860	H	F	CH_3	Br	Cl
861	H	F	CH_3	Br	Br
862	H	F	CH_3	Br	F
863	H	F	CH_3	F	H
864	H	F	CH_3	F	OCH_3
865	H	F	CH_3	F	Cl
866	H	F	CH_3	F	Br
867	H	F	CH_3	F	F
868	H	F	OCH_3	H	H
869	H	F	OCH_3	H	CH_3
870	H	F	OCH_3	H	OCH_3
871	H	F	OCH_3	H	Cl
872	H	F	OCH_3	H	Br
873	H	F	OCH_3	H	F
874	H	F	OCH_3	CH_3	H
875	H	F	OCH_3	CH_3	CH_3
876	H	F	OCH_3	CH_3	Cl
877	H	F	OCH_3	CH_3	Br
878	H	F	OCH_3	CH_3	F
879	H	F	OCH_3	OCH_3	H
880	H	F	OCH_3	OCH_3	CH_3
881	H	F	OCH_3	OCH_3	OCH_3
882	H	F	OCH_3	OCH_3	Cl
883	H	F	OCH_3	OCH_3	Br
884	H	F	OCH_3	OCH_3	F
885	H	F	OCH_3	Cl	H
886	H	F	OCH_3	Cl	CH_3
887	H	F	OCH_3	Cl	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
888	H	F	OCH_3	Cl	Br
889	H	F	OCH_3	Cl	F
890	H	F	OCH_3	Br	H
891	H	F	OCH_3	Br	CH_3
892	H	F	OCH_3	Br	Cl
893	H	F	OCH_3	Br	Br
894	H	F	OCH_3	Br	F
895	H	F	OCH_3	F	H
896	H	F	OCH_3	F	CH_3
897	H	F	OCH_3	F	Cl
898	H	F	OCH_3	F	Br
899	H	F	OCH_3	F	F
900	H	F	Cl	H	H
901	H	F	Cl	H	CH_3
902	H	F	Cl	H	OCH_3
903	H	F	Cl	H	Cl
904	H	F	Cl	H	Br
905	H	F	Cl	H	F
906	H	F	Cl	CH_3	H
907	H	F	Cl	CH_3	CH_3
908	H	F	Cl	CH_3	OCH_3
909	H	F	Cl	CH_3	Br
910	H	F	Cl	CH_3	F
911	H	F	Cl	OCH_3	H
912	H	F	Cl	OCH_3	CH_3
913	H	F	Cl	OCH_3	OCH_3
914	H	F	Cl	OCH_3	Br
915	H	F	Cl	OCH_3	F
916	H	F	Cl	Cl	H
917	H	F	Cl	Cl	CH_3
918	H	F	Cl	Cl	OCH_3
919	H	F	Cl	Cl	Cl
920	H	F	Cl	Cl	Br
921	H	F	Cl	Cl	F
922	H	F	Cl	Br	H
923	H	F	Cl	Br	CH_3
924	H	F	Cl	Br	OCH_3
925	H	F	Cl	Br	Br
926	H	F	Cl	F	H
927	H	F	Cl	F	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
928	H	F	Cl	F	OCH_3
929	H	F	Cl	F	Br
930	H	F	Cl	F	F
931	H	F	Br	H	H
932	H	F	Br	H	CH_3
933	H	F	Br	H	OCH_3
934	H	F	Br	H	Cl
935	H	F	Br	H	Br
936	H	F	Br	H	F
937	H	F	Br	CH_3	H
938	H	F	Br	CH_3	CH_3
939	H	F	Br	CH_3	OCH_3
940	H	F	Br	CH_3	Cl
941	H	F	Br	CH_3	F
942	H	F	Br	OCH_3	H
943	H	F	Br	OCH_3	CH_3
944	H	F	Br	OCH_3	OCH_3
945	H	F	Br	OCH_3	Cl
946	H	F	Br	OCH_3	F
947	H	F	Br	Cl	H
948	H	F	Br	Cl	CH_3
949	H	F	Br	Cl	OCH_3
950	H	F	Br	Cl	Cl
951	H	F	Br	Cl	F
952	H	F	Br	Br	H
953	H	F	Br	Br	CH_3
954	H	F	Br	Br	OCH_3
955	H	F	Br	Br	Cl
956	H	F	Br	Br	Br
957	H	F	Br	Br	F
958	H	F	Br	F	H
959	H	F	Br	F	CH_3
960	H	F	Br	F	OCH_3
961	H	F	Br	F	Cl
962	H	F	Br	F	F
963	H	F	F	H	H
964	H	F	F	H	CH_3
965	H	F	F	H	OCH_3
966	H	F	F	H	Cl
967	H	F	F	H	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
968	H	F	F	H	F
969	H	F	F	CH_3	H
970	H	F	F	CH_3	CH_3
971	H	F	F	CH_3	OCH_3
972	H	F	F	CH_3	Cl
973	H	F	F	CH_3	Br
974	H	F	F	OCH_3	H
975	H	F	F	OCH_3	CH_3
976	H	F	F	OCH_3	OCH_3
977	H	F	F	OCH_3	Cl
978	H	F	F	OCH_3	Br
979	H	F	F	Cl	H
980	H	F	F	Cl	CH_3
981	H	F	F	Cl	OCH_3
982	H	F	F	Cl	Cl
983	H	F	F	Cl	Br
984	H	F	F	Br	H
985	H	F	F	Br	CH_3
986	H	F	F	Br	OCH_3
987	H	F	F	Br	Cl
988	H	F	F	Br	Br
989	H	F	F	F	H
990	H	F	F	F	CH_3
991	H	F	F	F	OCH_3
992	H	F	F	F	Cl
993	H	F	F	F	Br
994	H	F	F	F	F
995	CH_3	CH_3	CH_3	H	H
996	CH_3	CH_3	CH_3	CH_3	H
997	CH_3	CH_3	CH_3	OCH_3	H
998	CH_3	CH_3	CH_3	Cl	H
999	CH_3	CH_3	CH_3	Br	H
1000	CH_3	CH_3	CH_3	F	H
1001	CH_3	CH_3	CH_3	H	CH_3
1002	CH_3	CH_3	CH_3	CH_3	CH_3
1003	CH_3	CH_3	CH_3	H	OCH_3
1004	CH_3	CH_3	CH_3	CH_3	OCH_3
1005	CH_3	CH_3	CH_3	OCH_3	OCH_3
1006	CH_3	CH_3	CH_3	Cl	OCH_3
1007	CH_3	CH_3	CH_3	Br	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1008	CH_3	CH_3	CH_3	F	OCH_3
1009	CH_3	CH_3	CH_3	H	Cl
1010	CH_3	CH_3	CH_3	CH_3	Cl
1011	CH_3	CH_3	CH_3	OCH_3	Cl
1012	CH_3	CH_3	CH_3	Cl	Cl
1013	CH_3	CH_3	CH_3	Br	Cl
1014	CH_3	CH_3	CH_3	F	Cl
1015	CH_3	CH_3	CH_3	H	Br
1016	CH_3	CH_3	CH_3	CH_3	Br
1017	CH_3	CH_3	CH_3	OCH_3	Br
1018	CH_3	CH_3	CH_3	Cl	Br
1019	CH_3	CH_3	CH_3	Br	Br
1020	CH_3	CH_3	CH_3	F	Br
1021	CH_3	CH_3	CH_3	H	F
1022	CH_3	CH_3	CH_3	CH_3	F
1023	CH_3	CH_3	CH_3	OCH_3	F
1024	CH_3	CH_3	CH_3	Cl	F
1025	CH_3	CH_3	CH_3	Br	F
1026	CH_3	CH_3	CH_3	F	F
1027	CH_3	CH_3	OCH_3	H	H
1028	CH_3	CH_3	OCH_3	CH_3	H
1029	CH_3	CH_3	OCH_3	OCH_3	H
1030	CH_3	CH_3	OCH_3	Cl	H
1031	CH_3	CH_3	OCH_3	Br	H
1032	CH_3	CH_3	OCH_3	F	H
1033	CH_3	CH_3	OCH_3	H	CH_3
1034	CH_3	CH_3	OCH_3	CH_3	CH_3
1035	CH_3	CH_3	OCH_3	OCH_3	CH_3
1036	CH_3	CH_3	OCH_3	Cl	CH_3
1037	CH_3	CH_3	OCH_3	Br	CH_3
1038	CH_3	CH_3	OCH_3	F	CH_3
1039	CH_3	CH_3	OCH_3	H	OCH_3
1040	CH_3	CH_3	OCH_3	OCH_3	OCH_3
1041	CH_3	CH_3	OCH_3	H	Cl
1042	CH_3	CH_3	OCH_3	CH_3	Cl
1043	CH_3	CH_3	OCH_3	OCH_3	Cl
1044	CH_3	CH_3	OCH_3	Cl	Cl
1045	CH_3	CH_3	OCH_3	Br	Cl
1046	CH_3	CH_3	OCH_3	F	Cl
1047	CH_3	CH_3	OCH_3	H	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1048	CH_3	CH_3	OCH_3	CH_3	Br
1049	CH_3	CH_3	OCH_3	OCH_3	Br
1050	CH_3	CH_3	OCH_3	Cl	Br
1051	CH_3	CH_3	OCH_3	Br	Br
1052	CH_3	CH_3	OCH_3	F	Br
1053	CH_3	CH_3	OCH_3	H	F
1054	CH_3	CH_3	OCH_3	CH_3	F
1055	CH_3	CH_3	OCH_3	OCH_3	F
1056	CH_3	CH_3	OCH_3	Cl	F
1057	CH_3	CH_3	OCH_3	Br	F
1058	CH_3	CH_3	OCH_3	F	F
1059	CH_3	CH_3	Cl	H	H
1060	CH_3	CH_3	Cl	CH_3	H
1061	CH_3	CH_3	Cl	OCH_3	H
1062	CH_3	CH_3	Cl	Cl	H
1063	CH_3	CH_3	Cl	Br	H
1064	CH_3	CH_3	Cl	F	H
1065	CH_3	CH_3	Cl	H	CH_3
1066	CH_3	CH_3	Cl	CH_3	CH_3
1067	CH_3	CH_3	Cl	OCH_3	CH_3
1068	CH_3	CH_3	Cl	Cl	CH_3
1069	CH_3	CH_3	Cl	Br	CH_3
1070	CH_3	CH_3	Cl	F	CH_3
1071	CH_3	CH_3	Cl	H	OCH_3
1072	CH_3	CH_3	Cl	CH_3	OCH_3
1073	CH_3	CH_3	Cl	OCH_3	OCH_3
1074	CH_3	CH_3	Cl	Cl	OCH_3
1075	CH_3	CH_3	Cl	Br	OCH_3
1076	CH_3	CH_3	Cl	F	OCH_3
1077	CH_3	CH_3	Cl	H	Cl
1078	CH_3	CH_3	Cl	Cl	Cl
1079	CH_3	CH_3	Cl	H	Br
1080	CH_3	CH_3	Cl	CH_3	Br
1081	CH_3	CH_3	Cl	OCH_3	Br
1082	CH_3	CH_3	Cl	Cl	Br
1083	CH_3	CH_3	Cl	Br	Br
1084	CH_3	CH_3	Cl	F	Br
1085	CH_3	CH_3	Cl	H	F
1086	CH_3	CH_3	Cl	CH_3	F
1087	CH_3	CH_3	Cl	OCH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1088	CH_3	CH_3	Cl	Cl	F
1089	CH_3	CH_3	Cl	F	F
1090	CH_3	CH_3	Br	H	H
1091	CH_3	CH_3	Br	CH_3	H
1092	CH_3	CH_3	Br	OCH_3	H
1093	CH_3	CH_3	Br	Cl	H
1094	CH_3	CH_3	Br	Br	H
1095	CH_3	CH_3	Br	F	H
1096	CH_3	CH_3	Br	H	CH_3
1097	CH_3	CH_3	Br	CH_3	CH_3
1098	CH_3	CH_3	Br	OCH_3	CH_3
1099	CH_3	CH_3	Br	Cl	CH_3
1100	CH_3	CH_3	Br	Br	CH_3
1101	CH_3	CH_3	Br	F	CH_3
1102	CH_3	CH_3	Br	H	OCH_3
1103	CH_3	CH_3	Br	CH_3	OCH_3
1104	CH_3	CH_3	Br	OCH_3	OCH_3
1105	CH_3	CH_3	Br	Cl	OCH_3
1106	CH_3	CH_3	Br	Br	OCH_3
1107	CH_3	CH_3	Br	F	OCH_3
1108	CH_3	CH_3	Br	H	Cl
1109	CH_3	CH_3	Br	CH_3	Cl
1110	CH_3	CH_3	Br	OCH_3	Cl
1111	CH_3	CH_3	Br	Cl	Cl
1112	CH_3	CH_3	Br	Br	Cl
1113	CH_3	CH_3	Br	F	Cl
1114	CH_3	CH_3	Br	H	Br
1115	CH_3	CH_3	Br	Br	Br
1116	CH_3	CH_3	Br	H	F
1117	CH_3	CH_3	Br	CH_3	F
1118	CH_3	CH_3	Br	OCH_3	F
1119	CH_3	CH_3	Br	Cl	F
1120	CH_3	CH_3	Br	Br	F
1121	CH_3	CH_3	Br	F	F
1122	CH_3	CH_3	F	H	H
1123	CH_3	CH_3	F	CH_3	H
1124	CH_3	CH_3	F	OCH_3	H
1125	CH_3	CH_3	F	Cl	H
1126	CH_3	CH_3	F	Br	H
1127	CH_3	CH_3	F	F	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1128	CH_3	CH_3	F	H	CH_3
1129	CH_3	CH_3	F	CH_3	CH_3
1130	CH_3	CH_3	F	OCH_3	CH_3
1131	CH_3	CH_3	F	Cl	CH_3
1132	CH_3	CH_3	F	Br	CH_3
1133	CH_3	CH_3	F	F	CH_3
1134	CH_3	CH_3	F	H	OCH_3
1135	CH_3	CH_3	F	CH_3	OCH_3
1136	CH_3	CH_3	F	OCH_3	OCH_3
1137	CH_3	CH_3	F	Cl	OCH_3
1138	CH_3	CH_3	F	Br	OCH_3
1139	CH_3	CH_3	F	F	OCH_3
1140	CH_3	CH_3	F	H	Cl
1141	CH_3	CH_3	F	CH_3	Cl
1142	CH_3	CH_3	F	OCH_3	Cl
1143	CH_3	CH_3	F	Cl	Cl
1144	CH_3	CH_3	F	Br	Cl
1145	CH_3	CH_3	F	F	Cl
1146	CH_3	CH_3	F	H	Br
1147	CH_3	CH_3	F	CH_3	Br
1148	CH_3	CH_3	F	OCH_3	Br
1149	CH_3	CH_3	F	Cl	Br
1150	CH_3	CH_3	F	Br	Br
1151	CH_3	CH_3	F	F	Br
1152	CH_3	CH_3	F	H	F
1153	CH_3	CH_3	F	F	F
1154	CH_3	OCH_3	CH_3	H	H
1155	CH_3	OCH_3	CH_3	H	CH_3
1156	CH_3	OCH_3	CH_3	H	OCH_3
1157	CH_3	OCH_3	CH_3	H	Cl
1158	CH_3	OCH_3	CH_3	H	Br
1159	CH_3	OCH_3	CH_3	H	F
1160	CH_3	OCH_3	CH_3	CH_3	H
1161	CH_3	OCH_3	CH_3	CH_3	CH_3
1162	CH_3	OCH_3	CH_3	CH_3	OCH_3
1163	CH_3	OCH_3	CH_3	CH_3	Cl
1164	CH_3	OCH_3	CH_3	CH_3	Br
1165	CH_3	OCH_3	CH_3	CH_3	F
1166	CH_3	OCH_3	CH_3	OCH_3	H
1167	CH_3	OCH_3	CH_3	OCH_3	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1168	CH_3	OCH_3	CH_3	OCH_3	Cl
1169	CH_3	OCH_3	CH_3	OCH_3	Br
1170	CH_3	OCH_3	CH_3	OCH_3	F
1171	CH_3	OCH_3	CH_3	Cl	H
1172	CH_3	OCH_3	CH_3	Cl	OCH_3
1173	CH_3	OCH_3	CH_3	Cl	Cl
1174	CH_3	OCH_3	CH_3	Cl	Br
1175	CH_3	OCH_3	CH_3	Cl	F
1176	CH_3	OCH_3	CH_3	Br	H
1177	CH_3	OCH_3	CH_3	Br	OCH_3
1178	CH_3	OCH_3	CH_3	Br	Cl
1179	CH_3	OCH_3	CH_3	Br	Br
1180	CH_3	OCH_3	CH_3	Br	F
1181	CH_3	OCH_3	CH_3	F	H
1182	CH_3	OCH_3	CH_3	F	OCH_3
1183	CH_3	OCH_3	CH_3	F	Cl
1184	CH_3	OCH_3	CH_3	F	Br
1185	CH_3	OCH_3	CH_3	F	F
1186	CH_3	OCH_3	OCH_3	H	H
1187	CH_3	OCH_3	OCH_3	H	CH_3
1188	CH_3	OCH_3	OCH_3	H	OCH_3
1189	CH_3	OCH_3	OCH_3	H	Cl
1190	CH_3	OCH_3	OCH_3	H	Br
1191	CH_3	OCH_3	OCH_3	H	F
1192	CH_3	OCH_3	OCH_3	CH_3	H
1193	CH_3	OCH_3	OCH_3	CH_3	CH_3
1194	CH_3	OCH_3	OCH_3	CH_3	Cl
1195	CH_3	OCH_3	OCH_3	CH_3	Br
1196	CH_3	OCH_3	OCH_3	CH_3	F
1197	CH_3	OCH_3	OCH_3	OCH_3	H
1198	CH_3	OCH_3	OCH_3	OCH_3	CH_3
1199	CH_3	OCH_3	OCH_3	OCH_3	OCH_3
1200	CH_3	OCH_3	OCH_3	OCH_3	Cl
1201	CH_3	OCH_3	OCH_3	OCH_3	Br
1202	CH_3	OCH_3	OCH_3	OCH_3	F
1203	CH_3	OCH_3	OCH_3	Cl	H
1204	CH_3	OCH_3	OCH_3	Cl	CH_3
1205	CH_3	OCH_3	OCH_3	Cl	Cl
1206	CH_3	OCH_3	OCH_3	Cl	Br
1207	CH_3	OCH_3	OCH_3	Cl	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1208	CH_3	OCH_3	OCH_3	Br	H
1209	CH_3	OCH_3	OCH_3	Br	CH_3
1210	CH_3	OCH_3	OCH_3	Br	Cl
1211	CH_3	OCH_3	OCH_3	Br	Br
1212	CH_3	OCH_3	OCH_3	Br	F
1213	CH_3	OCH_3	OCH_3	F	H
1214	CH_3	OCH_3	OCH_3	F	CH_3
1215	CH_3	OCH_3	OCH_3	F	Cl
1216	CH_3	OCH_3	OCH_3	F	Br
1217	CH_3	OCH_3	OCH_3	F	F
1218	CH_3	OCH_3	Cl	H	H
1219	CH_3	OCH_3	Cl	H	CH_3
1220	CH_3	OCH_3	Cl	H	OCH_3
1221	CH_3	OCH_3	Cl	H	Cl
1222	CH_3	OCH_3	Cl	H	Br
1223	CH_3	OCH_3	Cl	H	F
1224	CH_3	OCH_3	Cl	CH_3	H
1225	CH_3	OCH_3	Cl	CH_3	CH_3
1226	CH_3	OCH_3	Cl	CH_3	OCH_3
1227	CH_3	OCH_3	Cl	CH_3	Br
1228	CH_3	OCH_3	Cl	CH_3	F
1229	CH_3	OCH_3	Cl	OCH_3	H
1230	CH_3	OCH_3	Cl	OCH_3	CH_3
1231	CH_3	OCH_3	Cl	OCH_3	OCH_3
1232	CH_3	OCH_3	Cl	OCH_3	Br
1233	CH_3	OCH_3	Cl	OCH_3	F
1234	CH_3	OCH_3	Cl	Cl	H
1235	CH_3	OCH_3	Cl	Cl	CH_3
1236	CH_3	OCH_3	Cl	Cl	OCH_3
1237	CH_3	OCH_3	Cl	Cl	Cl
1238	CH_3	OCH_3	Cl	Cl	Br
1239	CH_3	OCH_3	Cl	Cl	F
1240	CH_3	OCH_3	Cl	Br	H
1241	CH_3	OCH_3	Cl	Br	CH_3
1242	CH_3	OCH_3	Cl	Br	OCH_3
1243	CH_3	OCH_3	Cl	Br	Br
1244	CH_3	OCH_3	Cl	F	H
1245	CH_3	OCH_3	Cl	F	CH_3
1246	CH_3	OCH_3	Cl	F	OCH_3
1247	CH_3	OCH_3	Cl	F	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1248	CH_3	OCH_3	Cl	F	F
1249	CH_3	OCH_3	Br	H	H
1250	CH_3	OCH_3	Br	H	CH_3
1251	CH_3	OCH_3	Br	H	OCH_3
1252	CH_3	OCH_3	Br	H	Cl
1253	CH_3	OCH_3	Br	H	Br
1254	CH_3	OCH_3	Br	H	F
1255	CH_3	OCH_3	Br	CH_3	H
1256	CH_3	OCH_3	Br	CH_3	CH_3
1257	CH_3	OCH_3	Br	CH_3	OCH_3
1258	CH_3	OCH_3	Br	CH_3	Cl
1259	CH_3	OCH_3	Br	CH_3	F
1260	CH_3	OCH_3	Br	OCH_3	H
1261	CH_3	OCH_3	Br	OCH_3	CH_3
1262	CH_3	OCH_3	Br	OCH_3	OCH_3
1263	CH_3	OCH_3	Br	OCH_3	Cl
1264	CH_3	OCH_3	Br	OCH_3	F
1265	CH_3	OCH_3	Br	Cl	H
1266	CH_3	OCH_3	Br	Cl	CH_3
1267	CH_3	OCH_3	Br	Cl	OCH_3
1268	CH_3	OCH_3	Br	Cl	Cl
1269	CH_3	OCH_3	Br	Cl	F
1270	CH_3	OCH_3	Br	Br	H
1271	CH_3	OCH_3	Br	Br	CH_3
1272	CH_3	OCH_3	Br	Br	OCH_3
1273	CH_3	OCH_3	Br	Br	Cl
1274	CH_3	OCH_3	Br	Br	Br
1275	CH_3	OCH_3	Br	Br	F
1276	CH_3	OCH_3	Br	F	H
1277	CH_3	OCH_3	Br	F	CH_3
1278	CH_3	OCH_3	Br	F	OCH_3
1279	CH_3	OCH_3	Br	F	Cl
1280	CH_3	OCH_3	Br	F	F
1281	CH_3	OCH_3	F	H	H
1282	CH_3	OCH_3	F	H	CH_3
1283	CH_3	OCH_3	F	H	OCH_3
1284	CH_3	OCH_3	F	H	Cl
1285	CH_3	OCH_3	F	H	Br
1286	CH_3	OCH_3	F	H	F
1287	CH_3	OCH_3	F	CH_3	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1288	CH_3	OCH_3	F	CH_3	CH_3
1289	CH_3	OCH_3	F	CH_3	OCH_3
1290	CH_3	OCH_3	F	CH_3	Cl
1291	CH_3	OCH_3	F	CH_3	Br
1292	CH_3	OCH_3	F	OCH_3	H
1293	CH_3	OCH_3	F	OCH_3	CH_3
1294	CH_3	OCH_3	F	OCH_3	OCH_3
1295	CH_3	OCH_3	F	OCH_3	Cl
1296	CH_3	OCH_3	F	OCH_3	Br
1297	CH_3	OCH_3	F	Cl	H
1298	CH_3	OCH_3	F	Cl	CH_3
1299	CH_3	OCH_3	F	Cl	OCH_3
1300	CH_3	OCH_3	F	Cl	Cl
1301	CH_3	OCH_3	F	Cl	Br
1302	CH_3	OCH_3	F	Br	H
1303	CH_3	OCH_3	F	Br	CH_3
1304	CH_3	OCH_3	F	Br	OCH_3
1305	CH_3	OCH_3	F	Br	Cl
1306	CH_3	OCH_3	F	Br	Br
1307	CH_3	OCH_3	F	F	H
1308	CH_3	OCH_3	F	F	CH_3
1309	CH_3	OCH_3	F	F	OCH_3
1310	CH_3	OCH_3	F	F	Cl
1311	CH_3	OCH_3	F	F	Br
1312	CH_3	OCH_3	F	F	F
1313	CH_3	Cl	CH_3	H	H
1314	CH_3	Cl	CH_3	H	CH_3
1315	CH_3	Cl	CH_3	H	OCH_3
1316	CH_3	Cl	CH_3	H	Cl
1317	CH_3	Cl	CH_3	H	Br
1318	CH_3	Cl	CH_3	H	F
1319	CH_3	Cl	CH_3	CH_3	H
1320	CH_3	Cl	CH_3	CH_3	CH_3
1321	CH_3	Cl	CH_3	CH_3	OCH_3
1322	CH_3	Cl	CH_3	CH_3	Cl
1323	CH_3	Cl	CH_3	CH_3	Br
1324	CH_3	Cl	CH_3	CH_3	F
1325	CH_3	Cl	CH_3	OCH_3	H
1326	CH_3	Cl	CH_3	OCH_3	OCH_3
1327	CH_3	Cl	CH_3	OCH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1328	CH_3	Cl	CH_3	OCH_3	Br
1329	CH_3	Cl	CH_3	OCH_3	F
1330	CH_3	Cl	CH_3	Cl	H
1331	CH_3	Cl	CH_3	Cl	OCH_3
1332	CH_3	Cl	CH_3	Cl	Cl
1333	CH_3	Cl	CH_3	Cl	Br
1334	CH_3	Cl	CH_3	Cl	F
1335	CH_3	Cl	CH_3	Br	H
1336	CH_3	Cl	CH_3	Br	OCH_3
1337	CH_3	Cl	CH_3	Br	Cl
1338	CH_3	Cl	CH_3	Br	Br
1339	CH_3	Cl	CH_3	Br	F
1340	CH_3	Cl	CH_3	F	H
1341	CH_3	Cl	CH_3	F	OCH_3
1342	CH_3	Cl	CH_3	F	Cl
1343	CH_3	Cl	CH_3	F	Br
1344	CH_3	Cl	CH_3	F	F
1345	CH_3	Cl	OCH_3	H	H
1346	CH_3	Cl	OCH_3	H	CH_3
1347	CH_3	Cl	OCH_3	H	OCH_3
1348	CH_3	Cl	OCH_3	H	Cl
1349	CH_3	Cl	OCH_3	H	Br
1350	CH_3	Cl	OCH_3	H	F
1351	CH_3	Cl	OCH_3	CH_3	H
1352	CH_3	Cl	OCH_3	CH_3	CH_3
1353	CH_3	Cl	OCH_3	CH_3	Cl
1354	CH_3	Cl	OCH_3	CH_3	Br
1355	CH_3	Cl	OCH_3	CH_3	F
1356	CH_3	Cl	OCH_3	OCH_3	H
1357	CH_3	Cl	OCH_3	OCH_3	CH_3
1358	CH_3	Cl	OCH_3	OCH_3	OCH_3
1359	CH_3	Cl	OCH_3	OCH_3	Cl
1360	CH_3	Cl	OCH_3	OCH_3	Br
1361	CH_3	Cl	OCH_3	OCH_3	F
1362	CH_3	Cl	OCH_3	Cl	H
1363	CH_3	Cl	OCH_3	Cl	CH_3
1364	CH_3	Cl	OCH_3	Cl	Cl
1365	CH_3	Cl	OCH_3	Cl	Br
1366	CH_3	Cl	OCH_3	Cl	F
1367	CH_3	Cl	OCH_3	Br	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1368	CH_3	Cl	OCH_3	Br	CH_3
1369	CH_3	Cl	OCH_3	Br	Cl
1370	CH_3	Cl	OCH_3	Br	Br
1371	CH_3	Cl	OCH_3	Br	F
1372	CH_3	Cl	OCH_3	F	H
1373	CH_3	Cl	OCH_3	F	CH_3
1374	CH_3	Cl	OCH_3	F	Cl
1375	CH_3	Cl	OCH_3	F	Br
1376	CH_3	Cl	OCH_3	F	F
1377	CH_3	Cl	Cl	H	H
1378	CH_3	Cl	Cl	H	CH_3
1379	CH_3	Cl	Cl	H	OCH_3
1380	CH_3	Cl	Cl	H	Cl
1381	CH_3	Cl	Cl	H	Br
1382	CH_3	Cl	Cl	H	F
1383	CH_3	Cl	Cl	CH_3	H
1384	CH_3	Cl	Cl	CH_3	CH_3
1385	CH_3	Cl	Cl	CH_3	OCH_3
1386	CH_3	Cl	Cl	CH_3	Br
1387	CH_3	Cl	Cl	CH_3	F
1388	CH_3	Cl	Cl	OCH_3	H
1389	CH_3	Cl	Cl	OCH_3	CH_3
1390	CH_3	Cl	Cl	OCH_3	OCH_3
1391	CH_3	Cl	Cl	OCH_3	Br
1392	CH_3	Cl	Cl	OCH_3	F
1393	CH_3	Cl	Cl	Cl	H
1394	CH_3	Cl	Cl	Cl	CH_3
1395	CH_3	Cl	Cl	Cl	OCH_3
1396	CH_3	Cl	Cl	Cl	Cl
1397	CH_3	Cl	Cl	Cl	Br
1398	CH_3	Cl	Cl	Cl	F
1399	CH_3	Cl	Cl	Br	H
1400	CH_3	Cl	Cl	Br	CH_3
1401	CH_3	Cl	Cl	Br	OCH_3
1402	CH_3	Cl	Cl	Br	Br
1403	CH_3	Cl	Cl	F	H
1404	CH_3	Cl	Cl	F	CH_3
1405	CH_3	Cl	Cl	F	OCH_3
1406	CH_3	Cl	Cl	F	Br
1407	CH_3	Cl	Cl	F	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1408	CH_3	Cl	Br	H	H
1409	CH_3	Cl	Br	H	CH_3
1410	CH_3	Cl	Br	H	OCH_3
1411	CH_3	Cl	Br	H	Cl
1412	CH_3	Cl	Br	H	Br
1413	CH_3	Cl	Br	H	F
1414	CH_3	Cl	Br	CH_3	H
1415	CH_3	Cl	Br	CH_3	CH_3
1416	CH_3	Cl	Br	CH_3	OCH_3
1417	CH_3	Cl	Br	CH_3	Cl
1418	CH_3	Cl	Br	CH_3	F
1419	CH_3	Cl	Br	OCH_3	H
1420	CH_3	Cl	Br	OCH_3	CH_3
1421	CH_3	Cl	Br	OCH_3	OCH_3
1422	CH_3	Cl	Br	OCH_3	Cl
1423	CH_3	Cl	Br	OCH_3	F
1424	CH_3	Cl	Br	Cl	H
1425	CH_3	Cl	Br	Cl	CH_3
1426	CH_3	Cl	Br	Cl	OCH_3
1427	CH_3	Cl	Br	Cl	Cl
1428	CH_3	Cl	Br	Cl	F
1429	CH_3	Cl	Br	Br	H
1430	CH_3	Cl	Br	Br	CH_3
1431	CH_3	Cl	Br	Br	OCH_3
1432	CH_3	Cl	Br	Br	Cl
1433	CH_3	Cl	Br	Br	Br
1434	CH_3	Cl	Br	Br	F
1435	CH_3	Cl	Br	F	H
1436	CH_3	Cl	Br	F	CH_3
1437	CH_3	Cl	Br	F	OCH_3
1438	CH_3	Cl	Br	F	Cl
1439	CH_3	Cl	Br	F	F
1440	CH_3	Cl	F	H	H
1441	CH_3	Cl	F	H	CH_3
1442	CH_3	Cl	F	H	OCH_3
1443	CH_3	Cl	F	H	Cl
1444	CH_3	Cl	F	H	Br
1445	CH_3	Cl	F	H	F
1446	CH_3	Cl	F	CH_3	H
1447	CH_3	Cl	F	CH_3	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1448	CH_3	Cl	F	CH_3	OCH_3
1449	CH_3	Cl	F	CH_3	Cl
1450	CH_3	Cl	F	CH_3	Br
1451	CH_3	Cl	F	OCH_3	H
1452	CH_3	Cl	F	OCH_3	CH_3
1453	CH_3	Cl	F	OCH_3	OCH_3
1454	CH_3	Cl	F	OCH_3	Cl
1455	CH_3	Cl	F	OCH_3	Br
1456	CH_3	Cl	F	Cl	H
1457	CH_3	Cl	F	Cl	CH_3
1458	CH_3	Cl	F	Cl	OCH_3
1459	CH_3	Cl	F	Cl	Cl
1460	CH_3	Cl	F	Cl	Br
1461	CH_3	Cl	F	Br	H
1462	CH_3	Cl	F	Br	CH_3
1463	CH_3	Cl	F	Br	OCH_3
1464	CH_3	Cl	F	Br	Cl
1465	CH_3	Cl	F	Br	Br
1466	CH_3	Cl	F	F	H
1467	CH_3	Cl	F	F	CH_3
1468	CH_3	Cl	F	F	OCH_3
1469	CH_3	Cl	F	F	Cl
1470	CH_3	Cl	F	F	Br
1471	CH_3	Cl	F	F	F
1472	CH_3	Br	CH_3	H	H
1473	CH_3	Br	CH_3	H	CH_3
1474	CH_3	Br	CH_3	H	OCH_3
1475	CH_3	Br	CH_3	H	Cl
1476	CH_3	Br	CH_3	H	Br
1477	CH_3	Br	CH_3	H	F
1478	CH_3	Br	CH_3	CH_3	H
1479	CH_3	Br	CH_3	CH_3	CH_3
1480	CH_3	Br	CH_3	CH_3	OCH_3
1481	CH_3	Br	CH_3	CH_3	Cl
1482	CH_3	Br	CH_3	CH_3	Br
1483	CH_3	Br	CH_3	CH_3	F
1484	CH_3	Br	CH_3	OCH_3	H
1485	CH_3	Br	CH_3	OCH_3	OCH_3
1486	CH_3	Br	CH_3	OCH_3	Cl
1487	CH_3	Br	CH_3	OCH_3	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1488	CH_3	Br	CH_3	OCH_3	F
1489	CH_3	Br	CH_3	Cl	H
1490	CH_3	Br	CH_3	Cl	OCH_3
1491	CH_3	Br	CH_3	Cl	Cl
1492	CH_3	Br	CH_3	Cl	Br
1493	CH_3	Br	CH_3	Cl	F
1494	CH_3	Br	CH_3	Br	H
1495	CH_3	Br	CH_3	Br	OCH_3
1496	CH_3	Br	CH_3	Br	Cl
1497	CH_3	Br	CH_3	Br	Br
1498	CH_3	Br	CH_3	Br	F
1499	CH_3	Br	CH_3	F	H
1500	CH_3	Br	CH_3	F	OCH_3
1501	CH_3	Br	CH_3	F	Cl
1502	CH_3	Br	CH_3	F	Br
1503	CH_3	Br	CH_3	F	F
1504	CH_3	Br	OCH_3	H	H
1505	CH_3	Br	OCH_3	H	CH_3
1506	CH_3	Br	OCH_3	H	OCH_3
1507	CH_3	Br	OCH_3	H	Cl
1508	CH_3	Br	OCH_3	H	Br
1509	CH_3	Br	OCH_3	H	F
1510	CH_3	Br	OCH_3	CH_3	H
1511	CH_3	Br	OCH_3	CH_3	CH_3
1512	CH_3	Br	OCH_3	CH_3	Cl
1513	CH_3	Br	OCH_3	CH_3	Br
1514	CH_3	Br	OCH_3	CH_3	F
1515	CH_3	Br	OCH_3	OCH_3	H
1516	CH_3	Br	OCH_3	OCH_3	CH_3
1517	CH_3	Br	OCH_3	OCH_3	OCH_3
1518	CH_3	Br	OCH_3	OCH_3	Cl
1519	CH_3	Br	OCH_3	OCH_3	Br
1520	CH_3	Br	OCH_3	OCH_3	F
1521	CH_3	Br	OCH_3	Cl	H
1522	CH_3	Br	OCH_3	Cl	CH_3
1523	CH_3	Br	OCH_3	Cl	Cl
1524	CH_3	Br	OCH_3	Cl	Br
1525	CH_3	Br	OCH_3	Cl	F
1526	CH_3	Br	OCH_3	Br	H
1527	CH_3	Br	OCH_3	Br	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1528	CH_3	Br	OCH_3	Br	Cl
1529	CH_3	Br	OCH_3	Br	Br
1530	CH_3	Br	OCH_3	Br	F
1531	CH_3	Br	OCH_3	F	H
1532	CH_3	Br	OCH_3	F	CH_3
1533	CH_3	Br	OCH_3	F	Cl
1534	CH_3	Br	OCH_3	F	Br
1535	CH_3	Br	OCH_3	F	F
1536	CH_3	Br	Cl	H	H
1537	CH_3	Br	Cl	H	CH_3
1538	CH_3	Br	Cl	H	OCH_3
1539	CH_3	Br	Cl	H	Cl
1540	CH_3	Br	Cl	H	Br
1541	CH_3	Br	Cl	H	F
1542	CH_3	Br	Cl	CH_3	H
1543	CH_3	Br	Cl	CH_3	CH_3
1544	CH_3	Br	Cl	CH_3	OCH_3
1545	CH_3	Br	Cl	CH_3	Br
1546	CH_3	Br	Cl	CH_3	F
1547	CH_3	Br	Cl	OCH_3	H
1548	CH_3	Br	Cl	OCH_3	CH_3
1549	CH_3	Br	Cl	OCH_3	OCH_3
1550	CH_3	Br	Cl	OCH_3	Br
1551	CH_3	Br	Cl	OCH_3	F
1552	CH_3	Br	Cl	Cl	H
1553	CH_3	Br	Cl	Cl	CH_3
1554	CH_3	Br	Cl	Cl	OCH_3
1555	CH_3	Br	Cl	Cl	Cl
1556	CH_3	Br	Cl	Cl	Br
1557	CH_3	Br	Cl	Cl	F
1558	CH_3	Br	Cl	Br	H
1559	CH_3	Br	Cl	Br	CH_3
1560	CH_3	Br	Cl	Br	OCH_3
1561	CH_3	Br	Cl	Br	Br
1562	CH_3	Br	Cl	F	H
1563	CH_3	Br	Cl	F	CH_3
1564	CH_3	Br	Cl	F	OCH_3
1565	CH_3	Br	Cl	F	Br
1566	CH_3	Br	Cl	F	F
1567	CH_3	Br	Br	H	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1568	CH_3	Br	Br	H	CH_3
1569	CH_3	Br	Br	H	OCH_3
1570	CH_3	Br	Br	H	Cl
1571	CH_3	Br	Br	H	Br
1572	CH_3	Br	Br	H	F
1573	CH_3	Br	Br	CH_3	H
1574	CH_3	Br	Br	CH_3	CH_3
1575	CH_3	Br	Br	CH_3	OCH_3
1576	CH_3	Br	Br	CH_3	Cl
1577	CH_3	Br	Br	CH_3	F
1578	CH_3	Br	Br	OCH_3	H
1579	CH_3	Br	Br	OCH_3	CH_3
1580	CH_3	Br	Br	OCH_3	OCH_3
1581	CH_3	Br	Br	OCH_3	Cl
1582	CH_3	Br	Br	OCH_3	F
1583	CH_3	Br	Br	Cl	H
1584	CH_3	Br	Br	Cl	CH_3
1585	CH_3	Br	Br	Cl	OCH_3
1586	CH_3	Br	Br	Cl	Cl
1587	CH_3	Br	Br	Cl	F
1588	CH_3	Br	Br	Br	H
1589	CH_3	Br	Br	Br	CH_3
1590	CH_3	Br	Br	Br	OCH_3
1591	CH_3	Br	Br	Br	Cl
1592	CH_3	Br	Br	Br	Br
1593	CH_3	Br	Br	Br	F
1594	CH_3	Br	Br	F	H
1595	CH_3	Br	Br	F	CH_3
1596	CH_3	Br	Br	F	OCH_3
1597	CH_3	Br	Br	F	Cl
1598	CH_3	Br	Br	F	F
1599	CH_3	Br	F	H	H
1600	CH_3	Br	F	H	CH_3
1601	CH_3	Br	F	H	OCH_3
1602	CH_3	Br	F	H	Cl
1603	CH_3	Br	F	H	Br
1604	CH_3	Br	F	H	F
1605	CH_3	Br	F	CH_3	H
1606	CH_3	Br	F	CH_3	CH_3
1607	CH_3	Br	F	CH_3	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1608	CH_3	Br	F	CH_3	Cl
1609	CH_3	Br	F	CH_3	Br
1610	CH_3	Br	F	OCH_3	H
1611	CH_3	Br	F	OCH_3	CH_3
1612	CH_3	Br	F	OCH_3	OCH_3
1613	CH_3	Br	F	OCH_3	Cl
1614	CH_3	Br	F	OCH_3	Br
1615	CH_3	Br	F	Cl	H
1616	CH_3	Br	F	Cl	CH_3
1617	CH_3	Br	F	Cl	OCH_3
1618	CH_3	Br	F	Cl	Cl
1619	CH_3	Br	F	Cl	Br
1620	CH_3	Br	F	Br	H
1621	CH_3	Br	F	Br	CH_3
1622	CH_3	Br	F	Br	OCH_3
1623	CH_3	Br	F	Br	Cl
1624	CH_3	Br	F	Br	Br
1625	CH_3	Br	F	F	H
1626	CH_3	Br	F	F	CH_3
1627	CH_3	Br	F	F	OCH_3
1628	CH_3	Br	F	F	Cl
1629	CH_3	Br	F	F	Br
1630	CH_3	Br	F	F	F
1631	CH_3	F	CH_3	H	H
1632	CH_3	F	CH_3	H	CH_3
1633	CH_3	F	CH_3	H	OCH_3
1634	CH_3	F	CH_3	H	Cl
1635	CH_3	F	CH_3	H	Br
1636	CH_3	F	CH_3	H	F
1637	CH_3	F	CH_3	CH_3	H
1638	CH_3	F	CH_3	CH_3	CH_3
1639	CH_3	F	CH_3	CH_3	OCH_3
1640	CH_3	F	CH_3	CH_3	Cl
1641	CH_3	F	CH_3	CH_3	Br
1642	CH_3	F	CH_3	CH_3	F
1643	CH_3	F	CH_3	OCH_3	H
1644	CH_3	F	CH_3	OCH_3	OCH_3
1645	CH_3	F	CH_3	OCH_3	Cl
1646	CH_3	F	CH_3	OCH_3	Br
1647	CH_3	F	CH_3	OCH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1648	CH_3	F	CH_3	Cl	H
1649	CH_3	F	CH_3	Cl	OCH_3
1650	CH_3	F	CH_3	Cl	Cl
1651	CH_3	F	CH_3	Cl	Br
1652	CH_3	F	CH_3	Cl	F
1653	CH_3	F	CH_3	Br	H
1654	CH_3	F	CH_3	Br	OCH_3
1655	CH_3	F	CH_3	Br	Cl
1656	CH_3	F	CH_3	Br	Br
1657	CH_3	F	CH_3	Br	F
1658	CH_3	F	CH_3	F	H
1659	CH_3	F	CH_3	F	OCH_3
1660	CH_3	F	CH_3	F	Cl
1661	CH_3	F	CH_3	F	Br
1662	CH_3	F	CH_3	F	F
1663	CH_3	F	OCH_3	H	H
1664	CH_3	F	OCH_3	H	CH_3
1665	CH_3	F	OCH_3	H	OCH_3
1666	CH_3	F	OCH_3	H	Cl
1667	CH_3	F	OCH_3	H	Br
1668	CH_3	F	OCH_3	H	F
1669	CH_3	F	OCH_3	CH_3	H
1670	CH_3	F	OCH_3	CH_3	CH_3
1671	CH_3	F	OCH_3	CH_3	Cl
1672	CH_3	F	OCH_3	CH_3	Br
1673	CH_3	F	OCH_3	CH_3	F
1674	CH_3	F	OCH_3	OCH_3	H
1675	CH_3	F	OCH_3	OCH_3	CH_3
1676	CH_3	F	OCH_3	OCH_3	OCH_3
1677	CH_3	F	OCH_3	OCH_3	Cl
1678	CH_3	F	OCH_3	OCH_3	Br
1679	CH_3	F	OCH_3	OCH_3	F
1680	CH_3	F	OCH_3	Cl	H
1681	CH_3	F	OCH_3	Cl	CH_3
1682	CH_3	F	OCH_3	Cl	Cl
1683	CH_3	F	OCH_3	Cl	Br
1684	CH_3	F	OCH_3	Cl	F
1685	CH_3	F	OCH_3	Br	H
1686	CH_3	F	OCH_3	Br	CH_3
1687	CH_3	F	OCH_3	Br	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1688	CH_3	F	OCH_3	Br	Br
1689	CH_3	F	OCH_3	Br	F
1690	CH_3	F	OCH_3	F	H
1691	CH_3	F	OCH_3	F	CH_3
1692	CH_3	F	OCH_3	F	Cl
1693	CH_3	F	OCH_3	F	Br
1694	CH_3	F	OCH_3	F	F
1695	CH_3	F	Cl	H	H
1696	CH_3	F	Cl	H	CH_3
1697	CH_3	F	Cl	H	OCH_3
1698	CH_3	F	Cl	H	Cl
1699	CH_3	F	Cl	H	Br
1700	CH_3	F	Cl	H	F
1701	CH_3	F	Cl	CH_3	H
1702	CH_3	F	Cl	CH_3	CH_3
1703	CH_3	F	Cl	CH_3	OCH_3
1704	CH_3	F	Cl	CH_3	Br
1705	CH_3	F	Cl	CH_3	F
1706	CH_3	F	Cl	OCH_3	H
1707	CH_3	F	Cl	OCH_3	CH_3
1708	CH_3	F	Cl	OCH_3	OCH_3
1709	CH_3	F	Cl	OCH_3	Br
1710	CH_3	F	Cl	OCH_3	F
1711	CH_3	F	Cl	Cl	H
1712	CH_3	F	Cl	Cl	CH_3
1713	CH_3	F	Cl	Cl	OCH_3
1714	CH_3	F	Cl	Cl	Cl
1715	CH_3	F	Cl	Cl	Br
1716	CH_3	F	Cl	Cl	F
1717	CH_3	F	Cl	Br	H
1718	CH_3	F	Cl	Br	CH_3
1719	CH_3	F	Cl	Br	OCH_3
1720	CH_3	F	Cl	Br	Br
1721	CH_3	F	Cl	F	H
1722	CH_3	F	Cl	F	CH_3
1723	CH_3	F	Cl	F	OCH_3
1724	CH_3	F	Cl	F	Br
1725	CH_3	F	Cl	F	F
1726	CH_3	F	Br	H	H
1727	CH_3	F	Br	H	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1728	CH_3	F	Br	H	OCH_3
1729	CH_3	F	Br	H	Cl
1730	CH_3	F	Br	H	Br
1731	CH_3	F	Br	H	F
1732	CH_3	F	Br	CH_3	H
1733	CH_3	F	Br	CH_3	CH_3
1734	CH_3	F	Br	CH_3	OCH_3
1735	CH_3	F	Br	CH_3	Cl
1736	CH_3	F	Br	CH_3	F
1737	CH_3	F	Br	OCH_3	H
1738	CH_3	F	Br	OCH_3	CH_3
1739	CH_3	F	Br	OCH_3	OCH_3
1740	CH_3	F	Br	OCH_3	Cl
1741	CH_3	F	Br	OCH_3	F
1742	CH_3	F	Br	Cl	H
1743	CH_3	F	Br	Cl	CH_3
1744	CH_3	F	Br	Cl	OCH_3
1745	CH_3	F	Br	Cl	Cl
1746	CH_3	F	Br	Cl	F
1747	CH_3	F	Br	Br	H
1748	CH_3	F	Br	Br	CH_3
1749	CH_3	F	Br	Br	OCH_3
1750	CH_3	F	Br	Br	Cl
1751	CH_3	F	Br	Br	Br
1752	CH_3	F	Br	Br	F
1753	CH_3	F	Br	F	H
1754	CH_3	F	Br	F	CH_3
1755	CH_3	F	Br	F	OCH_3
1756	CH_3	F	Br	F	Cl
1757	CH_3	F	Br	F	F
1758	CH_3	F	F	H	H
1759	CH_3	F	F	H	CH_3
1760	CH_3	F	F	H	OCH_3
1761	CH_3	F	F	H	Cl
1762	CH_3	F	F	H	Br
1763	CH_3	F	F	H	F
1764	CH_3	F	F	CH_3	H
1765	CH_3	F	F	CH_3	CH_3
1766	CH_3	F	F	CH_3	OCH_3
1767	CH_3	F	F	CH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1768	CH_3	F	F	CH_3	Br
1769	CH_3	F	F	OCH_3	H
1770	CH_3	F	F	OCH_3	CH_3
1771	CH_3	F	F	OCH_3	OCH_3
1772	CH_3	F	F	OCH_3	Cl
1773	CH_3	F	F	OCH_3	Br
1774	CH_3	F	F	Cl	H
1775	CH_3	F	F	Cl	CH_3
1776	CH_3	F	F	Cl	OCH_3
1777	CH_3	F	F	Cl	Cl
1778	CH_3	F	F	Cl	Br
1779	CH_3	F	F	Br	H
1780	CH_3	F	F	Br	CH_3
1781	CH_3	F	F	Br	OCH_3
1782	CH_3	F	F	Br	Cl
1783	CH_3	F	F	Br	Br
1784	CH_3	F	F	F	H
1785	CH_3	F	F	F	CH_3
1786	CH_3	F	F	F	OCH_3
1787	CH_3	F	F	F	Cl
1788	CH_3	F	F	F	Br
1789	CH_3	F	F	F	F
1790	OCH_3	CH_3	CH_3	H	H
1791	OCH_3	CH_3	CH_3	CH_3	H
1792	OCH_3	CH_3	CH_3	OCH_3	H
1793	OCH_3	CH_3	CH_3	Cl	H
1794	OCH_3	CH_3	CH_3	Br	H
1795	OCH_3	CH_3	CH_3	F	H
1796	OCH_3	CH_3	CH_3	H	CH_3
1797	OCH_3	CH_3	CH_3	CH_3	CH_3
1798	OCH_3	CH_3	CH_3	H	OCH_3
1799	OCH_3	CH_3	CH_3	CH_3	OCH_3
1800	OCH_3	CH_3	CH_3	OCH_3	OCH_3
1801	OCH_3	CH_3	CH_3	Cl	OCH_3
1802	OCH_3	CH_3	CH_3	Br	OCH_3
1803	OCH_3	CH_3	CH_3	F	OCH_3
1804	OCH_3	CH_3	CH_3	H	Cl
1805	OCH_3	CH_3	CH_3	CH_3	Cl
1806	OCH_3	CH_3	CH_3	OCH_3	Cl
1807	OCH_3	CH_3	CH_3	Cl	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1808	OCH_3	CH_3	CH_3	Br	Cl
1809	OCH_3	CH_3	CH_3	F	Cl
1810	OCH_3	CH_3	CH_3	H	Br
1811	OCH_3	CH_3	CH_3	CH_3	Br
1812	OCH_3	CH_3	CH_3	OCH_3	Br
1813	OCH_3	CH_3	CH_3	Cl	Br
1814	OCH_3	CH_3	CH_3	Br	Br
1815	OCH_3	CH_3	CH_3	F	Br
1816	OCH_3	CH_3	CH_3	H	F
1817	OCH_3	CH_3	CH_3	CH_3	F
1818	OCH_3	CH_3	CH_3	OCH_3	F
1819	OCH_3	CH_3	CH_3	Cl	F
1820	OCH_3	CH_3	CH_3	Br	F
1821	OCH_3	CH_3	CH_3	F	F
1822	OCH_3	CH_3	OCH_3	H	H
1823	OCH_3	CH_3	OCH_3	CH_3	H
1824	OCH_3	CH_3	OCH_3	OCH_3	H
1825	OCH_3	CH_3	OCH_3	Cl	H
1826	OCH_3	CH_3	OCH_3	Br	H
1827	OCH_3	CH_3	OCH_3	F	H
1828	OCH_3	CH_3	OCH_3	H	CH_3
1829	OCH_3	CH_3	OCH_3	CH_3	CH_3
1830	OCH_3	CH_3	OCH_3	OCH_3	CH_3
1831	OCH_3	CH_3	OCH_3	Cl	CH_3
1832	OCH_3	CH_3	OCH_3	Br	CH_3
1833	OCH_3	CH_3	OCH_3	F	CH_3
1834	OCH_3	CH_3	OCH_3	H	OCH_3
1835	OCH_3	CH_3	OCH_3	OCH_3	OCH_3
1836	OCH_3	CH_3	OCH_3	H	Cl
1837	OCH_3	CH_3	OCH_3	CH_3	Cl
1838	OCH_3	CH_3	OCH_3	OCH_3	Cl
1839	OCH_3	CH_3	OCH_3	Cl	Cl
1840	OCH_3	CH_3	OCH_3	Br	Cl
1841	OCH_3	CH_3	OCH_3	F	Cl
1842	OCH_3	CH_3	OCH_3	H	Br
1843	OCH_3	CH_3	OCH_3	CH_3	Br
1844	OCH_3	CH_3	OCH_3	OCH_3	Br
1845	OCH_3	CH_3	OCH_3	Cl	Br
1846	OCH_3	CH_3	OCH_3	Br	Br
1847	OCH_3	CH_3	OCH_3	F	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1848	OCH_3	CH_3	OCH_3	H	F
1849	OCH_3	CH_3	OCH_3	CH_3	F
1850	OCH_3	CH_3	OCH_3	OCH_3	F
1851	OCH_3	CH_3	OCH_3	Cl	F
1852	OCH_3	CH_3	OCH_3	Br	F
1853	OCH_3	CH_3	OCH_3	F	F
1854	OCH_3	CH_3	Cl	H	H
1855	OCH_3	CH_3	Cl	CH_3	H
1856	OCH_3	CH_3	Cl	OCH_3	H
1857	OCH_3	CH_3	Cl	Cl	H
1858	OCH_3	CH_3	Cl	Br	H
1859	OCH_3	CH_3	Cl	F	H
1860	OCH_3	CH_3	Cl	H	CH_3
1861	OCH_3	CH_3	Cl	CH_3	CH_3
1862	OCH_3	CH_3	Cl	OCH_3	CH_3
1863	OCH_3	CH_3	Cl	Cl	CH_3
1864	OCH_3	CH_3	Cl	Br	CH_3
1865	OCH_3	CH_3	Cl	F	CH_3
1866	OCH_3	CH_3	Cl	H	OCH_3
1867	OCH_3	CH_3	Cl	CH_3	OCH_3
1868	OCH_3	CH_3	Cl	OCH_3	OCH_3
1869	OCH_3	CH_3	Cl	Cl	OCH_3
1870	OCH_3	CH_3	Cl	Br	OCH_3
1871	OCH_3	CH_3	Cl	F	OCH_3
1872	OCH_3	CH_3	Cl	H	Cl
1873	OCH_3	CH_3	Cl	Cl	Cl
1874	OCH_3	CH_3	Cl	H	Br
1875	OCH_3	CH_3	Cl	CH_3	Br
1876	OCH_3	CH_3	Cl	OCH_3	Br
1877	OCH_3	CH_3	Cl	Cl	Br
1878	OCH_3	CH_3	Cl	Br	Br
1879	OCH_3	CH_3	Cl	F	Br
1880	OCH_3	CH_3	Cl	H	F
1881	OCH_3	CH_3	Cl	CH_3	F
1882	OCH_3	CH_3	Cl	OCH_3	F
1883	OCH_3	CH_3	Cl	Cl	F
1884	OCH_3	CH_3	Cl	F	F
1885	OCH_3	CH_3	Br	H	H
1886	OCH_3	CH_3	Br	CH_3	H
1887	OCH_3	CH_3	Br	OCH_3	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1888	OCH_3	CH_3	Br	Cl	H
1889	OCH_3	CH_3	Br	Br	H
1890	OCH_3	CH_3	Br	F	H
1891	OCH_3	CH_3	Br	H	CH_3
1892	OCH_3	CH_3	Br	CH_3	CH_3
1893	OCH_3	CH_3	Br	OCH_3	CH_3
1894	OCH_3	CH_3	Br	Cl	CH_3
1895	OCH_3	CH_3	Br	Br	CH_3
1896	OCH_3	CH_3	Br	F	CH_3
1897	OCH_3	CH_3	Br	H	OCH_3
1898	OCH_3	CH_3	Br	CH_3	OCH_3
1899	OCH_3	CH_3	Br	OCH_3	OCH_3
1900	OCH_3	CH_3	Br	Cl	OCH_3
1901	OCH_3	CH_3	Br	Br	OCH_3
1902	OCH_3	CH_3	Br	F	OCH_3
1903	OCH_3	CH_3	Br	H	Cl
1904	OCH_3	CH_3	Br	CH_3	Cl
1905	OCH_3	CH_3	Br	OCH_3	Cl
1906	OCH_3	CH_3	Br	Cl	Cl
1907	OCH_3	CH_3	Br	Br	Cl
1908	OCH_3	CH_3	Br	F	Cl
1909	OCH_3	CH_3	Br	H	Br
1910	OCH_3	CH_3	Br	Br	Br
1911	OCH_3	CH_3	Br	H	F
1912	OCH_3	CH_3	Br	CH_3	F
1913	OCH_3	CH_3	Br	OCH_3	F
1914	OCH_3	CH_3	Br	Cl	F
1915	OCH_3	CH_3	Br	Br	F
1916	OCH_3	CH_3	Br	F	F
1917	OCH_3	CH_3	F	H	H
1918	OCH_3	CH_3	F	CH_3	H
1919	OCH_3	CH_3	F	OCH_3	H
1920	OCH_3	CH_3	F	Cl	H
1921	OCH_3	CH_3	F	Br	H
1922	OCH_3	CH_3	F	F	H
1923	OCH_3	CH_3	F	H	CH_3
1924	OCH_3	CH_3	F	CH_3	CH_3
1925	OCH_3	CH_3	F	OCH_3	CH_3
1926	OCH_3	CH_3	F	Cl	CH_3
1927	OCH_3	CH_3	F	Br	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1928	OCH_3	CH_3	F	F	CH_3
1929	OCH_3	CH_3	F	H	OCH_3
1930	OCH_3	CH_3	F	CH_3	OCH_3
1931	OCH_3	CH_3	F	OCH_3	OCH_3
1932	OCH_3	CH_3	F	Cl	OCH_3
1933	OCH_3	CH_3	F	Br	OCH_3
1934	OCH_3	CH_3	F	F	OCH_3
1935	OCH_3	CH_3	F	H	Cl
1936	OCH_3	CH_3	F	CH_3	Cl
1937	OCH_3	CH_3	F	OCH_3	Cl
1938	OCH_3	CH_3	F	Cl	Cl
1939	OCH_3	CH_3	F	Br	Cl
1940	OCH_3	CH_3	F	F	Cl
1941	OCH_3	CH_3	F	H	Br
1942	OCH_3	CH_3	F	CH_3	Br
1943	OCH_3	CH_3	F	OCH_3	Br
1944	OCH_3	CH_3	F	Cl	Br
1945	OCH_3	CH_3	F	Br	Br
1946	OCH_3	CH_3	F	F	Br
1947	OCH_3	CH_3	F	H	F
1948	OCH_3	CH_3	F	F	F
1949	OCH_3	OCH_3	CH_3	H	H
1950	OCH_3	OCH_3	CH_3	H	CH_3
1951	OCH_3	OCH_3	CH_3	H	OCH_3
1952	OCH_3	OCH_3	CH_3	H	Cl
1953	OCH_3	OCH_3	CH_3	H	Br
1954	OCH_3	OCH_3	CH_3	H	F
1955	OCH_3	OCH_3	CH_3	CH_3	H
1956	OCH_3	OCH_3	CH_3	CH_3	CH_3
1957	OCH_3	OCH_3	CH_3	CH_3	OCH_3
1958	OCH_3	OCH_3	CH_3	CH_3	Cl
1959	OCH_3	OCH_3	CH_3	CH_3	Br
1960	OCH_3	OCH_3	CH_3	CH_3	F
1961	OCH_3	OCH_3	CH_3	OCH_3	H
1962	OCH_3	OCH_3	CH_3	OCH_3	OCH_3
1963	OCH_3	OCH_3	CH_3	OCH_3	Cl
1964	OCH_3	OCH_3	CH_3	OCH_3	Br
1965	OCH_3	OCH_3	CH_3	OCH_3	F
1966	OCH_3	OCH_3	CH_3	Cl	H
1967	OCH_3	OCH_3	CH_3	Cl	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
1968	OCH_3	OCH_3	CH_3	Cl	Cl
1969	OCH_3	OCH_3	CH_3	Cl	Br
1970	OCH_3	OCH_3	CH_3	Cl	F
1971	OCH_3	OCH_3	CH_3	Br	H
1972	OCH_3	OCH_3	CH_3	Br	OCH_3
1973	OCH_3	OCH_3	CH_3	Br	Cl
1974	OCH_3	OCH_3	CH_3	Br	Br
1975	OCH_3	OCH_3	CH_3	Br	F
1976	OCH_3	OCH_3	CH_3	F	H
1977	OCH_3	OCH_3	CH_3	F	OCH_3
1978	OCH_3	OCH_3	CH_3	F	Cl
1979	OCH_3	OCH_3	CH_3	F	Br
1980	OCH_3	OCH_3	CH_3	F	F
1981	OCH_3	OCH_3	OCH_3	H	H
1982	OCH_3	OCH_3	OCH_3	H	CH_3
1983	OCH_3	OCH_3	OCH_3	H	OCH_3
1984	OCH_3	OCH_3	OCH_3	H	Cl
1985	OCH_3	OCH_3	OCH_3	H	Br
1986	OCH_3	OCH_3	OCH_3	H	F
1987	OCH_3	OCH_3	OCH_3	CH_3	H
1988	OCH_3	OCH_3	OCH_3	CH_3	CH_3
1989	OCH_3	OCH_3	OCH_3	CH_3	Cl
1990	OCH_3	OCH_3	OCH_3	CH_3	Br
1991	OCH_3	OCH_3	OCH_3	CH_3	F
1992	OCH_3	OCH_3	OCH_3	OCH_3	H
1993	OCH_3	OCH_3	OCH_3	OCH_3	CH_3
1994	OCH_3	OCH_3	OCH_3	OCH_3	OCH_3
1995	OCH_3	OCH_3	OCH_3	OCH_3	Cl
1996	OCH_3	OCH_3	OCH_3	OCH_3	Br
1997	OCH_3	OCH_3	OCH_3	OCH_3	F
1998	OCH_3	OCH_3	OCH_3	Cl	H
1999	OCH_3	OCH_3	OCH_3	Cl	CH_3
2000	OCH_3	OCH_3	OCH_3	Cl	Cl
2001	OCH_3	OCH_3	OCH_3	Cl	Br
2002	OCH_3	OCH_3	OCH_3	Cl	F
2003	OCH_3	OCH_3	OCH_3	Br	H
2004	OCH_3	OCH_3	OCH_3	Br	CH_3
2005	OCH_3	OCH_3	OCH_3	Br	Cl
2006	OCH_3	OCH_3	OCH_3	Br	Br
2007	OCH_3	OCH_3	OCH_3	Br	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2008	OCH_3	OCH_3	OCH_3	F	H
2009	OCH_3	OCH_3	OCH_3	F	CH_3
2010	OCH_3	OCH_3	OCH_3	F	Cl
2011	OCH_3	OCH_3	OCH_3	F	Br
2012	OCH_3	OCH_3	OCH_3	F	F
2013	OCH_3	OCH_3	Cl	H	H
2014	OCH_3	OCH_3	Cl	H	CH_3
2015	OCH_3	OCH_3	Cl	H	OCH_3
2016	OCH_3	OCH_3	Cl	H	Cl
2017	OCH_3	OCH_3	Cl	H	Br
2018	OCH_3	OCH_3	Cl	H	F
2019	OCH_3	OCH_3	Cl	CH_3	H
2020	OCH_3	OCH_3	Cl	CH_3	CH_3
2021	OCH_3	OCH_3	Cl	CH_3	OCH_3
2022	OCH_3	OCH_3	Cl	CH_3	Br
2023	OCH_3	OCH_3	Cl	CH_3	F
2024	OCH_3	OCH_3	Cl	OCH_3	H
2025	OCH_3	OCH_3	Cl	OCH_3	CH_3
2026	OCH_3	OCH_3	Cl	OCH_3	OCH_3
2027	OCH_3	OCH_3	Cl	OCH_3	Br
2028	OCH_3	OCH_3	Cl	OCH_3	F
2029	OCH_3	OCH_3	Cl	Cl	H
2030	OCH_3	OCH_3	Cl	Cl	CH_3
2031	OCH_3	OCH_3	Cl	Cl	OCH_3
2032	OCH_3	OCH_3	Cl	Cl	Cl
2033	OCH_3	OCH_3	Cl	Cl	Br
2034	OCH_3	OCH_3	Cl	Cl	F
2035	OCH_3	OCH_3	Cl	Br	H
2036	OCH_3	OCH_3	Cl	Br	CH_3
2037	OCH_3	OCH_3	Cl	Br	OCH_3
2038	OCH_3	OCH_3	Cl	Br	Br
2039	OCH_3	OCH_3	Cl	F	H
2040	OCH_3	OCH_3	Cl	F	CH_3
2041	OCH_3	OCH_3	Cl	F	OCH_3
2042	OCH_3	OCH_3	Cl	F	Br
2043	OCH_3	OCH_3	Cl	F	F
2044	OCH_3	OCH_3	Br	H	H
2045	OCH_3	OCH_3	Br	H	CH_3
2046	OCH_3	OCH_3	Br	H	OCH_3
2047	OCH_3	OCH_3	Br	H	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2048	OCH_3	OCH_3	Br	H	Br
2049	OCH_3	OCH_3	Br	H	F
2050	OCH_3	OCH_3	Br	CH_3	H
2051	OCH_3	OCH_3	Br	CH_3	CH_3
2052	OCH_3	OCH_3	Br	CH_3	OCH_3
2053	OCH_3	OCH_3	Br	CH_3	Cl
2054	OCH_3	OCH_3	Br	CH_3	F
2055	OCH_3	OCH_3	Br	OCH_3	H
2056	OCH_3	OCH_3	Br	OCH_3	CH_3
2057	OCH_3	OCH_3	Br	OCH_3	OCH_3
2058	OCH_3	OCH_3	Br	OCH_3	Cl
2059	OCH_3	OCH_3	Br	OCH_3	F
2060	OCH_3	OCH_3	Br	Cl	H
2061	OCH_3	OCH_3	Br	Cl	CH_3
2062	OCH_3	OCH_3	Br	Cl	OCH_3
2063	OCH_3	OCH_3	Br	Cl	Cl
2064	OCH_3	OCH_3	Br	Cl	F
2065	OCH_3	OCH_3	Br	Br	H
2066	OCH_3	OCH_3	Br	Br	CH_3
2067	OCH_3	OCH_3	Br	Br	OCH_3
2068	OCH_3	OCH_3	Br	Br	Cl
2069	OCH_3	OCH_3	Br	Br	Br
2070	OCH_3	OCH_3	Br	Br	F
2071	OCH_3	OCH_3	Br	F	H
2072	OCH_3	OCH_3	Br	F	CH_3
2073	OCH_3	OCH_3	Br	F	OCH_3
2074	OCH_3	OCH_3	Br	F	Cl
2075	OCH_3	OCH_3	Br	F	F
2076	OCH_3	OCH_3	F	H	H
2077	OCH_3	OCH_3	F	H	CH_3
2078	OCH_3	OCH_3	F	H	OCH_3
2079	OCH_3	OCH_3	F	H	Cl
2080	OCH_3	OCH_3	F	H	Br
2081	OCH_3	OCH_3	F	H	F
2082	OCH_3	OCH_3	F	CH_3	H
2083	OCH_3	OCH_3	F	CH_3	CH_3
2084	OCH_3	OCH_3	F	CH_3	OCH_3
2085	OCH_3	OCH_3	F	CH_3	Cl
2086	OCH_3	OCH_3	F	CH_3	Br
2087	OCH_3	OCH_3	F	OCH_3	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2088	OCH_3	OCH_3	F	OCH_3	CH_3
2089	OCH_3	OCH_3	F	OCH_3	OCH_3
2090	OCH_3	OCH_3	F	OCH_3	Cl
2091	OCH_3	OCH_3	F	OCH_3	Br
2092	OCH_3	OCH_3	F	Cl	H
2093	OCH_3	OCH_3	F	Cl	CH_3
2094	OCH_3	OCH_3	F	Cl	OCH_3
2095	OCH_3	OCH_3	F	Cl	Cl
2096	OCH_3	OCH_3	F	Cl	Br
2097	OCH_3	OCH_3	F	Br	H
2098	OCH_3	OCH_3	F	Br	CH_3
2099	OCH_3	OCH_3	F	Br	OCH_3
2100	OCH_3	OCH_3	F	Br	Cl
2101	OCH_3	OCH_3	F	Br	Br
2102	OCH_3	OCH_3	F	F	H
2103	OCH_3	OCH_3	F	F	CH_3
2104	OCH_3	OCH_3	F	F	OCH_3
2105	OCH_3	OCH_3	F	F	Cl
2106	OCH_3	OCH_3	F	F	Br
2107	OCH_3	OCH_3	F	F	F
2108	OCH_3	Cl	CH_3	H	H
2109	OCH_3	Cl	CH_3	H	CH_3
2110	OCH_3	Cl	CH_3	H	OCH_3
2111	OCH_3	Cl	CH_3	H	Cl
2112	OCH_3	Cl	CH_3	H	Br
2113	OCH_3	Cl	CH_3	H	F
2114	OCH_3	Cl	CH_3	CH_3	H
2115	OCH_3	Cl	CH_3	CH_3	CH_3
2116	OCH_3	Cl	CH_3	CH_3	OCH_3
2117	OCH_3	Cl	CH_3	CH_3	Cl
2118	OCH_3	Cl	CH_3	CH_3	Br
2119	OCH_3	Cl	CH_3	CH_3	F
2120	OCH_3	Cl	CH_3	OCH_3	H
2121	OCH_3	Cl	CH_3	OCH_3	OCH_3
2122	OCH_3	Cl	CH_3	OCH_3	Cl
2123	OCH_3	Cl	CH_3	OCH_3	Br
2124	OCH_3	Cl	CH_3	OCH_3	F
2125	OCH_3	Cl	CH_3	Cl	H
2126	OCH_3	Cl	CH_3	Cl	OCH_3
2127	OCH_3	Cl	CH_3	Cl	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2128	OCH_3	Cl	CH_3	Cl	Br
2129	OCH_3	Cl	CH_3	Cl	F
2130	OCH_3	Cl	CH_3	Br	H
2131	OCH_3	Cl	CH_3	Br	OCH_3
2132	OCH_3	Cl	CH_3	Br	Cl
2133	OCH_3	Cl	CH_3	Br	Br
2134	OCH_3	Cl	CH_3	Br	F
2135	OCH_3	Cl	CH_3	F	H
2136	OCH_3	Cl	CH_3	F	OCH_3
2137	OCH_3	Cl	CH_3	F	Cl
2138	OCH_3	Cl	CH_3	F	Br
2139	OCH_3	Cl	CH_3	F	F
2140	OCH_3	Cl	OCH_3	H	H
2141	OCH_3	Cl	OCH_3	H	CH_3
2142	OCH_3	Cl	OCH_3	H	OCH_3
2143	OCH_3	Cl	OCH_3	H	Cl
2144	OCH_3	Cl	OCH_3	H	Br
2145	OCH_3	Cl	OCH_3	H	F
2146	OCH_3	Cl	OCH_3	CH_3	H
2147	OCH_3	Cl	OCH_3	CH_3	CH_3
2148	OCH_3	Cl	OCH_3	CH_3	Cl
2149	OCH_3	Cl	OCH_3	CH_3	Br
2150	OCH_3	Cl	OCH_3	CH_3	F
2151	OCH_3	Cl	OCH_3	OCH_3	H
2152	OCH_3	Cl	OCH_3	OCH_3	CH_3
2153	OCH_3	Cl	OCH_3	OCH_3	OCH_3
2154	OCH_3	Cl	OCH_3	OCH_3	Cl
2155	OCH_3	Cl	OCH_3	OCH_3	Br
2156	OCH_3	Cl	OCH_3	OCH_3	F
2157	OCH_3	Cl	OCH_3	Cl	H
2158	OCH_3	Cl	OCH_3	Cl	CH_3
2159	OCH_3	Cl	OCH_3	Cl	Cl
2160	OCH_3	Cl	OCH_3	Cl	Br
2161	OCH_3	Cl	OCH_3	Cl	F
2162	OCH_3	Cl	OCH_3	Br	H
2163	OCH_3	Cl	OCH_3	Br	CH_3
2164	OCH_3	Cl	OCH_3	Br	Cl
2165	OCH_3	Cl	OCH_3	Br	Br
2166	OCH_3	Cl	OCH_3	Br	F
2167	OCH_3	Cl	OCH_3	F	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2168	OCH_3	Cl	OCH_3	F	CH_3
2169	OCH_3	Cl	OCH_3	F	Cl
2170	OCH_3	Cl	OCH_3	F	Br
2171	OCH_3	Cl	OCH_3	F	F
2172	OCH_3	Cl	Cl	H	H
2173	OCH_3	Cl	Cl	H	CH_3
2174	OCH_3	Cl	Cl	H	OCH_3
2175	OCH_3	Cl	Cl	H	Cl
2176	OCH_3	Cl	Cl	H	Br
2177	OCH_3	Cl	Cl	H	F
2178	OCH_3	Cl	Cl	CH_3	H
2179	OCH_3	Cl	Cl	CH_3	CH_3
2180	OCH_3	Cl	Cl	CH_3	OCH_3
2181	OCH_3	Cl	Cl	CH_3	Br
2182	OCH_3	Cl	Cl	CH_3	F
2183	OCH_3	Cl	Cl	OCH_3	H
2184	OCH_3	Cl	Cl	OCH_3	CH_3
2185	OCH_3	Cl	Cl	OCH_3	OCH_3
2186	OCH_3	Cl	Cl	OCH_3	Br
2187	OCH_3	Cl	Cl	OCH_3	F
2188	OCH_3	Cl	Cl	Cl	H
2189	OCH_3	Cl	Cl	Cl	CH_3
2190	OCH_3	Cl	Cl	Cl	OCH_3
2191	OCH_3	Cl	Cl	Cl	Cl
2192	OCH_3	Cl	Cl	Cl	Br
2193	OCH_3	Cl	Cl	Cl	F
2194	OCH_3	Cl	Cl	Br	H
2195	OCH_3	Cl	Cl	Br	CH_3
2196	OCH_3	Cl	Cl	Br	OCH_3
2197	OCH_3	Cl	Cl	Br	Br
2198	OCH_3	Cl	Cl	F	H
2199	OCH_3	Cl	Cl	F	CH_3
2200	OCH_3	Cl	Cl	F	OCH_3
2201	OCH_3	Cl	Cl	F	Br
2202	OCH_3	Cl	Cl	F	F
2203	OCH_3	Cl	Br	H	H
2204	OCH_3	Cl	Br	H	CH_3
2205	OCH_3	Cl	Br	H	OCH_3
2206	OCH_3	Cl	Br	H	Cl
2207	OCH_3	Cl	Br	H	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2208	OCH_3	Cl	Br	H	F
2209	OCH_3	Cl	Br	CH_3	H
2210	OCH_3	Cl	Br	CH_3	CH_3
2211	OCH_3	Cl	Br	CH_3	OCH_3
2212	OCH_3	Cl	Br	CH_3	Cl
2213	OCH_3	Cl	Br	CH_3	F
2214	OCH_3	Cl	Br	OCH_3	H
2215	OCH_3	Cl	Br	OCH_3	CH_3
2216	OCH_3	Cl	Br	OCH_3	OCH_3
2217	OCH_3	Cl	Br	OCH_3	Cl
2218	OCH_3	Cl	Br	OCH_3	F
2219	OCH_3	Cl	Br	Cl	H
2220	OCH_3	Cl	Br	Cl	CH_3
2221	OCH_3	Cl	Br	Cl	OCH_3
2222	OCH_3	Cl	Br	Cl	Cl
2223	OCH_3	Cl	Br	Cl	F
2224	OCH_3	Cl	Br	Br	H
2225	OCH_3	Cl	Br	Br	CH_3
2226	OCH_3	Cl	Br	Br	OCH_3
2227	OCH_3	Cl	Br	Br	Cl
2228	OCH_3	Cl	Br	Br	Br
2229	OCH_3	Cl	Br	Br	F
2230	OCH_3	Cl	Br	F	H
2231	OCH_3	Cl	Br	F	CH_3
2232	OCH_3	Cl	Br	F	OCH_3
2233	OCH_3	Cl	Br	F	Cl
2234	OCH_3	Cl	Br	F	F
2235	OCH_3	Cl	F	H	H
2236	OCH_3	Cl	F	H	CH_3
2237	OCH_3	Cl	F	H	OCH_3
2238	OCH_3	Cl	F	H	Cl
2239	OCH_3	Cl	F	H	Br
2240	OCH_3	Cl	F	H	F
2241	OCH_3	Cl	F	CH_3	H
2242	OCH_3	Cl	F	CH_3	CH_3
2243	OCH_3	Cl	F	CH_3	OCH_3
2244	OCH_3	Cl	F	CH_3	Cl
2245	OCH_3	Cl	F	CH_3	Br
2246	OCH_3	Cl	F	OCH_3	H
2247	OCH_3	Cl	F	OCH_3	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2248	OCH_3	Cl	F	OCH_3	OCH_3
2249	OCH_3	Cl	F	OCH_3	Cl
2250	OCH_3	Cl	F	OCH_3	Br
2251	OCH_3	Cl	F	Cl	H
2252	OCH_3	Cl	F	Cl	CH_3
2253	OCH_3	Cl	F	Cl	OCH_3
2254	OCH_3	Cl	F	Cl	Cl
2255	OCH_3	Cl	F	Cl	Br
2256	OCH_3	Cl	F	Br	H
2257	OCH_3	Cl	F	Br	CH_3
2258	OCH_3	Cl	F	Br	OCH_3
2259	OCH_3	Cl	F	Br	Cl
2260	OCH_3	Cl	F	Br	Br
2261	OCH_3	Cl	F	F	H
2262	OCH_3	Cl	F	F	CH_3
2263	OCH_3	Cl	F	F	OCH_3
2264	OCH_3	Cl	F	F	Cl
2265	OCH_3	Cl	F	F	Br
2266	OCH_3	Cl	F	F	F
2267	OCH_3	Br	CH_3	H	H
2268	OCH_3	Br	CH_3	H	CH_3
2269	OCH_3	Br	CH_3	H	OCH_3
2270	OCH_3	Br	CH_3	H	Cl
2271	OCH_3	Br	CH_3	H	Br
2272	OCH_3	Br	CH_3	H	F
2273	OCH_3	Br	CH_3	CH_3	H
2274	OCH_3	Br	CH_3	CH_3	CH_3
2275	OCH_3	Br	CH_3	CH_3	OCH_3
2276	OCH_3	Br	CH_3	CH_3	Cl
2277	OCH_3	Br	CH_3	CH_3	Br
2278	OCH_3	Br	CH_3	CH_3	F
2279	OCH_3	Br	CH_3	OCH_3	H
2280	OCH_3	Br	CH_3	OCH_3	OCH_3
2281	OCH_3	Br	CH_3	OCH_3	Cl
2282	OCH_3	Br	CH_3	OCH_3	Br
2283	OCH_3	Br	CH_3	OCH_3	F
2284	OCH_3	Br	CH_3	Cl	H
2285	OCH_3	Br	CH_3	Cl	OCH_3
2286	OCH_3	Br	CH_3	Cl	Cl
2287	OCH_3	Br	CH_3	Cl	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2288	OCH_3	Br	CH_3	Cl	F
2289	OCH_3	Br	CH_3	Br	H
2290	OCH_3	Br	CH_3	Br	OCH_3
2291	OCH_3	Br	CH_3	Br	Cl
2292	OCH_3	Br	CH_3	Br	Br
2293	OCH_3	Br	CH_3	Br	F
2294	OCH_3	Br	CH_3	F	H
2295	OCH_3	Br	CH_3	F	OCH_3
2296	OCH_3	Br	CH_3	F	Cl
2297	OCH_3	Br	CH_3	F	Br
2298	OCH_3	Br	CH_3	F	F
2299	OCH_3	Br	OCH_3	H	H
2300	OCH_3	Br	OCH_3	H	CH_3
2301	OCH_3	Br	OCH_3	H	OCH_3
2302	OCH_3	Br	OCH_3	H	Cl
2303	OCH_3	Br	OCH_3	H	Br
2304	OCH_3	Br	OCH_3	H	F
2305	OCH_3	Br	OCH_3	CH_3	H
2306	OCH_3	Br	OCH_3	CH_3	CH_3
2307	OCH_3	Br	OCH_3	CH_3	Cl
2308	OCH_3	Br	OCH_3	CH_3	Br
2309	OCH_3	Br	OCH_3	CH_3	F
2310	OCH_3	Br	OCH_3	OCH_3	H
2311	OCH_3	Br	OCH_3	OCH_3	CH_3
2312	OCH_3	Br	OCH_3	OCH_3	OCH_3
2313	OCH_3	Br	OCH_3	OCH_3	Cl
2314	OCH_3	Br	OCH_3	OCH_3	Br
2315	OCH_3	Br	OCH_3	OCH_3	F
2316	OCH_3	Br	OCH_3	Cl	H
2317	OCH_3	Br	OCH_3	Cl	CH_3
2318	OCH_3	Br	OCH_3	Cl	Cl
2319	OCH_3	Br	OCH_3	Cl	Br
2320	OCH_3	Br	OCH_3	Cl	F
2321	OCH_3	Br	OCH_3	Br	H
2322	OCH_3	Br	OCH_3	Br	CH_3
2323	OCH_3	Br	OCH_3	Br	Cl
2324	OCH_3	Br	OCH_3	Br	Br
2325	OCH_3	Br	OCH_3	Br	F
2326	OCH_3	Br	OCH_3	F	H
2327	OCH_3	Br	OCH_3	F	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2328	OCH_3	Br	OCH_3	F	Cl
2329	OCH_3	Br	OCH_3	F	Br
2330	OCH_3	Br	OCH_3	F	F
2331	OCH_3	Br	Cl	H	H
2332	OCH_3	Br	Cl	H	CH_3
2333	OCH_3	Br	Cl	H	OCH_3
2334	OCH_3	Br	Cl	H	Cl
2335	OCH_3	Br	Cl	H	Br
2336	OCH_3	Br	Cl	H	F
2337	OCH_3	Br	Cl	CH_3	H
2338	OCH_3	Br	Cl	CH_3	CH_3
2339	OCH_3	Br	Cl	CH_3	OCH_3
2340	OCH_3	Br	Cl	CH_3	Br
2341	OCH_3	Br	Cl	CH_3	F
2342	OCH_3	Br	Cl	OCH_3	H
2343	OCH_3	Br	Cl	OCH_3	CH_3
2344	OCH_3	Br	Cl	OCH_3	OCH_3
2345	OCH_3	Br	Cl	OCH_3	Br
2346	OCH_3	Br	Cl	OCH_3	F
2347	OCH_3	Br	Cl	Cl	H
2348	OCH_3	Br	Cl	Cl	CH_3
2349	OCH_3	Br	Cl	Cl	OCH_3
2350	OCH_3	Br	Cl	Cl	Cl
2351	OCH_3	Br	Cl	Cl	Br
2352	OCH_3	Br	Cl	Cl	F
2353	OCH_3	Br	Cl	Br	H
2354	OCH_3	Br	Cl	Br	CH_3
2355	OCH_3	Br	Cl	Br	OCH_3
2356	OCH_3	Br	Cl	Br	Br
2357	OCH_3	Br	Cl	F	H
2358	OCH_3	Br	Cl	F	CH_3
2359	OCH_3	Br	Cl	F	OCH_3
2360	OCH_3	Br	Cl	F	Br
2361	OCH_3	Br	Cl	F	F
2362	OCH_3	Br	Br	H	H
2363	OCH_3	Br	Br	H	CH_3
2364	OCH_3	Br	Br	H	OCH_3
2365	OCH_3	Br	Br	H	Cl
2366	OCH_3	Br	Br	H	Br
2367	OCH_3	Br	Br	H	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2368	OCH_3	Br	Br	CH_3	H
2369	OCH_3	Br	Br	CH_3	CH_3
2370	OCH_3	Br	Br	CH_3	OCH_3
2371	OCH_3	Br	Br	CH_3	Cl
2372	OCH_3	Br	Br	CH_3	F
2373	OCH_3	Br	Br	OCH_3	H
2374	OCH_3	Br	Br	OCH_3	CH_3
2375	OCH_3	Br	Br	OCH_3	OCH_3
2376	OCH_3	Br	Br	OCH_3	Cl
2377	OCH_3	Br	Br	OCH_3	F
2378	OCH_3	Br	Br	Cl	H
2379	OCH_3	Br	Br	Cl	CH_3
2380	OCH_3	Br	Br	Cl	OCH_3
2381	OCH_3	Br	Br	Cl	Cl
2382	OCH_3	Br	Br	Cl	F
2383	OCH_3	Br	Br	Br	H
2384	OCH_3	Br	Br	Br	CH_3
2385	OCH_3	Br	Br	Br	OCH_3
2386	OCH_3	Br	Br	Br	Cl
2387	OCH_3	Br	Br	Br	Br
2388	OCH_3	Br	Br	Br	F
2389	OCH_3	Br	Br	F	H
2390	OCH_3	Br	Br	F	CH_3
2391	OCH_3	Br	Br	F	OCH_3
2392	OCH_3	Br	Br	F	Cl
2393	OCH_3	Br	Br	F	F
2394	OCH_3	Br	F	H	H
2395	OCH_3	Br	F	H	CH_3
2396	OCH_3	Br	F	H	OCH_3
2397	OCH_3	Br	F	H	Cl
2398	OCH_3	Br	F	H	Br
2399	OCH_3	Br	F	H	F
2400	OCH_3	Br	F	CH_3	H
2401	OCH_3	Br	F	CH_3	CH_3
2402	OCH_3	Br	F	CH_3	OCH_3
2403	OCH_3	Br	F	CH_3	Cl
2404	OCH_3	Br	F	CH_3	Br
2405	OCH_3	Br	F	OCH_3	H
2406	OCH_3	Br	F	OCH_3	CH_3
2407	OCH_3	Br	F	OCH_3	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2408	OCH_3	Br	F	OCH_3	Cl
2409	OCH_3	Br	F	OCH_3	Br
2410	OCH_3	Br	F	Cl	H
2411	OCH_3	Br	F	Cl	CH_3
2412	OCH_3	Br	F	Cl	OCH_3
2413	OCH_3	Br	F	Cl	Cl
2414	OCH_3	Br	F	Cl	Br
2415	OCH_3	Br	F	Br	H
2416	OCH_3	Br	F	Br	CH_3
2417	OCH_3	Br	F	Br	OCH_3
2418	OCH_3	Br	F	Br	Cl
2419	OCH_3	Br	F	Br	Br
2420	OCH_3	Br	F	F	H
2421	OCH_3	Br	F	F	CH_3
2422	OCH_3	Br	F	F	OCH_3
2423	OCH_3	Br	F	F	Cl
2424	OCH_3	Br	F	F	Br
2425	OCH_3	Br	F	F	F
2426	OCH_3	F	CH_3	H	H
2427	OCH_3	F	CH_3	H	CH_3
2428	OCH_3	F	CH_3	H	OCH_3
2429	OCH_3	F	CH_3	H	Cl
2430	OCH_3	F	CH_3	H	Br
2431	OCH_3	F	CH_3	H	F
2432	OCH_3	F	CH_3	CH_3	H
2433	OCH_3	F	CH_3	CH_3	CH_3
2434	OCH_3	F	CH_3	CH_3	OCH_3
2435	OCH_3	F	CH_3	CH_3	Cl
2436	OCH_3	F	CH_3	CH_3	Br
2437	OCH_3	F	CH_3	CH_3	F
2438	OCH_3	F	CH_3	OCH_3	H
2439	OCH_3	F	CH_3	OCH_3	OCH_3
2440	OCH_3	F	CH_3	OCH_3	Cl
2441	OCH_3	F	CH_3	OCH_3	Br
2442	OCH_3	F	CH_3	OCH_3	F
2443	OCH_3	F	CH_3	Cl	H
2444	OCH_3	F	CH_3	Cl	OCH_3
2445	OCH_3	F	CH_3	Cl	Cl
2446	OCH_3	F	CH_3	Cl	Br
2447	OCH_3	F	CH_3	Cl	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2448	OCH_3	F	CH_3	Br	H
2449	OCH_3	F	CH_3	Br	OCH_3
2450	OCH_3	F	CH_3	Br	Cl
2451	OCH_3	F	CH_3	Br	Br
2452	OCH_3	F	CH_3	Br	F
2453	OCH_3	F	CH_3	F	H
2454	OCH_3	F	CH_3	F	OCH_3
2455	OCH_3	F	CH_3	F	Cl
2456	OCH_3	F	CH_3	F	Br
2457	OCH_3	F	CH_3	F	F
2458	OCH_3	F	OCH_3	H	H
2459	OCH_3	F	OCH_3	H	CH_3
2460	OCH_3	F	OCH_3	H	OCH_3
2461	OCH_3	F	OCH_3	H	Cl
2462	OCH_3	F	OCH_3	H	Br
2463	OCH_3	F	OCH_3	H	F
2464	OCH_3	F	OCH_3	CH_3	H
2465	OCH_3	F	OCH_3	CH_3	CH_3
2466	OCH_3	F	OCH_3	CH_3	Cl
2467	OCH_3	F	OCH_3	CH_3	Br
2468	OCH_3	F	OCH_3	CH_3	F
2469	OCH_3	F	OCH_3	OCH_3	H
2470	OCH_3	F	OCH_3	OCH_3	CH_3
2471	OCH_3	F	OCH_3	OCH_3	OCH_3
2472	OCH_3	F	OCH_3	OCH_3	Cl
2473	OCH_3	F	OCH_3	OCH_3	Br
2474	OCH_3	F	OCH_3	OCH_3	F
2475	OCH_3	F	OCH_3	Cl	H
2476	OCH_3	F	OCH_3	Cl	CH_3
2477	OCH_3	F	OCH_3	Cl	Cl
2478	OCH_3	F	OCH_3	Cl	Br
2479	OCH_3	F	OCH_3	Cl	F
2480	OCH_3	F	OCH_3	Br	H
2481	OCH_3	F	OCH_3	Br	CH_3
2482	OCH_3	F	OCH_3	Br	Cl
2483	OCH_3	F	OCH_3	Br	Br
2484	OCH_3	F	OCH_3	Br	F
2485	OCH_3	F	OCH_3	F	H
2486	OCH_3	F	OCH_3	F	CH_3
2487	OCH_3	F	OCH_3	F	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2488	OCH_3	F	OCH_3	F	Br
2489	OCH_3	F	OCH_3	F	F
2490	OCH_3	F	Cl	H	H
2491	OCH_3	F	Cl	H	CH_3
2492	OCH_3	F	Cl	H	OCH_3
2493	OCH_3	F	Cl	H	Cl
2494	OCH_3	F	Cl	H	Br
2495	OCH_3	F	Cl	H	F
2496	OCH_3	F	Cl	CH_3	H
2497	OCH_3	F	Cl	CH_3	CH_3
2498	OCH_3	F	Cl	CH_3	OCH_3
2499	OCH_3	F	Cl	CH_3	Br
2500	OCH_3	F	Cl	CH_3	F
2501	OCH_3	F	Cl	OCH_3	H
2502	OCH_3	F	Cl	OCH_3	CH_3
2503	OCH_3	F	Cl	OCH_3	OCH_3
2504	OCH_3	F	Cl	OCH_3	Br
2505	OCH_3	F	Cl	OCH_3	F
2506	OCH_3	F	Cl	Cl	H
2507	OCH_3	F	Cl	Cl	CH_3
2508	OCH_3	F	Cl	Cl	OCH_3
2509	OCH_3	F	Cl	Cl	Cl
2510	OCH_3	F	Cl	Cl	Br
2511	OCH_3	F	Cl	Cl	F
2512	OCH_3	F	Cl	Br	H
2513	OCH_3	F	Cl	Br	CH_3
2514	OCH_3	F	Cl	Br	OCH_3
2515	OCH_3	F	Cl	Br	Br
2516	OCH_3	F	Cl	F	H
2517	OCH_3	F	Cl	F	CH_3
2518	OCH_3	F	Cl	F	OCH_3
2519	OCH_3	F	Cl	F	Br
2520	OCH_3	F	Cl	F	F
2521	OCH_3	F	Br	H	H
2522	OCH_3	F	Br	H	CH_3
2523	OCH_3	F	Br	H	OCH_3
2524	OCH_3	F	Br	H	Cl
2525	OCH_3	F	Br	H	Br
2526	OCH_3	F	Br	H	F
2527	OCH_3	F	Br	CH_3	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2528	OCH_3	F	Br	CH_3	CH_3
2529	OCH_3	F	Br	CH_3	OCH_3
2530	OCH_3	F	Br	CH_3	Cl
2531	OCH_3	F	Br	CH_3	F
2532	OCH_3	F	Br	OCH_3	H
2533	OCH_3	F	Br	OCH_3	CH_3
2534	OCH_3	F	Br	OCH_3	OCH_3
2535	OCH_3	F	Br	OCH_3	Cl
2536	OCH_3	F	Br	OCH_3	F
2537	OCH_3	F	Br	Cl	H
2538	OCH_3	F	Br	Cl	CH_3
2539	OCH_3	F	Br	Cl	OCH_3
2540	OCH_3	F	Br	Cl	Cl
2541	OCH_3	F	Br	Cl	F
2542	OCH_3	F	Br	Br	H
2543	OCH_3	F	Br	Br	CH_3
2544	OCH_3	F	Br	Br	OCH_3
2545	OCH_3	F	Br	Br	Cl
2546	OCH_3	F	Br	Br	Br
2547	OCH_3	F	Br	Br	F
2548	OCH_3	F	Br	F	H
2549	OCH_3	F	Br	F	CH_3
2550	OCH_3	F	Br	F	OCH_3
2551	OCH_3	F	Br	F	Cl
2552	OCH_3	F	Br	F	F
2553	OCH_3	F	F	H	H
2554	OCH_3	F	F	H	CH_3
2555	OCH_3	F	F	H	OCH_3
2556	OCH_3	F	F	H	Cl
2557	OCH_3	F	F	H	Br
2558	OCH_3	F	F	H	F
2559	OCH_3	F	F	CH_3	H
2560	OCH_3	F	F	CH_3	CH_3
2561	OCH_3	F	F	CH_3	OCH_3
2562	OCH_3	F	F	CH_3	Cl
2563	OCH_3	F	F	CH_3	Br
2564	OCH_3	F	F	OCH_3	H
2565	OCH_3	F	F	OCH_3	CH_3
2566	OCH_3	F	F	OCH_3	OCH_3
2567	OCH_3	F	F	OCH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2568	OCH_3	F	F	OCH_3	Br
2569	OCH_3	F	F	Cl	H
2570	OCH_3	F	F	Cl	CH_3
2571	OCH_3	F	F	Cl	OCH_3
2572	OCH_3	F	F	Cl	Cl
2573	OCH_3	F	F	Cl	Br
2574	OCH_3	F	F	Br	H
2575	OCH_3	F	F	Br	CH_3
2576	OCH_3	F	F	Br	OCH_3
2577	OCH_3	F	F	Br	Cl
2578	OCH_3	F	F	Br	Br
2579	OCH_3	F	F	F	H
2580	OCH_3	F	F	F	CH_3
2581	OCH_3	F	F	F	OCH_3
2582	OCH_3	F	F	F	Cl
2583	OCH_3	F	F	F	Br
2584	OCH_3	F	F	F	F
2585	Cl	CH_3	CH_3	H	H
2586	Cl	CH_3	CH_3	CH_3	H
2587	Cl	CH_3	CH_3	OCH_3	H
2588	Cl	CH_3	CH_3	Cl	H
2589	Cl	CH_3	CH_3	Br	H
2590	Cl	CH_3	CH_3	F	H
2591	Cl	CH_3	CH_3	H	CH_3
2592	Cl	CH_3	CH_3	CH_3	CH_3
2593	Cl	CH_3	CH_3	H	OCH_3
2594	Cl	CH_3	CH_3	CH_3	OCH_3
2595	Cl	CH_3	CH_3	OCH_3	OCH_3
2596	Cl	CH_3	CH_3	Cl	OCH_3
2597	Cl	CH_3	CH_3	Br	OCH_3
2598	Cl	CH_3	CH_3	F	OCH_3
2599	Cl	CH_3	CH_3	H	Cl
2600	Cl	CH_3	CH_3	CH_3	Cl
2601	Cl	CH_3	CH_3	OCH_3	Cl
2602	Cl	CH_3	CH_3	Cl	Cl
2603	Cl	CH_3	CH_3	Br	Cl
2604	Cl	CH_3	CH_3	F	Cl
2605	Cl	CH_3	CH_3	H	Br
2606	Cl	CH_3	CH_3	CH_3	Br
2607	Cl	CH_3	CH_3	OCH_3	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2608	Cl	CH_3	CH_3	Cl	Br
2609	Cl	CH_3	CH_3	Br	Br
2610	Cl	CH_3	CH_3	F	Br
2611	Cl	CH_3	CH_3	H	F
2612	Cl	CH_3	CH_3	CH_3	F
2613	Cl	CH_3	CH_3	OCH_3	F
2614	Cl	CH_3	CH_3	Cl	F
2615	Cl	CH_3	CH_3	Br	F
2616	Cl	CH_3	CH_3	F	F
2617	Cl	CH_3	OCH_3	H	H
2618	Cl	CH_3	OCH_3	CH_3	H
2619	Cl	CH_3	OCH_3	OCH_3	H
2620	Cl	CH_3	OCH_3	Cl	H
2621	Cl	CH_3	OCH_3	Br	H
2622	Cl	CH_3	OCH_3	F	H
2623	Cl	CH_3	OCH_3	H	CH_3
2624	Cl	CH_3	OCH_3	CH_3	CH_3
2625	Cl	CH_3	OCH_3	OCH_3	CH_3
2626	Cl	CH_3	OCH_3	Cl	CH_3
2627	Cl	CH_3	OCH_3	Br	CH_3
2628	Cl	CH_3	OCH_3	F	CH_3
2629	Cl	CH_3	OCH_3	H	OCH_3
2630	Cl	CH_3	OCH_3	OCH_3	OCH_3
2631	Cl	CH_3	OCH_3	H	Cl
2632	Cl	CH_3	OCH_3	CH_3	Cl
2633	Cl	CH_3	OCH_3	OCH_3	Cl
2634	Cl	CH_3	OCH_3	Cl	Cl
2635	Cl	CH_3	OCH_3	Br	Cl
2636	Cl	CH_3	OCH_3	F	Cl
2637	Cl	CH_3	OCH_3	H	Br
2638	Cl	CH_3	OCH_3	CH_3	Br
2639	Cl	CH_3	OCH_3	OCH_3	Br
2640	Cl	CH_3	OCH_3	Cl	Br
2641	Cl	CH_3	OCH_3	Br	Br
2642	Cl	CH_3	OCH_3	F	Br
2643	Cl	CH_3	OCH_3	H	F
2644	Cl	CH_3	OCH_3	CH_3	F
2645	Cl	CH_3	OCH_3	OCH_3	F
2646	Cl	CH_3	OCH_3	Cl	F
2647	Cl	CH_3	OCH_3	Br	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2648	Cl	CH_3	OCH_3	F	F
2649	Cl	CH_3	Cl	H	H
2650	Cl	CH_3	Cl	CH_3	H
2651	Cl	CH_3	Cl	OCH_3	H
2652	Cl	CH_3	Cl	Cl	H
2653	Cl	CH_3	Cl	Br	H
2654	Cl	CH_3	Cl	F	H
2655	Cl	CH_3	Cl	H	CH_3
2656	Cl	CH_3	Cl	CH_3	CH_3
2657	Cl	CH_3	Cl	OCH_3	CH_3
2658	Cl	CH_3	Cl	Cl	CH_3
2659	Cl	CH_3	Cl	Br	CH_3
2660	Cl	CH_3	Cl	F	CH_3
2661	Cl	CH_3	Cl	H	OCH_3
2662	Cl	CH_3	Cl	CH_3	OCH_3
2663	Cl	CH_3	Cl	OCH_3	OCH_3
2664	Cl	CH_3	Cl	Cl	OCH_3
2665	Cl	CH_3	Cl	Br	OCH_3
2666	Cl	CH_3	Cl	F	OCH_3
2667	Cl	CH_3	Cl	H	Cl
2668	Cl	CH_3	Cl	Cl	Cl
2669	Cl	CH_3	Cl	H	Br
2670	Cl	CH_3	Cl	CH_3	Br
2671	Cl	CH_3	Cl	OCH_3	Br
2672	Cl	CH_3	Cl	Cl	Br
2673	Cl	CH_3	Cl	Br	Br
2674	Cl	CH_3	Cl	F	Br
2675	Cl	CH_3	Cl	H	F
2676	Cl	CH_3	Cl	CH_3	F
2677	Cl	CH_3	Cl	OCH_3	F
2678	Cl	CH_3	Cl	Cl	F
2679	Cl	CH_3	Cl	F	F
2680	Cl	CH_3	Br	H	H
2681	Cl	CH_3	Br	CH_3	H
2682	Cl	CH_3	Br	OCH_3	H
2683	Cl	CH_3	Br	Cl	H
2684	Cl	CH_3	Br	Br	H
2685	Cl	CH_3	Br	F	H
2686	Cl	CH_3	Br	H	CH_3
2687	Cl	CH_3	Br	CH_3	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2688	Cl	CH_3	Br	OCH_3	CH_3
2689	Cl	CH_3	Br	Cl	CH_3
2690	Cl	CH_3	Br	Br	CH_3
2691	Cl	CH_3	Br	F	CH_3
2692	Cl	CH_3	Br	H	OCH_3
2693	Cl	CH_3	Br	CH_3	OCH_3
2694	Cl	CH_3	Br	OCH_3	OCH_3
2695	Cl	CH_3	Br	Cl	OCH_3
2696	Cl	CH_3	Br	Br	OCH_3
2697	Cl	CH_3	Br	F	OCH_3
2698	Cl	CH_3	Br	H	Cl
2699	Cl	CH_3	Br	CH_3	Cl
2700	Cl	CH_3	Br	OCH_3	Cl
2701	Cl	CH_3	Br	Cl	Cl
2702	Cl	CH_3	Br	Br	Cl
2703	Cl	CH_3	Br	F	Cl
2704	Cl	CH_3	Br	H	Br
2705	Cl	CH_3	Br	Br	Br
2706	Cl	CH_3	Br	H	F
2707	Cl	CH_3	Br	CH_3	F
2708	Cl	CH_3	Br	OCH_3	F
2709	Cl	CH_3	Br	Cl	F
2710	Cl	CH_3	Br	Br	F
2711	Cl	CH_3	Br	F	F
2712	Cl	CH_3	F	H	H
2713	Cl	CH_3	F	CH_3	H
2714	Cl	CH_3	F	OCH_3	H
2715	Cl	CH_3	F	Cl	H
2716	Cl	CH_3	F	Br	H
2717	Cl	CH_3	F	F	H
2718	Cl	CH_3	F	H	CH_3
2719	Cl	CH_3	F	CH_3	CH_3
2720	Cl	CH_3	F	OCH_3	CH_3
2721	Cl	CH_3	F	Cl	CH_3
2722	Cl	CH_3	F	Br	CH_3
2723	Cl	CH_3	F	F	CH_3
2724	Cl	CH_3	F	H	OCH_3
2725	Cl	CH_3	F	CH_3	OCH_3
2726	Cl	CH_3	F	OCH_3	OCH_3
2727	Cl	CH_3	F	Cl	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2728	Cl	CH_3	F	Br	OCH_3
2729	Cl	CH_3	F	F	OCH_3
2730	Cl	CH_3	F	H	Cl
2731	Cl	CH_3	F	CH_3	Cl
2732	Cl	CH_3	F	OCH_3	Cl
2733	Cl	CH_3	F	Cl	Cl
2734	Cl	CH_3	F	Br	Cl
2735	Cl	CH_3	F	F	Cl
2736	Cl	CH_3	F	H	Br
2737	Cl	CH_3	F	CH_3	Br
2738	Cl	CH_3	F	OCH_3	Br
2739	Cl	CH_3	F	Cl	Br
2740	Cl	CH_3	F	Br	Br
2741	Cl	CH_3	F	F	Br
2742	Cl	CH_3	F	H	F
2743	Cl	CH_3	F	F	F
2744	Cl	OCH_3	CH_3	H	H
2745	Cl	OCH_3	CH_3	H	CH_3
2746	Cl	OCH_3	CH_3	H	OCH_3
2747	Cl	OCH_3	CH_3	H	Cl
2748	Cl	OCH_3	CH_3	H	Br
2749	Cl	OCH_3	CH_3	H	F
2750	Cl	OCH_3	CH_3	CH_3	H
2751	Cl	OCH_3	CH_3	CH_3	CH_3
2752	Cl	OCH_3	CH_3	CH_3	OCH_3
2753	Cl	OCH_3	CH_3	CH_3	Cl
2754	Cl	OCH_3	CH_3	CH_3	Br
2755	Cl	OCH_3	CH_3	CH_3	F
2756	Cl	OCH_3	CH_3	OCH_3	H
2757	Cl	OCH_3	CH_3	OCH_3	OCH_3
2758	Cl	OCH_3	CH_3	OCH_3	Cl
2759	Cl	OCH_3	CH_3	OCH_3	Br
2760	Cl	OCH_3	CH_3	OCH_3	F
2761	Cl	OCH_3	CH_3	Cl	H
2762	Cl	OCH_3	CH_3	Cl	OCH_3
2763	Cl	OCH_3	CH_3	Cl	Cl
2764	Cl	OCH_3	CH_3	Cl	Br
2765	Cl	OCH_3	CH_3	Cl	F
2766	Cl	OCH_3	CH_3	Br	H
2767	Cl	OCH_3	CH_3	Br	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2768	Cl	OCH_3	CH_3	Br	Cl
2769	Cl	OCH_3	CH_3	Br	Br
2770	Cl	OCH_3	CH_3	Br	F
2771	Cl	OCH_3	CH_3	F	H
2772	Cl	OCH_3	CH_3	F	OCH_3
2773	Cl	OCH_3	CH_3	F	Cl
2774	Cl	OCH_3	CH_3	F	Br
2775	Cl	OCH_3	CH_3	F	F
2776	Cl	OCH_3	OCH_3	H	H
2777	Cl	OCH_3	OCH_3	H	CH_3
2778	Cl	OCH_3	OCH_3	H	OCH_3
2779	Cl	OCH_3	OCH_3	H	Cl
2780	Cl	OCH_3	OCH_3	H	Br
2781	Cl	OCH_3	OCH_3	H	F
2782	Cl	OCH_3	OCH_3	CH_3	H
2783	Cl	OCH_3	OCH_3	CH_3	CH_3
2784	Cl	OCH_3	OCH_3	CH_3	Cl
2785	Cl	OCH_3	OCH_3	CH_3	Br
2786	Cl	OCH_3	OCH_3	CH_3	F
2787	Cl	OCH_3	OCH_3	OCH_3	H
2788	Cl	OCH_3	OCH_3	OCH_3	CH_3
2789	Cl	OCH_3	OCH_3	OCH_3	OCH_3
2790	Cl	OCH_3	OCH_3	OCH_3	Cl
2791	Cl	OCH_3	OCH_3	OCH_3	Br
2792	Cl	OCH_3	OCH_3	OCH_3	F
2793	Cl	OCH_3	OCH_3	Cl	H
2794	Cl	OCH_3	OCH_3	Cl	CH_3
2795	Cl	OCH_3	OCH_3	Cl	Cl
2796	Cl	OCH_3	OCH_3	Cl	Br
2797	Cl	OCH_3	OCH_3	Cl	F
2798	Cl	OCH_3	OCH_3	Br	H
2799	Cl	OCH_3	OCH_3	Br	CH_3
2800	Cl	OCH_3	OCH_3	Br	Cl
2801	Cl	OCH_3	OCH_3	Br	Br
2802	Cl	OCH_3	OCH_3	Br	F
2803	Cl	OCH_3	OCH_3	F	H
2804	Cl	OCH_3	OCH_3	F	CH_3
2805	Cl	OCH_3	OCH_3	F	Cl
2806	Cl	OCH_3	OCH_3	F	Br
2807	Cl	OCH_3	OCH_3	F	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2808	Cl	OCH_3	Cl	H	H
2809	Cl	OCH_3	Cl	H	CH_3
2810	Cl	OCH_3	Cl	H	OCH_3
2811	Cl	OCH_3	Cl	H	Cl
2812	Cl	OCH_3	Cl	H	Br
2813	Cl	OCH_3	Cl	H	F
2814	Cl	OCH_3	Cl	CH_3	H
2815	Cl	OCH_3	Cl	CH_3	CH_3
2816	Cl	OCH_3	Cl	CH_3	OCH_3
2817	Cl	OCH_3	Cl	CH_3	Br
2818	Cl	OCH_3	Cl	CH_3	F
2819	Cl	OCH_3	Cl	OCH_3	H
2820	Cl	OCH_3	Cl	OCH_3	CH_3
2821	Cl	OCH_3	Cl	OCH_3	OCH_3
2822	Cl	OCH_3	Cl	OCH_3	Br
2823	Cl	OCH_3	Cl	OCH_3	F
2824	Cl	OCH_3	Cl	Cl	H
2825	Cl	OCH_3	Cl	Cl	CH_3
2826	Cl	OCH_3	Cl	Cl	OCH_3
2827	Cl	OCH_3	Cl	Cl	Cl
2828	Cl	OCH_3	Cl	Cl	Br
2829	Cl	OCH_3	Cl	Cl	F
2830	Cl	OCH_3	Cl	Br	H
2831	Cl	OCH_3	Cl	Br	CH_3
2832	Cl	OCH_3	Cl	Br	OCH_3
2833	Cl	OCH_3	Cl	Br	Br
2834	Cl	OCH_3	Cl	F	H
2835	Cl	OCH_3	Cl	F	CH_3
2836	Cl	OCH_3	Cl	F	OCH_3
2837	Cl	OCH_3	Cl	F	Br
2838	Cl	OCH_3	Cl	F	F
2839	Cl	OCH_3	Br	H	H
2840	Cl	OCH_3	Br	H	CH_3
2841	Cl	OCH_3	Br	H	OCH_3
2842	Cl	OCH_3	Br	H	Cl
2843	Cl	OCH_3	Br	H	Br
2844	Cl	OCH_3	Br	H	F
2845	Cl	OCH_3	Br	CH_3	H
2846	Cl	OCH_3	Br	CH_3	CH_3
2847	Cl	OCH_3	Br	CH_3	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2848	Cl	OCH_3	Br	CH_3	Cl
2849	Cl	OCH_3	Br	CH_3	F
2850	Cl	OCH_3	Br	OCH_3	H
2851	Cl	OCH_3	Br	OCH_3	CH_3
2852	Cl	OCH_3	Br	OCH_3	OCH_3
2853	Cl	OCH_3	Br	OCH_3	Cl
2854	Cl	OCH_3	Br	OCH_3	F
2855	Cl	OCH_3	Br	Cl	H
2856	Cl	OCH_3	Br	Cl	CH_3
2857	Cl	OCH_3	Br	Cl	OCH_3
2858	Cl	OCH_3	Br	Cl	Cl
2859	Cl	OCH_3	Br	Cl	F
2860	Cl	OCH_3	Br	Br	H
2861	Cl	OCH_3	Br	Br	CH_3
2862	Cl	OCH_3	Br	Br	OCH_3
2863	Cl	OCH_3	Br	Br	Cl
2864	Cl	OCH_3	Br	Br	Br
2865	Cl	OCH_3	Br	Br	F
2866	Cl	OCH_3	Br	F	H
2867	Cl	OCH_3	Br	F	CH_3
2868	Cl	OCH_3	Br	F	OCH_3
2869	Cl	OCH_3	Br	F	Cl
2870	Cl	OCH_3	Br	F	F
2871	Cl	OCH_3	F	H	H
2872	Cl	OCH_3	F	H	CH_3
2873	Cl	OCH_3	F	H	OCH_3
2874	Cl	OCH_3	F	H	Cl
2875	Cl	OCH_3	F	H	Br
2876	Cl	OCH_3	F	H	F
2877	Cl	OCH_3	F	CH_3	H
2878	Cl	OCH_3	F	CH_3	CH_3
2879	Cl	OCH_3	F	CH_3	OCH_3
2880	Cl	OCH_3	F	CH_3	Cl
2881	Cl	OCH_3	F	CH_3	Br
2882	Cl	OCH_3	F	OCH_3	H
2883	Cl	OCH_3	F	OCH_3	CH_3
2884	Cl	OCH_3	F	OCH_3	OCH_3
2885	Cl	OCH_3	F	OCH_3	Cl
2886	Cl	OCH_3	F	OCH_3	Br
2887	Cl	OCH_3	F	Cl	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2888	Cl	OCH_3	F	Cl	CH_3
2889	Cl	OCH_3	F	Cl	OCH_3
2890	Cl	OCH_3	F	Cl	Cl
2891	Cl	OCH_3	F	Cl	Br
2892	Cl	OCH_3	F	Br	H
2893	Cl	OCH_3	F	Br	CH_3
2894	Cl	OCH_3	F	Br	OCH_3
2895	Cl	OCH_3	F	Br	Cl
2896	Cl	OCH_3	F	Br	Br
2897	Cl	OCH_3	F	F	H
2898	Cl	OCH_3	F	F	CH_3
2899	Cl	OCH_3	F	F	OCH_3
2900	Cl	OCH_3	F	F	Cl
2901	Cl	OCH_3	F	F	Br
2902	Cl	OCH_3	F	F	F
2903	Cl	Cl	CH_3	H	H
2904	Cl	Cl	CH_3	H	CH_3
2905	Cl	Cl	CH_3	H	OCH_3
2906	Cl	Cl	CH_3	H	Cl
2907	Cl	Cl	CH_3	H	Br
2908	Cl	Cl	CH_3	H	F
2909	Cl	Cl	CH_3	CH_3	H
2910	Cl	Cl	CH_3	CH_3	CH_3
2911	Cl	Cl	CH_3	CH_3	OCH_3
2912	Cl	Cl	CH_3	CH_3	Cl
2913	Cl	Cl	CH_3	CH_3	Br
2914	Cl	Cl	CH_3	CH_3	F
2915	Cl	Cl	CH_3	OCH_3	H
2916	Cl	Cl	CH_3	OCH_3	OCH_3
2917	Cl	Cl	CH_3	OCH_3	Cl
2918	Cl	Cl	CH_3	OCH_3	Br
2919	Cl	Cl	CH_3	OCH_3	F
2920	Cl	Cl	CH_3	Cl	H
2921	Cl	Cl	CH_3	Cl	OCH_3
2922	Cl	Cl	CH_3	Cl	Cl
2923	Cl	Cl	CH_3	Cl	Br
2924	Cl	Cl	CH_3	Cl	F
2925	Cl	Cl	CH_3	Br	H
2926	Cl	Cl	CH_3	Br	OCH_3
2927	Cl	Cl	CH_3	Br	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2928	Cl	Cl	CH_3	Br	Br
2929	Cl	Cl	CH_3	Br	F
2930	Cl	Cl	CH_3	F	H
2931	Cl	Cl	CH_3	F	OCH_3
2932	Cl	Cl	CH_3	F	Cl
2933	Cl	Cl	CH_3	F	Br
2934	Cl	Cl	CH_3	F	F
2935	Cl	Cl	OCH_3	H	H
2936	Cl	Cl	OCH_3	H	CH_3
2937	Cl	Cl	OCH_3	H	OCH_3
2938	Cl	Cl	OCH_3	H	Cl
2939	Cl	Cl	OCH_3	H	Br
2940	Cl	Cl	OCH_3	H	F
2941	Cl	Cl	OCH_3	CH_3	H
2942	Cl	Cl	OCH_3	CH_3	CH_3
2943	Cl	Cl	OCH_3	CH_3	Cl
2944	Cl	Cl	OCH_3	CH_3	Br
2945	Cl	Cl	OCH_3	CH_3	F
2946	Cl	Cl	OCH_3	OCH_3	H
2947	Cl	Cl	OCH_3	OCH_3	CH_3
2948	Cl	Cl	OCH_3	OCH_3	OCH_3
2949	Cl	Cl	OCH_3	OCH_3	Cl
2950	Cl	Cl	OCH_3	OCH_3	Br
2951	Cl	Cl	OCH_3	OCH_3	F
2952	Cl	Cl	OCH_3	Cl	H
2953	Cl	Cl	OCH_3	Cl	CH_3
2954	Cl	Cl	OCH_3	Cl	Cl
2955	Cl	Cl	OCH_3	Cl	Br
2956	Cl	Cl	OCH_3	Cl	F
2957	Cl	Cl	OCH_3	Br	H
2958	Cl	Cl	OCH_3	Br	CH_3
2959	Cl	Cl	OCH_3	Br	Cl
2960	Cl	Cl	OCH_3	Br	Br
2961	Cl	Cl	OCH_3	Br	F
2962	Cl	Cl	OCH_3	F	H
2963	Cl	Cl	OCH_3	F	CH_3
2964	Cl	Cl	OCH_3	F	Cl
2965	Cl	Cl	OCH_3	F	Br
2966	Cl	Cl	OCH_3	F	F
2967	Cl	Cl	Cl	H	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
2968	Cl	Cl	Cl	H	CH_3
2969	Cl	Cl	Cl	H	OCH_3
2970	Cl	Cl	Cl	H	Cl
2971	Cl	Cl	Cl	H	Br
2972	Cl	Cl	Cl	H	F
2973	Cl	Cl	Cl	CH_3	H
2974	Cl	Cl	Cl	CH_3	CH_3
2975	Cl	Cl	Cl	CH_3	OCH_3
2976	Cl	Cl	Cl	CH_3	Br
2977	Cl	Cl	Cl	CH_3	F
2978	Cl	Cl	Cl	OCH_3	H
2979	Cl	Cl	Cl	OCH_3	CH_3
2980	Cl	Cl	Cl	OCH_3	OCH_3
2981	Cl	Cl	Cl	OCH_3	Br
2982	Cl	Cl	Cl	OCH_3	F
2983	Cl	Cl	Cl	Cl	H
2984	Cl	Cl	Cl	Cl	CH_3
2985	Cl	Cl	Cl	Cl	OCH_3
2986	Cl	Cl	Cl	Cl	Cl
2987	Cl	Cl	Cl	Cl	Br
2988	Cl	Cl	Cl	Cl	F
2989	Cl	Cl	Cl	Br	H
2990	Cl	Cl	Cl	Br	CH_3
2991	Cl	Cl	Cl	Br	OCH_3
2992	Cl	Cl	Cl	Br	Br
2993	Cl	Cl	Cl	F	H
2994	Cl	Cl	Cl	F	CH_3
2995	Cl	Cl	Cl	F	OCH_3
2996	Cl	Cl	Cl	F	Br
2997	Cl	Cl	Cl	F	F
2998	Cl	Cl	Br	H	H
2999	Cl	Cl	Br	H	CH_3
3000	Cl	Cl	Br	H	OCH_3
3001	Cl	Cl	Br	H	Cl
3002	Cl	Cl	Br	H	Br
3003	Cl	Cl	Br	H	F
3004	Cl	Cl	Br	CH_3	H
3005	Cl	Cl	Br	CH_3	CH_3
3006	Cl	Cl	Br	CH_3	OCH_3
3007	Cl	Cl	Br	CH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3008	Cl	Cl	Br	CH_3	F
3009	Cl	Cl	Br	OCH_3	H
3010	Cl	Cl	Br	OCH_3	CH_3
3011	Cl	Cl	Br	OCH_3	OCH_3
3012	Cl	Cl	Br	OCH_3	Cl
3013	Cl	Cl	Br	OCH_3	F
3014	Cl	Cl	Br	Cl	H
3015	Cl	Cl	Br	Cl	CH_3
3016	Cl	Cl	Br	Cl	OCH_3
3017	Cl	Cl	Br	Cl	Cl
3018	Cl	Cl	Br	Cl	F
3019	Cl	Cl	Br	Br	H
3020	Cl	Cl	Br	Br	CH_3
3021	Cl	Cl	Br	Br	OCH_3
3022	Cl	Cl	Br	Br	Cl
3023	Cl	Cl	Br	Br	Br
3024	Cl	Cl	Br	Br	F
3025	Cl	Cl	Br	F	H
3026	Cl	Cl	Br	F	CH_3
3027	Cl	Cl	Br	F	OCH_3
3028	Cl	Cl	Br	F	Cl
3029	Cl	Cl	Br	F	F
3030	Cl	Cl	F	H	H
3031	Cl	Cl	F	H	CH_3
3032	Cl	Cl	F	H	OCH_3
3033	Cl	Cl	F	H	Cl
3034	Cl	Cl	F	H	Br
3035	Cl	Cl	F	H	F
3036	Cl	Cl	F	CH_3	H
3037	Cl	Cl	F	CH_3	CH_3
3038	Cl	Cl	F	CH_3	OCH_3
3039	Cl	Cl	F	CH_3	Cl
3040	Cl	Cl	F	CH_3	Br
3041	Cl	Cl	F	OCH_3	H
3042	Cl	Cl	F	OCH_3	CH_3
3043	Cl	Cl	F	OCH_3	OCH_3
3044	Cl	Cl	F	OCH_3	Cl
3045	Cl	Cl	F	OCH_3	Br
3046	Cl	Cl	F	Cl	H
3047	Cl	Cl	F	Cl	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3048	Cl	Cl	F	Cl	OCH_3
3049	Cl	Cl	F	Cl	Cl
3050	Cl	Cl	F	Cl	Br
3051	Cl	Cl	F	Br	H
3052	Cl	Cl	F	Br	CH_3
3053	Cl	Cl	F	Br	OCH_3
3054	Cl	Cl	F	Br	Cl
3055	Cl	Cl	F	Br	Br
3056	Cl	Cl	F	F	H
3057	Cl	Cl	F	F	CH_3
3058	Cl	Cl	F	F	OCH_3
3059	Cl	Cl	F	F	Cl
3060	Cl	Cl	F	F	Br
3061	Cl	Cl	F	F	F
3062	Cl	Br	CH_3	H	H
3063	Cl	Br	CH_3	H	CH_3
3064	Cl	Br	CH_3	H	OCH_3
3065	Cl	Br	CH_3	H	Cl
3066	Cl	Br	CH_3	H	Br
3067	Cl	Br	CH_3	H	F
3068	Cl	Br	CH_3	CH_3	H
3069	Cl	Br	CH_3	CH_3	CH_3
3070	Cl	Br	CH_3	CH_3	OCH_3
3071	Cl	Br	CH_3	CH_3	Cl
3072	Cl	Br	CH_3	CH_3	Br
3073	Cl	Br	CH_3	CH_3	F
3074	Cl	Br	CH_3	OCH_3	H
3075	Cl	Br	CH_3	OCH_3	OCH_3
3076	Cl	Br	CH_3	OCH_3	Cl
3077	Cl	Br	CH_3	OCH_3	Br
3078	Cl	Br	CH_3	OCH_3	F
3079	Cl	Br	CH_3	Cl	H
3080	Cl	Br	CH_3	Cl	OCH_3
3081	Cl	Br	CH_3	Cl	Cl
3082	Cl	Br	CH_3	Cl	Br
3083	Cl	Br	CH_3	Cl	F
3084	Cl	Br	CH_3	Br	H
3085	Cl	Br	CH_3	Br	OCH_3
3086	Cl	Br	CH_3	Br	Cl
3087	Cl	Br	CH_3	Br	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3088	Cl	Br	CH_3	Br	F
3089	Cl	Br	CH_3	F	H
3090	Cl	Br	CH_3	F	OCH_3
3091	Cl	Br	CH_3	F	Cl
3092	Cl	Br	CH_3	F	Br
3093	Cl	Br	CH_3	F	F
3094	Cl	Br	OCH_3	H	H
3095	Cl	Br	OCH_3	H	CH_3
3096	Cl	Br	OCH_3	H	OCH_3
3097	Cl	Br	OCH_3	H	Cl
3098	Cl	Br	OCH_3	H	Br
3099	Cl	Br	OCH_3	H	F
3100	Cl	Br	OCH_3	CH_3	H
3101	Cl	Br	OCH_3	CH_3	CH_3
3102	Cl	Br	OCH_3	CH_3	Cl
3103	Cl	Br	OCH_3	CH_3	Br
3104	Cl	Br	OCH_3	CH_3	F
3105	Cl	Br	OCH_3	OCH_3	H
3106	Cl	Br	OCH_3	OCH_3	CH_3
3107	Cl	Br	OCH_3	OCH_3	OCH_3
3108	Cl	Br	OCH_3	OCH_3	Cl
3109	Cl	Br	OCH_3	OCH_3	Br
3110	Cl	Br	OCH_3	OCH_3	F
3111	Cl	Br	OCH_3	Cl	H
3112	Cl	Br	OCH_3	Cl	CH_3
3113	Cl	Br	OCH_3	Cl	Cl
3114	Cl	Br	OCH_3	Cl	Br
3115	Cl	Br	OCH_3	Cl	F
3116	Cl	Br	OCH_3	Br	H
3117	Cl	Br	OCH_3	Br	CH_3
3118	Cl	Br	OCH_3	Br	Cl
3119	Cl	Br	OCH_3	Br	Br
3120	Cl	Br	OCH_3	Br	F
3121	Cl	Br	OCH_3	F	H
3122	Cl	Br	OCH_3	F	CH_3
3123	Cl	Br	OCH_3	F	Cl
3124	Cl	Br	OCH_3	F	Br
3125	Cl	Br	OCH_3	F	F
3126	Cl	Br	Cl	H	H
3127	Cl	Br	Cl	H	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3128	Cl	Br	Cl	H	OCH_3
3129	Cl	Br	Cl	H	Cl
3130	Cl	Br	Cl	H	Br
3131	Cl	Br	Cl	H	F
3132	Cl	Br	Cl	CH_3	H
3133	Cl	Br	Cl	CH_3	CH_3
3134	Cl	Br	Cl	CH_3	OCH_3
3135	Cl	Br	Cl	CH_3	Br
3136	Cl	Br	Cl	CH_3	F
3137	Cl	Br	Cl	OCH_3	H
3138	Cl	Br	Cl	OCH_3	CH_3
3139	Cl	Br	Cl	OCH_3	OCH_3
3140	Cl	Br	Cl	OCH_3	Br
3141	Cl	Br	Cl	OCH_3	F
3142	Cl	Br	Cl	Cl	H
3143	Cl	Br	Cl	Cl	CH_3
3144	Cl	Br	Cl	Cl	OCH_3
3145	Cl	Br	Cl	Cl	Cl
3146	Cl	Br	Cl	Cl	Br
3147	Cl	Br	Cl	Cl	F
3148	Cl	Br	Cl	Br	H
3149	Cl	Br	Cl	Br	CH_3
3150	Cl	Br	Cl	Br	OCH_3
3151	Cl	Br	Cl	Br	Br
3152	Cl	Br	Cl	F	H
3153	Cl	Br	Cl	F	CH_3
3154	Cl	Br	Cl	F	OCH_3
3155	Cl	Br	Cl	F	Br
3156	Cl	Br	Cl	F	F
3157	Cl	Br	Br	H	H
3158	Cl	Br	Br	H	CH_3
3159	Cl	Br	Br	H	OCH_3
3160	Cl	Br	Br	H	Cl
3161	Cl	Br	Br	H	Br
3162	Cl	Br	Br	H	F
3163	Cl	Br	Br	CH_3	H
3164	Cl	Br	Br	CH_3	CH_3
3165	Cl	Br	Br	CH_3	OCH_3
3166	Cl	Br	Br	CH_3	Cl
3167	Cl	Br	Br	CH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3168	Cl	Br	Br	OCH_3	H
3169	Cl	Br	Br	OCH_3	CH_3
3170	Cl	Br	Br	OCH_3	OCH_3
3171	Cl	Br	Br	OCH_3	Cl
3172	Cl	Br	Br	OCH_3	F
3173	Cl	Br	Br	Cl	H
3174	Cl	Br	Br	Cl	CH_3
3175	Cl	Br	Br	Cl	OCH_3
3176	Cl	Br	Br	Cl	Cl
3177	Cl	Br	Br	Cl	F
3178	Cl	Br	Br	Br	H
3179	Cl	Br	Br	Br	CH_3
3180	Cl	Br	Br	Br	OCH_3
3181	Cl	Br	Br	Br	Cl
3182	Cl	Br	Br	Br	Br
3183	Cl	Br	Br	Br	F
3184	Cl	Br	Br	F	H
3185	Cl	Br	Br	F	CH_3
3186	Cl	Br	Br	F	OCH_3
3187	Cl	Br	Br	F	Cl
3188	Cl	Br	Br	F	F
3189	Cl	Br	F	H	H
3190	Cl	Br	F	H	CH_3
3191	Cl	Br	F	H	OCH_3
3192	Cl	Br	F	H	Cl
3193	Cl	Br	F	H	Br
3194	Cl	Br	F	H	F
3195	Cl	Br	F	CH_3	H
3196	Cl	Br	F	CH_3	CH_3
3197	Cl	Br	F	CH_3	OCH_3
3198	Cl	Br	F	CH_3	Cl
3199	Cl	Br	F	CH_3	Br
3200	Cl	Br	F	OCH_3	H
3201	Cl	Br	F	OCH_3	CH_3
3202	Cl	Br	F	OCH_3	OCH_3
3203	Cl	Br	F	OCH_3	Cl
3204	Cl	Br	F	OCH_3	Br
3205	Cl	Br	F	Cl	H
3206	Cl	Br	F	Cl	CH_3
3207	Cl	Br	F	Cl	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3208	Cl	Br	F	Cl	Cl
3209	Cl	Br	F	Cl	Br
3210	Cl	Br	F	Br	H
3211	Cl	Br	F	Br	CH_3
3212	Cl	Br	F	Br	OCH_3
3213	Cl	Br	F	Br	Cl
3214	Cl	Br	F	Br	Br
3215	Cl	Br	F	F	H
3216	Cl	Br	F	F	CH_3
3217	Cl	Br	F	F	OCH_3
3218	Cl	Br	F	F	Cl
3219	Cl	Br	F	F	Br
3220	Cl	Br	F	F	F
3221	Cl	F	CH_3	H	H
3222	Cl	F	CH_3	H	CH_3
3223	Cl	F	CH_3	H	OCH_3
3224	Cl	F	CH_3	H	Cl
3225	Cl	F	CH_3	H	Br
3226	Cl	F	CH_3	H	F
3227	Cl	F	CH_3	CH_3	H
3228	Cl	F	CH_3	CH_3	CH_3
3229	Cl	F	CH_3	CH_3	OCH_3
3230	Cl	F	CH_3	CH_3	Cl
3231	Cl	F	CH_3	CH_3	Br
3232	Cl	F	CH_3	CH_3	F
3233	Cl	F	CH_3	OCH_3	H
3234	Cl	F	CH_3	OCH_3	OCH_3
3235	Cl	F	CH_3	OCH_3	Cl
3236	Cl	F	CH_3	OCH_3	Br
3237	Cl	F	CH_3	OCH_3	F
3238	Cl	F	CH_3	Cl	H
3239	Cl	F	CH_3	Cl	OCH_3
3240	Cl	F	CH_3	Cl	Cl
3241	Cl	F	CH_3	Cl	Br
3242	Cl	F	CH_3	Cl	F
3243	Cl	F	CH_3	Br	H
3244	Cl	F	CH_3	Br	OCH_3
3245	Cl	F	CH_3	Br	Cl
3246	Cl	F	CH_3	Br	Br
3247	Cl	F	CH_3	Br	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3248	Cl	F	CH_3	F	H
3249	Cl	F	CH_3	F	OCH_3
3250	Cl	F	CH_3	F	Cl
3251	Cl	F	CH_3	F	Br
3252	Cl	F	CH_3	F	F
3253	Cl	F	OCH_3	H	H
3254	Cl	F	OCH_3	H	CH_3
3255	Cl	F	OCH_3	H	OCH_3
3256	Cl	F	OCH_3	H	Cl
3257	Cl	F	OCH_3	H	Br
3258	Cl	F	OCH_3	H	F
3259	Cl	F	OCH_3	CH_3	H
3260	Cl	F	OCH_3	CH_3	CH_3
3261	Cl	F	OCH_3	CH_3	Cl
3262	Cl	F	OCH_3	CH_3	Br
3263	Cl	F	OCH_3	CH_3	F
3264	Cl	F	OCH_3	OCH_3	H
3265	Cl	F	OCH_3	OCH_3	CH_3
3266	Cl	F	OCH_3	OCH_3	OCH_3
3267	Cl	F	OCH_3	OCH_3	Cl
3268	Cl	F	OCH_3	OCH_3	Br
3269	Cl	F	OCH_3	OCH_3	F
3270	Cl	F	OCH_3	Cl	H
3271	Cl	F	OCH_3	Cl	CH_3
3272	Cl	F	OCH_3	Cl	Cl
3273	Cl	F	OCH_3	Cl	Br
3274	Cl	F	OCH_3	Cl	F
3275	Cl	F	OCH_3	Br	H
3276	Cl	F	OCH_3	Br	CH_3
3277	Cl	F	OCH_3	Br	Cl
3278	Cl	F	OCH_3	Br	Br
3279	Cl	F	OCH_3	Br	F
3280	Cl	F	OCH_3	F	H
3281	Cl	F	OCH_3	F	CH_3
3282	Cl	F	OCH_3	F	Cl
3283	Cl	F	OCH_3	F	Br
3284	Cl	F	OCH_3	F	F
3285	Cl	F	Cl	H	H
3286	Cl	F	Cl	H	CH_3
3287	Cl	F	Cl	H	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3288	Cl	F	Cl	H	Cl
3289	Cl	F	Cl	H	Br
3290	Cl	F	Cl	H	F
3291	Cl	F	Cl	CH_3	H
3292	Cl	F	Cl	CH_3	CH_3
3293	Cl	F	Cl	CH_3	OCH_3
3294	Cl	F	Cl	CH_3	Br
3295	Cl	F	Cl	CH_3	F
3296	Cl	F	Cl	OCH_3	H
3297	Cl	F	Cl	OCH_3	CH_3
3298	Cl	F	Cl	OCH_3	OCH_3
3299	Cl	F	Cl	OCH_3	Br
3300	Cl	F	Cl	OCH_3	F
3301	Cl	F	Cl	Cl	H
3302	Cl	F	Cl	Cl	CH_3
3303	Cl	F	Cl	Cl	OCH_3
3304	Cl	F	Cl	Cl	Cl
3305	Cl	F	Cl	Cl	Br
3306	Cl	F	Cl	Cl	F
3307	Cl	F	Cl	Br	H
3308	Cl	F	Cl	Br	CH_3
3309	Cl	F	Cl	Br	OCH_3
3310	Cl	F	Cl	Br	Br
3311	Cl	F	Cl	F	H
3312	Cl	F	Cl	F	CH_3
3313	Cl	F	Cl	F	OCH_3
3314	Cl	F	Cl	F	Br
3315	Cl	F	Cl	F	F
3316	Cl	F	Br	H	H
3317	Cl	F	Br	H	CH_3
3318	Cl	F	Br	H	OCH_3
3319	Cl	F	Br	H	Cl
3320	Cl	F	Br	H	Br
3321	Cl	F	Br	H	F
3322	Cl	F	Br	CH_3	H
3323	Cl	F	Br	CH_3	CH_3
3324	Cl	F	Br	CH_3	OCH_3
3325	Cl	F	Br	CH_3	Cl
3326	Cl	F	Br	CH_3	F
3327	Cl	F	Br	OCH_3	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3328	Cl	F	Br	OCH_3	CH_3
3329	Cl	F	Br	OCH_3	OCH_3
3330	Cl	F	Br	OCH_3	Cl
3331	Cl	F	Br	OCH_3	F
3332	Cl	F	Br	Cl	H
3333	Cl	F	Br	Cl	CH_3
3334	Cl	F	Br	Cl	OCH_3
3335	Cl	F	Br	Cl	Cl
3336	Cl	F	Br	Cl	F
3337	Cl	F	Br	Br	H
3338	Cl	F	Br	Br	CH_3
3339	Cl	F	Br	Br	OCH_3
3340	Cl	F	Br	Br	Cl
3341	Cl	F	Br	Br	Br
3342	Cl	F	Br	Br	F
3343	Cl	F	Br	F	H
3344	Cl	F	Br	F	CH_3
3345	Cl	F	Br	F	OCH_3
3346	Cl	F	Br	F	Cl
3347	Cl	F	Br	F	F
3348	Cl	F	F	H	H
3349	Cl	F	F	H	CH_3
3350	Cl	F	F	H	OCH_3
3351	Cl	F	F	H	Cl
3352	Cl	F	F	H	Br
3353	Cl	F	F	H	F
3354	Cl	F	F	CH_3	H
3355	Cl	F	F	CH_3	CH_3
3356	Cl	F	F	CH_3	OCH_3
3357	Cl	F	F	CH_3	Cl
3358	Cl	F	F	CH_3	Br
3359	Cl	F	F	OCH_3	H
3360	Cl	F	F	OCH_3	CH_3
3361	Cl	F	F	OCH_3	OCH_3
3362	Cl	F	F	OCH_3	Cl
3363	Cl	F	F	OCH_3	Br
3364	Cl	F	F	Cl	H
3365	Cl	F	F	Cl	CH_3
3366	Cl	F	F	Cl	OCH_3
3367	Cl	F	F	Cl	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3368	Cl	F	F	Cl	Br
3369	Cl	F	F	Br	H
3370	Cl	F	F	Br	CH_3
3371	Cl	F	F	Br	OCH_3
3372	Cl	F	F	Br	Cl
3373	Cl	F	F	Br	Br
3374	Cl	F	F	F	H
3375	Cl	F	F	F	CH_3
3376	Cl	F	F	F	OCH_3
3377	Cl	F	F	F	Cl
3378	Cl	F	F	F	Br
3379	Cl	F	F	F	F
3380	Br	CH_3	CH_3	H	H
3381	Br	CH_3	CH_3	CH_3	H
3382	Br	CH_3	CH_3	OCH_3	H
3383	Br	CH_3	CH_3	Cl	H
3384	Br	CH_3	CH_3	Br	H
3385	Br	CH_3	CH_3	F	H
3386	Br	CH_3	CH_3	H	CH_3
3387	Br	CH_3	CH_3	CH_3	CH_3
3388	Br	CH_3	CH_3	H	OCH_3
3389	Br	CH_3	CH_3	CH_3	OCH_3
3390	Br	CH_3	CH_3	OCH_3	OCH_3
3391	Br	CH_3	CH_3	Cl	OCH_3
3392	Br	CH_3	CH_3	Br	OCH_3
3393	Br	CH_3	CH_3	F	OCH_3
3394	Br	CH_3	CH_3	H	Cl
3395	Br	CH_3	CH_3	CH_3	Cl
3396	Br	CH_3	CH_3	OCH_3	Cl
3397	Br	CH_3	CH_3	Cl	Cl
3398	Br	CH_3	CH_3	Br	Cl
3399	Br	CH_3	CH_3	F	Cl
3400	Br	CH_3	CH_3	H	Br
3401	Br	CH_3	CH_3	CH_3	Br
3402	Br	CH_3	CH_3	OCH_3	Br
3403	Br	CH_3	CH_3	Cl	Br
3404	Br	CH_3	CH_3	Br	Br
3405	Br	CH_3	CH_3	F	Br
3406	Br	CH_3	CH_3	H	F
3407	Br	CH_3	CH_3	CH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3408	Br	CH_3	CH_3	OCH_3	F
3409	Br	CH_3	CH_3	Cl	F
3410	Br	CH_3	CH_3	Br	F
3411	Br	CH_3	CH_3	F	F
3412	Br	CH_3	OCH_3	H	H
3413	Br	CH_3	OCH_3	CH_3	H
3414	Br	CH_3	OCH_3	OCH_3	H
3415	Br	CH_3	OCH_3	Cl	H
3416	Br	CH_3	OCH_3	Br	H
3417	Br	CH_3	OCH_3	F	H
3418	Br	CH_3	OCH_3	H	CH_3
3419	Br	CH_3	OCH_3	CH_3	CH_3
3420	Br	CH_3	OCH_3	OCH_3	CH_3
3421	Br	CH_3	OCH_3	Cl	CH_3
3422	Br	CH_3	OCH_3	Br	CH_3
3423	Br	CH_3	OCH_3	F	CH_3
3424	Br	CH_3	OCH_3	H	OCH_3
3425	Br	CH_3	OCH_3	OCH_3	OCH_3
3426	Br	CH_3	OCH_3	H	Cl
3427	Br	CH_3	OCH_3	CH_3	Cl
3428	Br	CH_3	OCH_3	OCH_3	Cl
3429	Br	CH_3	OCH_3	Cl	Cl
3430	Br	CH_3	OCH_3	Br	Cl
3431	Br	CH_3	OCH_3	F	Cl
3432	Br	CH_3	OCH_3	H	Br
3433	Br	CH_3	OCH_3	CH_3	Br
3434	Br	CH_3	OCH_3	OCH_3	Br
3435	Br	CH_3	OCH_3	Cl	Br
3436	Br	CH_3	OCH_3	Br	Br
3437	Br	CH_3	OCH_3	F	Br
3438	Br	CH_3	OCH_3	H	F
3439	Br	CH_3	OCH_3	CH_3	F
3440	Br	CH_3	OCH_3	OCH_3	F
3441	Br	CH_3	OCH_3	Cl	F
3442	Br	CH_3	OCH_3	Br	F
3443	Br	CH_3	OCH_3	F	F
3444	Br	CH_3	Cl	H	H
3445	Br	CH_3	Cl	CH_3	H
3446	Br	CH_3	Cl	OCH_3	H
3447	Br	CH_3	Cl	Cl	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3448	Br	CH_3	Cl	Br	H
3449	Br	CH_3	Cl	F	H
3450	Br	CH_3	Cl	H	CH_3
3451	Br	CH_3	Cl	CH_3	CH_3
3452	Br	CH_3	Cl	OCH_3	CH_3
3453	Br	CH_3	Cl	Cl	CH_3
3454	Br	CH_3	Cl	Br	CH_3
3455	Br	CH_3	Cl	F	CH_3
3456	Br	CH_3	Cl	H	OCH_3
3457	Br	CH_3	Cl	CH_3	OCH_3
3458	Br	CH_3	Cl	OCH_3	OCH_3
3459	Br	CH_3	Cl	Cl	OCH_3
3460	Br	CH_3	Cl	Br	OCH_3
3461	Br	CH_3	Cl	F	OCH_3
3462	Br	CH_3	Cl	H	Cl
3463	Br	CH_3	Cl	Cl	Cl
3464	Br	CH_3	Cl	H	Br
3465	Br	CH_3	Cl	CH_3	Br
3466	Br	CH_3	Cl	OCH_3	Br
3467	Br	CH_3	Cl	Cl	Br
3468	Br	CH_3	Cl	Br	Br
3469	Br	CH_3	Cl	F	Br
3470	Br	CH_3	Cl	H	F
3471	Br	CH_3	Cl	CH_3	F
3472	Br	CH_3	Cl	OCH_3	F
3473	Br	CH_3	Cl	Cl	F
3474	Br	CH_3	Cl	F	F
3475	Br	CH_3	Br	H	H
3476	Br	CH_3	Br	CH_3	H
3477	Br	CH_3	Br	OCH_3	H
3478	Br	CH_3	Br	Cl	H
3479	Br	CH_3	Br	Br	H
3480	Br	CH_3	Br	F	H
3481	Br	CH_3	Br	H	CH_3
3482	Br	CH_3	Br	CH_3	CH_3
3483	Br	CH_3	Br	OCH_3	CH_3
3484	Br	CH_3	Br	Cl	CH_3
3485	Br	CH_3	Br	Br	CH_3
3486	Br	CH_3	Br	F	CH_3
3487	Br	CH_3	Br	H	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3488	Br	CH_3	Br	CH_3	OCH_3
3489	Br	CH_3	Br	OCH_3	OCH_3
3490	Br	CH_3	Br	Cl	OCH_3
3491	Br	CH_3	Br	Br	OCH_3
3492	Br	CH_3	Br	F	OCH_3
3493	Br	CH_3	Br	H	Cl
3494	Br	CH_3	Br	CH_3	Cl
3495	Br	CH_3	Br	OCH_3	Cl
3496	Br	CH_3	Br	Cl	Cl
3497	Br	CH_3	Br	Br	Cl
3498	Br	CH_3	Br	F	Cl
3499	Br	CH_3	Br	H	Br
3500	Br	CH_3	Br	Br	Br
3501	Br	CH_3	Br	H	F
3502	Br	CH_3	Br	CH_3	F
3503	Br	CH_3	Br	OCH_3	F
3504	Br	CH_3	Br	Cl	F
3505	Br	CH_3	Br	Br	F
3506	Br	CH_3	Br	F	F
3507	Br	CH_3	F	H	H
3508	Br	CH_3	F	CH_3	H
3509	Br	CH_3	F	OCH_3	H
3510	Br	CH_3	F	Cl	H
3511	Br	CH_3	F	Br	H
3512	Br	CH_3	F	F	H
3513	Br	CH_3	F	H	CH_3
3514	Br	CH_3	F	CH_3	CH_3
3515	Br	CH_3	F	OCH_3	CH_3
3516	Br	CH_3	F	Cl	CH_3
3517	Br	CH_3	F	Br	CH_3
3518	Br	CH_3	F	F	CH_3
3519	Br	CH_3	F	H	OCH_3
3520	Br	CH_3	F	CH_3	OCH_3
3521	Br	CH_3	F	OCH_3	OCH_3
3522	Br	CH_3	F	Cl	OCH_3
3523	Br	CH_3	F	Br	OCH_3
3524	Br	CH_3	F	F	OCH_3
3525	Br	CH_3	F	H	Cl
3526	Br	CH_3	F	CH_3	Cl
3527	Br	CH_3	F	OCH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3528	Br	CH_3	F	Cl	Cl
3529	Br	CH_3	F	Br	Cl
3530	Br	CH_3	F	F	Cl
3531	Br	CH_3	F	H	Br
3532	Br	CH_3	F	CH_3	Br
3533	Br	CH_3	F	OCH_3	Br
3534	Br	CH_3	F	Cl	Br
3535	Br	CH_3	F	Br	Br
3536	Br	CH_3	F	F	Br
3537	Br	CH_3	F	H	F
3538	Br	CH_3	F	F	F
3539	Br	OCH_3	CH_3	H	H
3540	Br	OCH_3	CH_3	H	CH_3
3541	Br	OCH_3	CH_3	H	OCH_3
3542	Br	OCH_3	CH_3	H	Cl
3543	Br	OCH_3	CH_3	H	Br
3544	Br	OCH_3	CH_3	H	F
3545	Br	OCH_3	CH_3	CH_3	H
3546	Br	OCH_3	CH_3	CH_3	CH_3
3547	Br	OCH_3	CH_3	CH_3	OCH_3
3548	Br	OCH_3	CH_3	CH_3	Cl
3549	Br	OCH_3	CH_3	CH_3	Br
3550	Br	OCH_3	CH_3	CH_3	F
3551	Br	OCH_3	CH_3	OCH_3	H
3552	Br	OCH_3	CH_3	OCH_3	OCH_3
3553	Br	OCH_3	CH_3	OCH_3	Cl
3554	Br	OCH_3	CH_3	OCH_3	Br
3555	Br	OCH_3	CH_3	OCH_3	F
3556	Br	OCH_3	CH_3	Cl	H
3557	Br	OCH_3	CH_3	Cl	OCH_3
3558	Br	OCH_3	CH_3	Cl	Cl
3559	Br	OCH_3	CH_3	Cl	Br
3560	Br	OCH_3	CH_3	Cl	F
3561	Br	OCH_3	CH_3	Br	H
3562	Br	OCH_3	CH_3	Br	OCH_3
3563	Br	OCH_3	CH_3	Br	Cl
3564	Br	OCH_3	CH_3	Br	Br
3565	Br	OCH_3	CH_3	Br	F
3566	Br	OCH_3	CH_3	F	H
3567	Br	OCH_3	CH_3	F	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3568	Br	OCH_3	CH_3	F	Cl
3569	Br	OCH_3	CH_3	F	Br
3570	Br	OCH_3	CH_3	F	F
3571	Br	OCH_3	OCH_3	H	H
3572	Br	OCH_3	OCH_3	H	CH_3
3573	Br	OCH_3	OCH_3	H	OCH_3
3574	Br	OCH_3	OCH_3	H	Cl
3575	Br	OCH_3	OCH_3	H	Br
3576	Br	OCH_3	OCH_3	H	F
3577	Br	OCH_3	OCH_3	CH_3	H
3578	Br	OCH_3	OCH_3	CH_3	CH_3
3579	Br	OCH_3	OCH_3	CH_3	Cl
3580	Br	OCH_3	OCH_3	CH_3	Br
3581	Br	OCH_3	OCH_3	CH_3	F
3582	Br	OCH_3	OCH_3	OCH_3	H
3583	Br	OCH_3	OCH_3	OCH_3	CH_3
3584	Br	OCH_3	OCH_3	OCH_3	OCH_3
3585	Br	OCH_3	OCH_3	OCH_3	Cl
3586	Br	OCH_3	OCH_3	OCH_3	Br
3587	Br	OCH_3	OCH_3	OCH_3	F
3588	Br	OCH_3	OCH_3	Cl	H
3589	Br	OCH_3	OCH_3	Cl	CH_3
3590	Br	OCH_3	OCH_3	Cl	Cl
3591	Br	OCH_3	OCH_3	Cl	Br
3592	Br	OCH_3	OCH_3	Cl	F
3593	Br	OCH_3	OCH_3	Br	H
3594	Br	OCH_3	OCH_3	Br	CH_3
3595	Br	OCH_3	OCH_3	Br	Cl
3596	Br	OCH_3	OCH_3	Br	Br
3597	Br	OCH_3	OCH_3	Br	F
3598	Br	OCH_3	OCH_3	F	H
3599	Br	OCH_3	OCH_3	F	CH_3
3600	Br	OCH_3	OCH_3	F	Cl
3601	Br	OCH_3	OCH_3	F	Br
3602	Br	OCH_3	OCH_3	F	F
3603	Br	OCH_3	Cl	H	H
3604	Br	OCH_3	Cl	H	CH_3
3605	Br	OCH_3	Cl	H	OCH_3
3606	Br	OCH_3	Cl	H	Cl
3607	Br	OCH_3	Cl	H	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3608	Br	OCH_3	Cl	H	F
3609	Br	OCH_3	Cl	CH_3	H
3610	Br	OCH_3	Cl	CH_3	CH_3
3611	Br	OCH_3	Cl	CH_3	OCH_3
3612	Br	OCH_3	Cl	CH_3	Br
3613	Br	OCH_3	Cl	CH_3	F
3614	Br	OCH_3	Cl	OCH_3	H
3615	Br	OCH_3	Cl	OCH_3	CH_3
3616	Br	OCH_3	Cl	OCH_3	OCH_3
3617	Br	OCH_3	Cl	OCH_3	Br
3618	Br	OCH_3	Cl	OCH_3	F
3619	Br	OCH_3	Cl	Cl	H
3620	Br	OCH_3	Cl	Cl	CH_3
3621	Br	OCH_3	Cl	Cl	OCH_3
3622	Br	OCH_3	Cl	Cl	Cl
3623	Br	OCH_3	Cl	Cl	Br
3624	Br	OCH_3	Cl	Cl	F
3625	Br	OCH_3	Cl	Br	H
3626	Br	OCH_3	Cl	Br	CH_3
3627	Br	OCH_3	Cl	Br	OCH_3
3628	Br	OCH_3	Cl	Br	Br
3629	Br	OCH_3	Cl	F	H
3630	Br	OCH_3	Cl	F	CH_3
3631	Br	OCH_3	Cl	F	OCH_3
3632	Br	OCH_3	Cl	F	Br
3633	Br	OCH_3	Cl	F	F
3634	Br	OCH_3	Br	H	H
3635	Br	OCH_3	Br	H	CH_3
3636	Br	OCH_3	Br	H	OCH_3
3637	Br	OCH_3	Br	H	Cl
3638	Br	OCH_3	Br	H	Br
3639	Br	OCH_3	Br	H	F
3640	Br	OCH_3	Br	CH_3	H
3641	Br	OCH_3	Br	CH_3	CH_3
3642	Br	OCH_3	Br	CH_3	OCH_3
3643	Br	OCH_3	Br	CH_3	Cl
3644	Br	OCH_3	Br	CH_3	F
3645	Br	OCH_3	Br	OCH_3	H
3646	Br	OCH_3	Br	OCH_3	CH_3
3647	Br	OCH_3	Br	OCH_3	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3648	Br	OCH_3	Br	OCH_3	Cl
3649	Br	OCH_3	Br	OCH_3	F
3650	Br	OCH_3	Br	Cl	H
3651	Br	OCH_3	Br	Cl	CH_3
3652	Br	OCH_3	Br	Cl	OCH_3
3653	Br	OCH_3	Br	Cl	Cl
3654	Br	OCH_3	Br	Cl	F
3655	Br	OCH_3	Br	Br	H
3656	Br	OCH_3	Br	Br	CH_3
3657	Br	OCH_3	Br	Br	OCH_3
3658	Br	OCH_3	Br	Br	Cl
3659	Br	OCH_3	Br	Br	Br
3660	Br	OCH_3	Br	Br	F
3661	Br	OCH_3	Br	F	H
3662	Br	OCH_3	Br	F	CH_3
3663	Br	OCH_3	Br	F	OCH_3
3664	Br	OCH_3	Br	F	Cl
3665	Br	OCH_3	Br	F	F
3666	Br	OCH_3	F	H	H
3667	Br	OCH_3	F	H	CH_3
3668	Br	OCH_3	F	H	OCH_3
3669	Br	OCH_3	F	H	Cl
3670	Br	OCH_3	F	H	Br
3671	Br	OCH_3	F	H	F
3672	Br	OCH_3	F	CH_3	H
3673	Br	OCH_3	F	CH_3	CH_3
3674	Br	OCH_3	F	CH_3	OCH_3
3675	Br	OCH_3	F	CH_3	Cl
3676	Br	OCH_3	F	CH_3	Br
3677	Br	OCH_3	F	OCH_3	H
3678	Br	OCH_3	F	OCH_3	CH_3
3679	Br	OCH_3	F	OCH_3	OCH_3
3680	Br	OCH_3	F	OCH_3	Cl
3681	Br	OCH_3	F	OCH_3	Br
3682	Br	OCH_3	F	Cl	H
3683	Br	OCH_3	F	Cl	CH_3
3684	Br	OCH_3	F	Cl	OCH_3
3685	Br	OCH_3	F	Cl	Cl
3686	Br	OCH_3	F	Cl	Br
3687	Br	OCH_3	F	Br	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3688	Br	OCH_3	F	Br	CH_3
3689	Br	OCH_3	F	Br	OCH_3
3690	Br	OCH_3	F	Br	Cl
3691	Br	OCH_3	F	Br	Br
3692	Br	OCH_3	F	F	H
3693	Br	OCH_3	F	F	CH_3
3694	Br	OCH_3	F	F	OCH_3
3695	Br	OCH_3	F	F	Cl
3696	Br	OCH_3	F	F	Br
3697	Br	OCH_3	F	F	F
3698	Br	Cl	CH_3	H	H
3699	Br	Cl	CH_3	H	CH_3
3700	Br	Cl	CH_3	H	OCH_3
3701	Br	Cl	CH_3	H	Cl
3702	Br	Cl	CH_3	H	Br
3703	Br	Cl	CH_3	H	F
3704	Br	Cl	CH_3	CH_3	H
3705	Br	Cl	CH_3	CH_3	CH_3
3706	Br	Cl	CH_3	CH_3	OCH_3
3707	Br	Cl	CH_3	CH_3	Cl
3708	Br	Cl	CH_3	CH_3	Br
3709	Br	Cl	CH_3	CH_3	F
3710	Br	Cl	CH_3	OCH_3	H
3711	Br	Cl	CH_3	OCH_3	OCH_3
3712	Br	Cl	CH_3	OCH_3	Cl
3713	Br	Cl	CH_3	OCH_3	Br
3714	Br	Cl	CH_3	OCH_3	F
3715	Br	Cl	CH_3	Cl	H
3716	Br	Cl	CH_3	Cl	OCH_3
3717	Br	Cl	CH_3	Cl	Cl
3718	Br	Cl	CH_3	Cl	Br
3719	Br	Cl	CH_3	Cl	F
3720	Br	Cl	CH_3	Br	H
3721	Br	Cl	CH_3	Br	OCH_3
3722	Br	Cl	CH_3	Br	Cl
3723	Br	Cl	CH_3	Br	Br
3724	Br	Cl	CH_3	Br	F
3725	Br	Cl	CH_3	F	H
3726	Br	Cl	CH_3	F	OCH_3
3727	Br	Cl	CH_3	F	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3728	Br	Cl	CH_3	F	Br
3729	Br	Cl	CH_3	F	F
3730	Br	Cl	OCH_3	H	H
3731	Br	Cl	OCH_3	H	CH_3
3732	Br	Cl	OCH_3	H	OCH_3
3733	Br	Cl	OCH_3	H	Cl
3734	Br	Cl	OCH_3	H	Br
3735	Br	Cl	OCH_3	H	F
3736	Br	Cl	OCH_3	CH_3	H
3737	Br	Cl	OCH_3	CH_3	CH_3
3738	Br	Cl	OCH_3	CH_3	Cl
3739	Br	Cl	OCH_3	CH_3	Br
3740	Br	Cl	OCH_3	CH_3	F
3741	Br	Cl	OCH_3	OCH_3	H
3742	Br	Cl	OCH_3	OCH_3	CH_3
3743	Br	Cl	OCH_3	OCH_3	OCH_3
3744	Br	Cl	OCH_3	OCH_3	Cl
3745	Br	Cl	OCH_3	OCH_3	Br
3746	Br	Cl	OCH_3	OCH_3	F
3747	Br	Cl	OCH_3	Cl	H
3748	Br	Cl	OCH_3	Cl	CH_3
3749	Br	Cl	OCH_3	Cl	Cl
3750	Br	Cl	OCH_3	Cl	Br
3751	Br	Cl	OCH_3	Cl	F
3752	Br	Cl	OCH_3	Br	H
3753	Br	Cl	OCH_3	Br	CH_3
3754	Br	Cl	OCH_3	Br	Cl
3755	Br	Cl	OCH_3	Br	Br
3756	Br	Cl	OCH_3	Br	F
3757	Br	Cl	OCH_3	F	H
3758	Br	Cl	OCH_3	F	CH_3
3759	Br	Cl	OCH_3	F	Cl
3760	Br	Cl	OCH_3	F	Br
3761	Br	Cl	OCH_3	F	F
3762	Br	Cl	Cl	H	H
3763	Br	Cl	Cl	H	CH_3
3764	Br	Cl	Cl	H	OCH_3
3765	Br	Cl	Cl	H	Cl
3766	Br	Cl	Cl	H	Br
3767	Br	Cl	Cl	H	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3768	Br	Cl	Cl	CH_3	H
3769	Br	Cl	Cl	CH_3	CH_3
3770	Br	Cl	Cl	CH_3	OCH_3
3771	Br	Cl	Cl	CH_3	Br
3772	Br	Cl	Cl	CH_3	F
3773	Br	Cl	Cl	OCH_3	H
3774	Br	Cl	Cl	OCH_3	CH_3
3775	Br	Cl	Cl	OCH_3	OCH_3
3776	Br	Cl	Cl	OCH_3	Br
3777	Br	Cl	Cl	OCH_3	F
3778	Br	Cl	Cl	Cl	H
3779	Br	Cl	Cl	Cl	CH_3
3780	Br	Cl	Cl	Cl	OCH_3
3781	Br	Cl	Cl	Cl	Cl
3782	Br	Cl	Cl	Cl	Br
3783	Br	Cl	Cl	Cl	F
3784	Br	Cl	Cl	Br	H
3785	Br	Cl	Cl	Br	CH_3
3786	Br	Cl	Cl	Br	OCH_3
3787	Br	Cl	Cl	Br	Br
3788	Br	Cl	Cl	F	H
3789	Br	Cl	Cl	F	CH_3
3790	Br	Cl	Cl	F	OCH_3
3791	Br	Cl	Cl	F	Br
3792	Br	Cl	Cl	F	F
3793	Br	Cl	Br	H	H
3794	Br	Cl	Br	H	CH_3
3795	Br	Cl	Br	H	OCH_3
3796	Br	Cl	Br	H	Cl
3797	Br	Cl	Br	H	Br
3798	Br	Cl	Br	H	F
3799	Br	Cl	Br	CH_3	H
3800	Br	Cl	Br	CH_3	CH_3
3801	Br	Cl	Br	CH_3	OCH_3
3802	Br	Cl	Br	CH_3	Cl
3803	Br	Cl	Br	CH_3	F
3804	Br	Cl	Br	OCH_3	H
3805	Br	Cl	Br	OCH_3	CH_3
3806	Br	Cl	Br	OCH_3	OCH_3
3807	Br	Cl	Br	OCH_3	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3808	Br	Cl	Br	OCH_3	F
3809	Br	Cl	Br	Cl	H
3810	Br	Cl	Br	Cl	CH_3
3811	Br	Cl	Br	Cl	OCH_3
3812	Br	Cl	Br	Cl	Cl
3813	Br	Cl	Br	Cl	F
3814	Br	Cl	Br	Br	H
3815	Br	Cl	Br	Br	CH_3
3816	Br	Cl	Br	Br	OCH_3
3817	Br	Cl	Br	Br	Cl
3818	Br	Cl	Br	Br	Br
3819	Br	Cl	Br	Br	F
3820	Br	Cl	Br	F	H
3821	Br	Cl	Br	F	CH_3
3822	Br	Cl	Br	F	OCH_3
3823	Br	Cl	Br	F	Cl
3824	Br	Cl	Br	F	F
3825	Br	Cl	F	H	H
3826	Br	Cl	F	H	CH_3
3827	Br	Cl	F	H	OCH_3
3828	Br	Cl	F	H	Cl
3829	Br	Cl	F	H	Br
3830	Br	Cl	F	H	F
3831	Br	Cl	F	CH_3	H
3832	Br	Cl	F	CH_3	CH_3
3833	Br	Cl	F	CH_3	OCH_3
3834	Br	Cl	F	CH_3	Cl
3835	Br	Cl	F	CH_3	Br
3836	Br	Cl	F	OCH_3	H
3837	Br	Cl	F	OCH_3	CH_3
3838	Br	Cl	F	OCH_3	OCH_3
3839	Br	Cl	F	OCH_3	Cl
3840	Br	Cl	F	OCH_3	Br
3841	Br	Cl	F	Cl	H
3842	Br	Cl	F	Cl	CH_3
3843	Br	Cl	F	Cl	OCH_3
3844	Br	Cl	F	Cl	Cl
3845	Br	Cl	F	Cl	Br
3846	Br	Cl	F	Br	H
3847	Br	Cl	F	Br	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3848	Br	Cl	F	Br	OCH_3
3849	Br	Cl	F	Br	Cl
3850	Br	Cl	F	Br	Br
3851	Br	Cl	F	F	H
3852	Br	Cl	F	F	CH_3
3853	Br	Cl	F	F	OCH_3
3854	Br	Cl	F	F	Cl
3855	Br	Cl	F	F	Br
3856	Br	Cl	F	F	F
3857	Br	Br	CH_3	H	H
3858	Br	Br	CH_3	H	CH_3
3859	Br	Br	CH_3	H	OCH_3
3860	Br	Br	CH_3	H	Cl
3861	Br	Br	CH_3	H	Br
3862	Br	Br	CH_3	H	F
3863	Br	Br	CH_3	CH_3	H
3864	Br	Br	CH_3	CH_3	CH_3
3865	Br	Br	CH_3	CH_3	OCH_3
3866	Br	Br	CH_3	CH_3	Cl
3867	Br	Br	CH_3	CH_3	Br
3868	Br	Br	CH_3	CH_3	F
3869	Br	Br	CH_3	OCH_3	H
3870	Br	Br	CH_3	OCH_3	OCH_3
3871	Br	Br	CH_3	OCH_3	Cl
3872	Br	Br	CH_3	OCH_3	Br
3873	Br	Br	CH_3	OCH_3	F
3874	Br	Br	CH_3	Cl	H
3875	Br	Br	CH_3	Cl	OCH_3
3876	Br	Br	CH_3	Cl	Cl
3877	Br	Br	CH_3	Cl	Br
3878	Br	Br	CH_3	Cl	F
3879	Br	Br	CH_3	Br	H
3880	Br	Br	CH_3	Br	OCH_3
3881	Br	Br	CH_3	Br	Cl
3882	Br	Br	CH_3	Br	Br
3883	Br	Br	CH_3	Br	F
3884	Br	Br	CH_3	F	H
3885	Br	Br	CH_3	F	OCH_3
3886	Br	Br	CH_3	F	Cl
3887	Br	Br	CH_3	F	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3888	Br	Br	CH_3	F	F
3889	Br	Br	OCH_3	H	H
3890	Br	Br	OCH_3	H	CH_3
3891	Br	Br	OCH_3	H	OCH_3
3892	Br	Br	OCH_3	H	Cl
3893	Br	Br	OCH_3	H	Br
3894	Br	Br	OCH_3	H	F
3895	Br	Br	OCH_3	CH_3	H
3896	Br	Br	OCH_3	CH_3	CH_3
3897	Br	Br	OCH_3	CH_3	Cl
3898	Br	Br	OCH_3	CH_3	Br
3899	Br	Br	OCH_3	CH_3	F
3900	Br	Br	OCH_3	OCH_3	H
3901	Br	Br	OCH_3	OCH_3	CH_3
3902	Br	Br	OCH_3	OCH_3	OCH_3
3903	Br	Br	OCH_3	OCH_3	Cl
3904	Br	Br	OCH_3	OCH_3	Br
3905	Br	Br	OCH_3	OCH_3	F
3906	Br	Br	OCH_3	Cl	H
3907	Br	Br	OCH_3	Cl	CH_3
3908	Br	Br	OCH_3	Cl	Cl
3909	Br	Br	OCH_3	Cl	Br
3910	Br	Br	OCH_3	Cl	F
3911	Br	Br	OCH_3	Br	H
3912	Br	Br	OCH_3	Br	CH_3
3913	Br	Br	OCH_3	Br	Cl
3914	Br	Br	OCH_3	Br	Br
3915	Br	Br	OCH_3	Br	F
3916	Br	Br	OCH_3	F	H
3917	Br	Br	OCH_3	F	CH_3
3918	Br	Br	OCH_3	F	Cl
3919	Br	Br	OCH_3	F	Br
3920	Br	Br	OCH_3	F	F
3921	Br	Br	Cl	H	H
3922	Br	Br	Cl	H	CH_3
3923	Br	Br	Cl	H	OCH_3
3924	Br	Br	Cl	H	Cl
3925	Br	Br	Cl	H	Br
3926	Br	Br	Cl	H	F
3927	Br	Br	Cl	CH_3	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3928	Br	Br	Cl	CH_3	CH_3
3929	Br	Br	Cl	CH_3	OCH_3
3930	Br	Br	Cl	CH_3	Br
3931	Br	Br	Cl	CH_3	F
3932	Br	Br	Cl	OCH_3	H
3933	Br	Br	Cl	OCH_3	CH_3
3934	Br	Br	Cl	OCH_3	OCH_3
3935	Br	Br	Cl	OCH_3	Br
3936	Br	Br	Cl	OCH_3	F
3937	Br	Br	Cl	Cl	H
3938	Br	Br	Cl	Cl	CH_3
3939	Br	Br	Cl	Cl	OCH_3
3940	Br	Br	Cl	Cl	Cl
3941	Br	Br	Cl	Cl	Br
3942	Br	Br	Cl	Cl	F
3943	Br	Br	Cl	Br	H
3944	Br	Br	Cl	Br	CH_3
3945	Br	Br	Cl	Br	OCH_3
3946	Br	Br	Cl	Br	Br
3947	Br	Br	Cl	F	H
3948	Br	Br	Cl	F	CH_3
3949	Br	Br	Cl	F	OCH_3
3950	Br	Br	Cl	F	Br
3951	Br	Br	Cl	F	F
3952	Br	Br	Br	H	H
3953	Br	Br	Br	H	CH_3
3954	Br	Br	Br	H	OCH_3
3955	Br	Br	Br	H	Cl
3956	Br	Br	Br	H	Br
3957	Br	Br	Br	H	F
3958	Br	Br	Br	CH_3	H
3959	Br	Br	Br	CH_3	CH_3
3960	Br	Br	Br	CH_3	OCH_3
3961	Br	Br	Br	CH_3	Cl
3962	Br	Br	Br	CH_3	F
3963	Br	Br	Br	OCH_3	H
3964	Br	Br	Br	OCH_3	CH_3
3965	Br	Br	Br	OCH_3	OCH_3
3966	Br	Br	Br	OCH_3	Cl
3967	Br	Br	Br	OCH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
3968	Br	Br	Br		H
3969	Br	Br	Br	Cl	CH_3
3970	Br	Br	Br	Cl	OCH_3
3971	Br	Br	Br	Cl	Cl
3972	Br	Br	Br	Cl	F
3973	Br	Br	Br	Br	H
3974	Br	Br	Br	Br	CH_3
3975	Br	Br	Br	Br	OCH_3
3976	Br	Br	Br	Br	Cl
3977	Br	Br	Br	Br	Br
3978	Br	Br	Br	Br	F
3979	Br	Br	Br	F	H
3980	Br	Br	Br	F	CH_3
3981	Br	Br	Br	F	OCH_3
3982	Br	Br	Br	F	Cl
3983	Br	Br	Br	F	F
3984	Br	Br	F	H	H
3985	Br	Br	F	H	CH_3
3986	Br	Br	F	H	OCH_3
3987	Br	Br	F	H	Cl
3988	Br	Br	F	H	Br
3989	Br	Br	F	H	F
3990	Br	Br	F	CH_3	H
3991	Br	Br	F	CH_3	CH_3
3992	Br	Br	F	CH_3	OCH_3
3993	Br	Br	F	CH_3	Cl
3994	Br	Br	F	CH_3	Br
3995	Br	Br	F	OCH_3	H
3996	Br	Br	F	OCH_3	CH_3
3997	Br	Br	F	OCH_3	OCH_3
3998	Br	Br	F	OCH_3	Cl
3999	Br	Br	F	OCH_3	Br
4000	Br	Br	F	Cl	H
4001	Br	Br	F	Cl	CH_3
4002	Br	Br	F	Cl	OCH_3
4003	Br	Br	F	Cl	Cl
4004	Br	Br	F	Cl	Br
4005	Br	Br	F	Br	H
4006	Br	Br	F	Br	CH_3
4007	Br	Br	F	Br	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4008	Br	Br	F	Br	Cl
4009	Br	Br	F	Br	Br
4010	Br	Br	F	F	H
4011	Br	Br	F	F	CH_3
4012	Br	Br	F	F	OCH_3
4013	Br	Br	F	F	Cl
4014	Br	Br	F	F	Br
4015	Br	Br	F	F	F
4016	Br	F	CH_3	H	H
4017	Br	F	CH_3	H	CH_3
4018	Br	F	CH_3	H	OCH_3
4019	Br	F	CH_3	H	Cl
4020	Br	F	CH_3	H	Br
4021	Br	F	CH_3	H	F
4022	Br	F	CH_3	CH_3	H
4023	Br	F	CH_3	CH_3	CH_3
4024	Br	F	CH_3	CH_3	OCH_3
4025	Br	F	CH_3	CH_3	Cl
4026	Br	F	CH_3	CH_3	Br
4027	Br	F	CH_3	CH_3	F
4028	Br	F	CH_3	OCH_3	H
4029	Br	F	CH_3	OCH_3	OCH_3
4030	Br	F	CH_3	OCH_3	Cl
4031	Br	F	CH_3	OCH_3	Br
4032	Br	F	CH_3	OCH_3	F
4033	Br	F	CH_3	Cl	H
4034	Br	F	CH_3	Cl	OCH_3
4035	Br	F	CH_3	Cl	Cl
4036	Br	F	CH_3	Cl	Br
4037	Br	F	CH_3	Cl	F
4038	Br	F	CH_3	Br	H
4039	Br	F	CH_3	Br	OCH_3
4040	Br	F	CH_3	Br	Cl
4041	Br	F	CH_3	Br	Br
4042	Br	F	CH_3	Br	F
4043	Br	F	CH_3	F	H
4044	Br	F	CH_3	F	OCH_3
4045	Br	F	CH_3	F	Cl
4046	Br	F	CH_3	F	Br
4047	Br	F	CH_3	F	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4048	Br	F	OCH_3	H	H
4049	Br	F	OCH_3	H	CH_3
4050	Br	F	OCH_3	H	OCH_3
4051	Br	F	OCH_3	H	Cl
4052	Br	F	OCH_3	H	Br
4053	Br	F	OCH_3	H	F
4054	Br	F	OCH_3	CH_3	H
4055	Br	F	OCH_3	CH_3	CH_3
4056	Br	F	OCH_3	CH_3	Cl
4057	Br	F	OCH_3	CH_3	Br
4058	Br	F	OCH_3	CH_3	F
4059	Br	F	OCH_3	OCH_3	H
4060	Br	F	OCH_3	OCH_3	CH_3
4061	Br	F	OCH_3	OCH_3	OCH_3
4062	Br	F	OCH_3	OCH_3	Cl
4063	Br	F	OCH_3	OCH_3	Br
4064	Br	F	OCH_3	OCH_3	F
4065	Br	F	OCH_3	Cl	H
4066	Br	F	OCH_3	Cl	CH_3
4067	Br	F	OCH_3	Cl	Cl
4068	Br	F	OCH_3	Cl	Br
4069	Br	F	OCH_3	Cl	F
4070	Br	F	OCH_3	Br	H
4071	Br	F	OCH_3	Br	CH_3
4072	Br	F	OCH_3	Br	Cl
4073	Br	F	OCH_3	Br	Br
4074	Br	F	OCH_3	Br	F
4075	Br	F	OCH_3	F	H
4076	Br	F	OCH_3	F	CH_3
4077	Br	F	OCH_3	F	Cl
4078	Br	F	OCH_3	F	Br
4079	Br	F	OCH_3	F	F
4080	Br	F	Cl	H	H
4081	Br	F	Cl	H	CH_3
4082	Br	F	Cl	H	OCH_3
4083	Br	F	Cl	H	Cl
4084	Br	F	Cl	H	Br
4085	Br	F	Cl	H	F
4086	Br	F	Cl	CH_3	H
4087	Br	F	Cl	CH_3	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4088	Br	F	Cl	CH_3	OCH_3
4089	Br	F	Cl	CH_3	Br
4090	Br	F	Cl	CH_3	F
4091	Br	F	Cl	OCH_3	H
4092	Br	F	Cl	OCH_3	CH_3
4093	Br	F	Cl	OCH_3	OCH_3
4094	Br	F	Cl	OCH_3	Br
4095	Br	F	Cl	OCH_3	F
4096	Br	F	Cl	Cl	H
4097	Br	F	Cl	Cl	CH_3
4098	Br	F	Cl	Cl	OCH_3
4099	Br	F	Cl	Cl	Cl
4100	Br	F	Cl	Cl	Br
4101	Br	F	Cl	Cl	F
4102	Br	F	Cl	Br	H
4103	Br	F	Cl	Br	CH_3
4104	Br	F	Cl	Br	OCH_3
4105	Br	F	Cl	Br	Br
4106	Br	F	Cl	F	H
4107	Br	F	Cl	F	CH_3
4108	Br	F	Cl	F	OCH_3
4109	Br	F	Cl	F	Br
4110	Br	F	Cl	F	F
4111	Br	F	Br	H	H
4112	Br	F	Br	H	CH_3
4113	Br	F	Br	H	OCH_3
4114	Br	F	Br	H	Cl
4115	Br	F	Br	H	Br
4116	Br	F	Br	H	F
4117	Br	F	Br	CH_3	H
4118	Br	F	Br	CH_3	CH_3
4119	Br	F	Br	CH_3	OCH_3
4120	Br	F	Br	CH_3	Cl
4121	Br	F	Br	CH_3	F
4122	Br	F	Br	OCH_3	H
4123	Br	F	Br	OCH_3	CH_3
4124	Br	F	Br	OCH_3	OCH_3
4125	Br	F	Br	OCH_3	Cl
4126	Br	F	Br	OCH_3	F
4127	Br	F	Br	Cl	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4128	Br	F	Br	Cl	CH_3
4129	Br	F	Br	Cl	OCH_3
4130	Br	F	Br	Cl	Cl
4131	Br	F	Br	Cl	F
4132	Br	F	Br	Br	H
4133	Br	F	Br	Br	CH_3
4134	Br	F	Br	Br	OCH_3
4135	Br	F	Br	Br	Cl
4136	Br	F	Br	Br	Br
4137	Br	F	Br	Br	F
4138	Br	F	Br	F	H
4139	Br	F	Br	F	CH_3
4140	Br	F	Br	F	OCH_3
4141	Br	F	Br	F	Cl
4142	Br	F	Br	F	F
4143	Br	F	F	H	H
4144	Br	F	F	H	CH_3
4145	Br	F	F	H	OCH_3
4146	Br	F	F	H	Cl
4147	Br	F	F	H	Br
4148	Br	F	F	H	F
4149	Br	F	F	CH_3	H
4150	Br	F	F	CH_3	CH_3
4151	Br	F	F	CH_3	OCH_3
4152	Br	F	F	CH_3	Cl
4153	Br	F	F	CH_3	Br
4154	Br	F	F	OCH_3	H
4155	Br	F	F	OCH_3	CH_3
4156	Br	F	F	OCH_3	OCH_3
4157	Br	F	F	OCH_3	Cl
4158	Br	F	F	OCH_3	Br
4159	Br	F	F	Cl	H
4160	Br	F	F	Cl	CH_3
4161	Br	F	F	Cl	OCH_3
4162	Br	F	F	Cl	Cl
4163	Br	F	F	Cl	Br
4164	Br	F	F	Br	H
4165	Br	F	F	Br	CH_3
4166	Br	F	F	Br	OCH_3
4167	Br	F	F	Br	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4168	Br	F	F	Br	Br
4169	Br	F	F	F	H
4170	Br	F	F	F	CH_3
4171	Br	F	F	F	OCH_3
4172	Br	F	F	F	Cl
4173	Br	F	F	F	Br
4174	Br	F	F	F	F
4175	F	CH_3	CH_3	H	H
4176	F	CH_3	CH_3	CH_3	H
4177	F	CH_3	CH_3	OCH_3	H
4178	F	CH_3	CH_3	Cl	H
4179	F	CH_3	CH_3	Br	H
4180	F	CH_3	CH_3	F	H
4181	F	CH_3	CH_3	H	CH_3
4182	F	CH_3	CH_3	CH_3	CH_3
4183	F	CH_3	CH_3	H	OCH_3
4184	F	CH_3	CH_3	CH_3	OCH_3
4185	F	CH_3	CH_3	OCH_3	OCH_3
4186	F	CH_3	CH_3	Cl	OCH_3
4187	F	CH_3	CH_3	Br	OCH_3
4188	F	CH_3	CH_3	F	OCH_3
4189	F	CH_3	CH_3	H	Cl
4190	F	CH_3	CH_3	CH_3	Cl
4191	F	CH_3	CH_3	OCH_3	Cl
4192	F	CH_3	CH_3	Cl	Cl
4193	F	CH_3	CH_3	Br	Cl
4194	F	CH_3	CH_3	F	Cl
4195	F	CH_3	CH_3	H	Br
4196	F	CH_3	CH_3	CH_3	Br
4197	F	CH_3	CH_3	OCH_3	Br
4198	F	CH_3	CH_3	Cl	Br
4199	F	CH_3	CH_3	Br	Br
4200	F	CH_3	CH_3	F	Br
4201	F	CH_3	CH_3	H	F
4202	F	CH_3	CH_3	CH_3	F
4203	F	CH_3	CH_3	OCH_3	F
4204	F	CH_3	CH_3	Cl	F
4205	F	CH_3	CH_3	Br	F
4206	F	CH_3	CH_3	F	F
4207	F	CH_3	OCH_3	H	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4208	F	CH_3	OCH_3	CH_3	H
4209	F	CH_3	OCH_3	OCH_3	H
4210	F	CH_3	OCH_3	Cl	H
4211	F	CH_3	OCH_3	Br	H
4212	F	CH_3	OCH_3	F	H
4213	F	CH_3	OCH_3	H	CH_3
4214	F	CH_3	OCH_3	CH_3	CH_3
4215	F	CH_3	OCH_3	OCH_3	CH_3
4216	F	CH_3	OCH_3	Cl	CH_3
4217	F	CH_3	OCH_3	Br	CH_3
4218	F	CH_3	OCH_3	F	CH_3
4219	F	CH_3	OCH_3	H	OCH_3
4220	F	CH_3	OCH_3	OCH_3	OCH_3
4221	F	CH_3	OCH_3	H	Cl
4222	F	CH_3	OCH_3	CH_3	Cl
4223	F	CH_3	OCH_3	OCH_3	Cl
4224	F	CH_3	OCH_3	Cl	Cl
4225	F	CH_3	OCH_3	Br	Cl
4226	F	CH_3	OCH_3	F	Cl
4227	F	CH_3	OCH_3	H	Br
4228	F	CH_3	OCH_3	CH_3	Br
4229	F	CH_3	OCH_3	OCH_3	Br
4230	F	CH_3	OCH_3	Cl	Br
4231	F	CH_3	OCH_3	Br	Br
4232	F	CH_3	OCH_3	F	Br
4233	F	CH_3	OCH_3	H	F
4234	F	CH_3	OCH_3	CH_3	F
4235	F	CH_3	OCH_3	OCH_3	F
4236	F	CH_3	OCH_3	Cl	F
4237	F	CH_3	OCH_3	Br	F
4238	F	CH_3	OCH_3	F	F
4239	F	CH_3	Cl	H	H
4240	F	CH_3	Cl	CH_3	H
4241	F	CH_3	Cl	OCH_3	H
4242	F	CH_3	Cl	Cl	H
4243	F	CH_3	Cl	Br	H
4244	F	CH_3	Cl	F	H
4245	F	CH_3	Cl	H	CH_3
4246	F	CH_3	Cl	CH_3	CH_3
4247	F	CH_3	Cl	OCH_3	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4248	F	CH_3	Cl	Cl	CH_3
4249	F	CH_3	Cl	Br	CH_3
4250	F	CH_3	Cl	F	CH_3
4251	F	CH_3	Cl	H	OCH_3
4252	F	CH_3	Cl	CH_3	OCH_3
4253	F	CH_3	Cl	OCH_3	OCH_3
4254	F	CH_3	Cl	Cl	OCH_3
4255	F	CH_3	Cl	Br	OCH_3
4256	F	CH_3	Cl	F	OCH_3
4257	F	CH_3	Cl	H	Cl
4258	F	CH_3	Cl	Cl	Cl
4259	F	CH_3	Cl	H	Br
4260	F	CH_3	Cl	CH_3	Br
4261	F	CH_3	Cl	OCH_3	Br
4262	F	CH_3	Cl	Cl	Br
4263	F	CH_3	Cl	Br	Br
4264	F	CH_3	Cl	F	Br
4265	F	CH_3	Cl	H	F
4266	F	CH_3	Cl	CH_3	F
4267	F	CH_3	Cl	OCH_3	F
4268	F	CH_3	Cl	Cl	F
4269	F	CH_3	Cl	F	F
4270	F	CH_3	Br	H	H
4271	F	CH_3	Br	CH_3	H
4272	F	CH_3	Br	OCH_3	H
4273	F	CH_3	Br	Cl	H
4274	F	CH_3	Br	Br	H
4275	F	CH_3	Br	F	H
4276	F	CH_3	Br	H	CH_3
4277	F	CH_3	Br	CH_3	CH_3
4278	F	CH_3	Br	OCH_3	CH_3
4279	F	CH_3	Br	Cl	CH_3
4280	F	CH_3	Br	Br	CH_3
4281	F	CH_3	Br	F	CH_3
4282	F	CH_3	Br	H	OCH_3
4283	F	CH_3	Br	CH_3	OCH_3
4284	F	CH_3	Br	OCH_3	OCH_3
4285	F	CH_3	Br	Cl	OCH_3
4286	F	CH_3	Br	Br	OCH_3
4287	F	CH_3	Br	F	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4288	F	CH_3	Br	H	Cl
4289	F	CH_3	Br	CH_3	Cl
4290	F	CH_3	Br	OCH_3	Cl
4291	F	CH_3	Br	Cl	Cl
4292	F	CH_3	Br	Br	Cl
4293	F	CH_3	Br	F	Cl
4294	F	CH_3	Br	H	Br
4295	F	CH_3	Br	Br	Br
4296	F	CH_3	Br	H	F
4297	F	CH_3	Br	CH_3	F
4298	F	CH_3	Br	OCH_3	F
4299	F	CH_3	Br	Cl	F
4300	F	CH_3	Br	Br	F
4301	F	CH_3	Br	F	F
4302	F	CH_3	F	H	H
4303	F	CH_3	F	CH_3	H
4304	F	CH_3	F	OCH_3	H
4305	F	CH_3	F	Cl	H
4306	F	CH_3	F	Br	H
4307	F	CH_3	F	F	H
4308	F	CH_3	F	H	CH_3
4309	F	CH_3	F	CH_3	CH_3
4310	F	CH_3	F	OCH_3	CH_3
4311	F	CH_3	F	Cl	CH_3
4312	F	CH_3	F	Br	CH_3
4313	F	CH_3	F	F	CH_3
4314	F	CH_3	F	H	OCH_3
4315	F	CH_3	F	CH_3	OCH_3
4316	F	CH_3	F	OCH_3	OCH_3
4317	F	CH_3	F	Cl	OCH_3
4318	F	CH_3	F	Br	OCH_3
4319	F	CH_3	F	F	OCH_3
4320	F	CH_3	F	H	Cl
4321	F	CH_3	F	CH_3	Cl
4322	F	CH_3	F	OCH_3	Cl
4323	F	CH_3	F	Cl	Cl
4324	F	CH_3	F	Br	Cl
4325	F	CH_3	F	F	Cl
4326	F	CH_3	F	H	Br
4327	F	CH_3	F	CH_3	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4328	F	CH_3	F	OCH_3	Br
4329	F	CH_3	F	Cl	Br
4330	F	CH_3	F	Br	Br
4331	F	CH_3	F	F	Br
4332	F	CH_3	F	H	F
4333	F	CH_3	F	F	F
4334	F	OCH_3	CH_3	H	H
4335	F	OCH_3	CH_3	H	CH_3
4336	F	OCH_3	CH_3	H	OCH_3
4337	F	OCH_3	CH_3	H	Cl
4338	F	OCH_3	CH_3	H	Br
4339	F	OCH_3	CH_3	H	F
4340	F	OCH_3	CH_3	CH_3	H
4341	F	OCH_3	CH_3	CH_3	CH_3
4342	F	OCH_3	CH_3	CH_3	OCH_3
4343	F	OCH_3	CH_3	CH_3	Cl
4344	F	OCH_3	CH_3	CH_3	Br
4345	F	OCH_3	CH_3	CH_3	F
4346	F	OCH_3	CH_3	OCH_3	H
4347	F	OCH_3	CH_3	OCH_3	OCH_3
4348	F	OCH_3	CH_3	OCH_3	Cl
4349	F	OCH_3	CH_3	OCH_3	Br
4350	F	OCH_3	CH_3	OCH_3	F
4351	F	OCH_3	CH_3	Cl	H
4352	F	OCH_3	CH_3	Cl	OCH_3
4353	F	OCH_3	CH_3	Cl	Cl
4354	F	OCH_3	CH_3	Cl	Br
4355	F	OCH_3	CH_3	Cl	F
4356	F	OCH_3	CH_3	Br	H
4357	F	OCH_3	CH_3	Br	OCH_3
4358	F	OCH_3	CH_3	Br	Cl
4359	F	OCH_3	CH_3	Br	Br
4360	F	OCH_3	CH_3	Br	F
4361	F	OCH_3	CH_3	F	H
4362	F	OCH_3	CH_3	F	OCH_3
4363	F	OCH_3	CH_3	F	Cl
4364	F	OCH_3	CH_3	F	Br
4365	F	OCH_3	CH_3	F	F
4366	F	OCH_3	OCH_3	H	H
4367	F	OCH_3	OCH_3	H	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4368	F	OCH_3	OCH_3	H	OCH_3
4369	F	OCH_3	OCH_3	H	Cl
4370	F	OCH_3	OCH_3	H	Br
4371	F	OCH_3	OCH_3	H	F
4372	F	OCH_3	OCH_3	CH_3	H
4373	F	OCH_3	OCH_3	CH_3	CH_3
4374	F	OCH_3	OCH_3	CH_3	Cl
4375	F	OCH_3	OCH_3	CH_3	Br
4376	F	OCH_3	OCH_3	CH_3	F
4377	F	OCH_3	OCH_3	OCH_3	H
4378	F	OCH_3	OCH_3	OCH_3	CH_3
4379	F	OCH_3	OCH_3	OCH_3	OCH_3
4380	F	OCH_3	OCH_3	OCH_3	Cl
4381	F	OCH_3	OCH_3	OCH_3	Br
4382	F	OCH_3	OCH_3	OCH_3	F
4383	F	OCH_3	OCH_3	Cl	H
4384	F	OCH_3	OCH_3	Cl	CH_3
4385	F	OCH_3	OCH_3	Cl	Cl
4386	F	OCH_3	OCH_3	Cl	Br
4387	F	OCH_3	OCH_3	Cl	F
4388	F	OCH_3	OCH_3	Br	H
4389	F	OCH_3	OCH_3	Br	CH_3
4390	F	OCH_3	OCH_3	Br	Cl
4391	F	OCH_3	OCH_3	Br	Br
4392	F	OCH_3	OCH_3	Br	F
4393	F	OCH_3	OCH_3	F	H
4394	F	OCH_3	OCH_3	F	CH_3
4395	F	OCH_3	OCH_3	F	Cl
4396	F	OCH_3	OCH_3	F	Br
4397	F	OCH_3	OCH_3	F	F
4398	F	OCH_3	Cl	H	H
4399	F	OCH_3	Cl	H	CH_3
4400	F	OCH_3	Cl	H	OCH_3
4401	F	OCH_3	Cl	H	Cl
4402	F	OCH_3	Cl	H	Br
4403	F	OCH_3	Cl	H	F
4404	F	OCH_3	Cl	CH_3	H
4405	F	OCH_3	Cl	CH_3	CH_3
4406	F	OCH_3	Cl	CH_3	OCH_3
4407	F	OCH_3	Cl	CH_3	Br

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4408	F	OCH_3	Cl	CH_3	F
4409	F	OCH_3	Cl	OCH_3	H
4410	F	OCH_3	Cl	OCH_3	CH_3
4411	F	OCH_3	Cl	OCH_3	OCH_3
4412	F	OCH_3	Cl	OCH_3	Br
4413	F	OCH_3	Cl	OCH_3	F
4414	F	OCH_3	Cl	Cl	H
4415	F	OCH_3	Cl	Cl	CH_3
4416	F	OCH_3	Cl	Cl	OCH_3
4417	F	OCH_3	Cl	Cl	Cl
4418	F	OCH_3	Cl	Cl	Br
4419	F	OCH_3	Cl	Cl	F
4420	F	OCH_3	Cl	Br	H
4421	F	OCH_3	Cl	Br	CH_3
4422	F	OCH_3	Cl	Br	OCH_3
4423	F	OCH_3	Cl	Br	Br
4424	F	OCH_3	Cl	F	H
4425	F	OCH_3	Cl	F	CH_3
4426	F	OCH_3	Cl	F	OCH_3
4427	F	OCH_3	Cl	F	Br
4428	F	OCH_3	Cl	F	F
4429	F	OCH_3	Br	H	H
4430	F	OCH_3	Br	H	CH_3
4431	F	OCH_3	Br	H	OCH_3
4432	F	OCH_3	Br	H	Cl
4433	F	OCH_3	Br	H	Br
4434	F	OCH_3	Br	H	F
4435	F	OCH_3	Br	CH_3	H
4436	F	OCH_3	Br	CH_3	CH_3
4437	F	OCH_3	Br	CH_3	OCH_3
4438	F	OCH_3	Br	CH_3	Cl
4439	F	OCH_3	Br	CH_3	F
4440	F	OCH_3	Br	OCH_3	H
4441	F	OCH_3	Br	OCH_3	CH_3
4442	F	OCH_3	Br	OCH_3	OCH_3
4443	F	OCH_3	Br	OCH_3	Cl
4444	F	OCH_3	Br	OCH_3	F
4445	F	OCH_3	Br	Cl	H
4446	F	OCH_3	Br	Cl	CH_3
4447	F	OCH_3	Br	Cl	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4448	F	OCH_3	Br	Cl	Cl
4449	F	OCH_3	Br	Cl	F
4450	F	OCH_3	Br	Br	H
4451	F	OCH_3	Br	Br	CH_3
4452	F	OCH_3	Br	Br	OCH_3
4453	F	OCH_3	Br	Br	Cl
4454	F	OCH_3	Br	Br	Br
4455	F	OCH_3	Br	Br	F
4456	F	OCH_3	Br	F	H
4457	F	OCH_3	Br	F	CH_3
4458	F	OCH_3	Br	F	OCH_3
4459	F	OCH_3	Br	F	Cl
4460	F	OCH_3	Br	F	F
4461	F	OCH_3	F	H	H
4462	F	OCH_3	F	H	CH_3
4463	F	OCH_3	F	H	OCH_3
4464	F	OCH_3	F	H	Cl
4465	F	OCH_3	F	H	Br
4466	F	OCH_3	F	H	F
4467	F	OCH_3	F	CH_3	H
4468	F	OCH_3	F	CH_3	CH_3
4469	F	OCH_3	F	CH_3	OCH_3
4470	F	OCH_3	F	CH_3	Cl
4471	F	OCH_3	F	CH_3	Br
4472	F	OCH_3	F	OCH_3	H
4473	F	OCH_3	F	OCH_3	CH_3
4474	F	OCH_3	F	OCH_3	OCH_3
4475	F	OCH_3	F	OCH_3	Cl
4476	F	OCH_3	F	OCH_3	Br
4477	F	OCH_3	F	Cl	H
4478	F	OCH_3	F	Cl	CH_3
4479	F	OCH_3	F	Cl	OCH_3
4480	F	OCH_3	F	Cl	Cl
4481	F	OCH_3	F	Cl	Br
4482	F	OCH_3	F	Br	H
4483	F	OCH_3	F	Br	CH_3
4484	F	OCH_3	F	Br	OCH_3
4485	F	OCH_3	F	Br	Cl
4486	F	OCH_3	F	Br	Br
4487	F	OCH_3	F	F	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4488	F	OCH_3	F	F	CH_3
4489	F	OCH_3	F	F	OCH_3
4490	F	OCH_3	F	F	Cl
4491	F	OCH_3	F	F	Br
4492	F	OCH_3	F	F	F
4493	F	Cl	CH_3	H	H
4494	F	Cl	CH_3	H	CH_3
4495	F	Cl	CH_3	H	OCH_3
4496	F	Cl	CH_3	H	Cl
4497	F	Cl	CH_3	H	Br
4498	F	Cl	CH_3	H	F
4499	F	Cl	CH_3	CH_3	H
4500	F	Cl	CH_3	CH_3	CH_3
4501	F	Cl	CH_3	CH_3	OCH_3
4502	F	Cl	CH_3	CH_3	Cl
4503	F	Cl	CH_3	CH_3	Br
4504	F	Cl	CH_3	CH_3	F
4505	F	Cl	CH_3	OCH_3	H
4506	F	Cl	CH_3	OCH_3	OCH_3
4507	F	Cl	CH_3	OCH_3	Cl
4508	F	Cl	CH_3	OCH_3	Br
4509	F	Cl	CH_3	OCH_3	F
4510	F	Cl	CH_3	Cl	H
4511	F	Cl	CH_3	Cl	OCH_3
4512	F	Cl	CH_3	Cl	Cl
4513	F	Cl	CH_3	Cl	Br
4514	F	Cl	CH_3	Cl	F
4515	F	Cl	CH_3	Br	H
4516	F	Cl	CH_3	Br	OCH_3
4517	F	Cl	CH_3	Br	Cl
4518	F	Cl	CH_3	Br	Br
4519	F	Cl	CH_3	Br	F
4520	F	Cl	CH_3	F	H
4521	F	Cl	CH_3	F	OCH_3
4522	F	Cl	CH_3	F	Cl
4523	F	Cl	CH_3	F	Br
4524	F	Cl	CH_3	F	F
4525	F	Cl	OCH_3	H	H
4526	F	Cl	OCH_3	H	CH_3
4527	F	Cl	OCH_3	H	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4528	F	Cl	OCH_3	H	Cl
4529	F	Cl	OCH_3	H	Br
4530	F	Cl	OCH_3	H	F
4531	F	Cl	OCH_3	CH_3	H
4532	F	Cl	OCH_3	CH_3	CH_3
4533	F	Cl	OCH_3	CH_3	Cl
4534	F	Cl	OCH_3	CH_3	Br
4535	F	Cl	OCH_3	CH_3	F
4536	F	Cl	OCH_3	OCH_3	H
4537	F	Cl	OCH_3	OCH_3	CH_3
4538	F	Cl	OCH_3	OCH_3	OCH_3
4539	F	Cl	OCH_3	OCH_3	Cl
4540	F	Cl	OCH_3	OCH_3	Br
4541	F	Cl	OCH_3	OCH_3	F
4542	F	Cl	OCH_3	Cl	H
4543	F	Cl	OCH_3	Cl	CH_3
4544	F	Cl	OCH_3	Cl	Cl
4545	F	Cl	OCH_3	Cl	Br
4546	F	Cl	OCH_3	Cl	F
4547	F	Cl	OCH_3	Br	H
4548	F	Cl	OCH_3	Br	CH_3
4549	F	Cl	OCH_3	Br	Cl
4550	F	Cl	OCH_3	Br	Br
4551	F	Cl	OCH_3	Br	F
4552	F	Cl	OCH_3	F	H
4553	F	Cl	OCH_3	F	CH_3
4554	F	Cl	OCH_3	F	Cl
4555	F	Cl	OCH_3	F	Br
4556	F	Cl	OCH_3	F	F
4557	F	Cl	Cl	H	H
4558	F	Cl	Cl	H	CH_3
4559	F	Cl	Cl	H	OCH_3
4560	F	Cl	Cl	H	Cl
4561	F	Cl	Cl	H	Br
4562	F	Cl	Cl	H	F
4563	F	Cl	Cl	CH_3	H
4564	F	Cl	Cl	CH_3	CH_3
4565	F	Cl	Cl	CH_3	OCH_3
4566	F	Cl	Cl	CH_3	Br
4567	F	Cl	Cl	CH_3	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4568	F	Cl	Cl	OCH_3	H
4569	F	Cl	Cl	OCH_3	CH_3
4570	F	Cl	Cl	OCH_3	OCH_3
4571	F	Cl	Cl	OCH_3	Br
4572	F	Cl	Cl	OCH_3	F
4573	F	Cl	Cl	Cl	H
4574	F	Cl	Cl	Cl	CH_3
4575	F	Cl	Cl	Cl	OCH_3
4576	F	Cl	Cl	Cl	Cl
4577	F	Cl	Cl	Cl	Br
4578	F	Cl	Cl	Cl	F
4579	F	Cl	Cl	Br	H
4580	F	Cl	Cl	Br	CH_3
4581	F	Cl	Cl	Br	OCH_3
4582	F	Cl	Cl	Br	Br
4583	F	Cl	Cl	F	H
4584	F	Cl	Cl	F	CH_3
4585	F	Cl	Cl	F	OCH_3
4586	F	Cl	Cl	F	Br
4587	F	Cl	Cl	F	F
4588	F	Cl	Br	H	H
4589	F	Cl	Br	H	CH_3
4590	F	Cl	Br	H	OCH_3
4591	F	Cl	Br	H	Cl
4592	F	Cl	Br	H	Br
4593	F	Cl	Br	H	F
4594	F	Cl	Br	CH_3	H
4595	F	Cl	Br	CH_3	CH_3
4596	F	Cl	Br	CH_3	OCH_3
4597	F	Cl	Br	CH_3	Cl
4598	F	Cl	Br	CH_3	F
4599	F	Cl	Br	OCH_3	H
4600	F	Cl	Br	OCH_3	CH_3
4601	F	Cl	Br	OCH_3	OCH_3
4602	F	Cl	Br	OCH_3	Cl
4603	F	Cl	Br	OCH_3	F
4604	F	Cl	Br	Cl	H
4605	F	Cl	Br	Cl	CH_3
4606	F	Cl	Br	Cl	OCH_3
4607	F	Cl	Br	Cl	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4608	F	Cl	Br	Cl	F
4609	F	Cl	Br	Br	H
4610	F	Cl	Br	Br	CH_3
4611	F	Cl	Br	Br	OCH_3
4612	F	Cl	Br	Br	Cl
4613	F	Cl	Br	Br	Br
4614	F	Cl	Br	Br	F
4615	F	Cl	Br	F	H
4616	F	Cl	Br	F	CH_3
4617	F	Cl	Br	F	OCH_3
4618	F	Cl	Br	F	Cl
4619	F	Cl	Br	F	F
4620	F	Cl	F	H	H
4621	F	Cl	F	H	CH_3
4622	F	Cl	F	H	OCH_3
4623	F	Cl	F	H	Cl
4624	F	Cl	F	H	Br
4625	F	Cl	F	H	F
4626	F	Cl	F	CH_3	H
4627	F	Cl	F	CH_3	CH_3
4628	F	Cl	F	CH_3	OCH_3
4629	F	Cl	F	CH_3	Cl
4630	F	Cl	F	CH_3	Br
4631	F	Cl	F	OCH_3	H
4632	F	Cl	F	OCH_3	CH_3
4633	F	Cl	F	OCH_3	OCH_3
4634	F	Cl	F	OCH_3	Cl
4635	F	Cl	F	OCH_3	Br
4636	F	Cl	F	Cl	H
4637	F	Cl	F	Cl	CH_3
4638	F	Cl	F	Cl	OCH_3
4639	F	Cl	F	Cl	Cl
4640	F	Cl	F	Cl	Br
4641	F	Cl	F	Br	H
4642	F	Cl	F	Br	CH_3
4643	F	Cl	F	Br	OCH_3
4644	F	Cl	F	Br	Cl
4645	F	Cl	F	Br	Br
4646	F	Cl	F	F	H
4647	F	Cl	F	F	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4648	F	Cl	F	F	OCH_3
4649	F	Cl	F	F	Cl
4650	F	Cl	F	F	Br
4651	F	Cl	F	F	F
4652	F	Br	CH_3	H	H
4653	F	Br	CH_3	H	CH_3
4654	F	Br	CH_3	H	OCH_3
4655	F	Br	CH_3	H	Cl
4656	F	Br	CH_3	H	Br
4657	F	Br	CH_3	H	F
4658	F	Br	CH_3	CH_3	H
4659	F	Br	CH_3	CH_3	CH_3
4660	F	Br	CH_3	CH_3	OCH_3
4661	F	Br	CH_3	CH_3	Cl
4662	F	Br	CH_3	CH_3	Br
4663	F	Br	CH_3	CH_3	F
4664	F	Br	CH_3	OCH_3	H
4665	F	Br	CH_3	OCH_3	OCH_3
4666	F	Br	CH_3	OCH_3	Cl
4667	F	Br	CH_3	OCH_3	Br
4668	F	Br	CH_3	OCH_3	F
4669	F	Br	CH_3	Cl	H
4670	F	Br	CH_3	Cl	OCH_3
4671	F	Br	CH_3	Cl	Cl
4672	F	Br	CH_3	Cl	Br
4673	F	Br	CH_3	Cl	F
4674	F	Br	CH_3	Br	H
4675	F	Br	CH_3	Br	OCH_3
4676	F	Br	CH_3	Br	Cl
4677	F	Br	CH_3	Br	Br
4678	F	Br	CH_3	Br	F
4679	F	Br	CH_3	F	H
4680	F	Br	CH_3	F	OCH_3
4681	F	Br	CH_3	F	Cl
4682	F	Br	CH_3	F	Br
4683	F	Br	CH_3	F	F
4684	F	Br	OCH_3	H	H
4685	F	Br	OCH_3	H	CH_3
4686	F	Br	OCH_3	H	OCH_3
4687	F	Br	OCH_3	H	Cl

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4688	F	Br	OCH_3	H	Br
4689	F	Br	OCH_3	H	F
4690	F	Br	OCH_3	CH_3	H
4691	F	Br	OCH_3	CH_3	CH_3
4692	F	Br	OCH_3	CH_3	Cl
4693	F	Br	OCH_3	CH_3	Br
4694	F	Br	OCH_3	CH_3	F
4695	F	Br	OCH_3	OCH_3	H
4696	F	Br	OCH_3	OCH_3	CH_3
4697	F	Br	OCH_3	OCH_3	OCH_3
4698	F	Br	OCH_3	OCH_3	Cl
4699	F	Br	OCH_3	OCH_3	Br
4700	F	Br	OCH_3	OCH_3	F
4701	F	Br	OCH_3	Cl	H
4702	F	Br	OCH_3	Cl	CH_3
4703	F	Br	OCH_3	Cl	Cl
4704	F	Br	OCH_3	Cl	Br
4705	F	Br	OCH_3	Cl	F
4706	F	Br	OCH_3	Br	H
4707	F	Br	OCH_3	Br	CH_3
4708	F	Br	OCH_3	Br	Cl
4709	F	Br	OCH_3	Br	Br
4710	F	Br	OCH_3	Br	F
4711	F	Br	OCH_3	F	H
4712	F	Br	OCH_3	F	CH_3
4713	F	Br	OCH_3	F	Cl
4714	F	Br	OCH_3	F	Br
4715	F	Br	OCH_3	F	F
4716	F	Br	Cl	H	H
4717	F	Br	Cl	H	CH_3
4718	F	Br	Cl	H	OCH_3
4719	F	Br	Cl	H	Cl
4720	F	Br	Cl	H	Br
4721	F	Br	Cl	H	F
4722	F	Br	Cl	CH_3	H
4723	F	Br	Cl	CH_3	CH_3
4724	F	Br	Cl	CH_3	OCH_3
4725	F	Br	Cl	CH_3	Br
4726	F	Br	Cl	CH_3	F
4727	F	Br	Cl	OCH_3	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4728	F	Br	Cl	OCH_3	CH_3
4729	F	Br	Cl	OCH_3	OCH_3
4730	F	Br	Cl	OCH_3	Br
4731	F	Br	Cl	OCH_3	F
4732	F	Br	Cl	Cl	H
4733	F	Br	Cl	Cl	CH_3
4734	F	Br	Cl	Cl	OCH_3
4735	F	Br	Cl	Cl	Cl
4736	F	Br	Cl	Cl	Br
4737	F	Br	Cl	Cl	F
4738	F	Br	Cl	Br	H
4739	F	Br	Cl	Br	CH_3
4740	F	Br	Cl	Br	OCH_3
4741	F	Br	Cl	Br	Br
4742	F	Br	Cl	F	H
4743	F	Br	Cl	F	CH_3
4744	F	Br	Cl	F	OCH_3
4745	F	Br	Cl	F	Br
4746	F	Br	Cl	F	F
4747	F	Br	Br	H	H
4748	F	Br	Br	H	CH_3
4749	F	Br	Br	H	OCH_3
4750	F	Br	Br	H	Cl
4751	F	Br	Br	H	Br
4752	F	Br	Br	H	F
4753	F	Br	Br	CH_3	H
4754	F	Br	Br	CH_3	CH_3
4755	F	Br	Br	CH_3	OCH_3
4756	F	Br	Br	CH_3	Cl
4757	F	Br	Br	CH_3	F
4758	F	Br	Br	OCH_3	H
4759	F	Br	Br	OCH_3	CH_3
4760	F	Br	Br	OCH_3	OCH_3
4761	F	Br	Br	OCH_3	Cl
4762	F	Br	Br	OCH_3	F
4763	F	Br	Br	Cl	H
4764	F	Br	Br	Cl	CH_3
4765	F	Br	Br	Cl	OCH_3
4766	F	Br	Br	Cl	Cl
4767	F	Br	Br	Cl	F

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4768	F	Br	Br	Br	H
4769	F	Br	Br	Br	CH_3
4770	F	Br	Br	Br	OCH_3
4771	F	Br	Br	Br	Cl
4772	F	Br	Br	Br	Br
4773	F	Br	Br	Br	F
4774	F	Br	Br	F	H
4775	F	Br	Br	F	CH_3
4776	F	Br	Br	F	OCH_3
4777	F	Br	Br	F	Cl
4778	F	Br	Br	F	F
4779	F	Br	F	H	H
4780	F	Br	F	H	CH_3
4781	F	Br	F	H	OCH_3
4782	F	Br	F	H	Cl
4783	F	Br	F	H	Br
4784	F	Br	F	H	F
4785	F	Br	F	CH_3	H
4786	F	Br	F	CH_3	CH_3
4787	F	Br	F	CH_3	OCH_3
4788	F	Br	F	CH_3	Cl
4789	F	Br	F	CH_3	Br
4790	F	Br	F	OCH_3	H
4791	F	Br	F	OCH_3	CH_3
4792	F	Br	F	OCH_3	OCH_3
4793	F	Br	F	OCH_3	Cl
4794	F	Br	F	OCH_3	Br
4795	F	Br	F	Cl	H
4796	F	Br	F	Cl	CH_3
4797	F	Br	F	Cl	OCH_3
4798	F	Br	F	Cl	Cl
4799	F	Br	F	Cl	Br
4800	F	Br	F	Br	H
4801	F	Br	F	Br	CH_3
4802	F	Br	F	Br	OCH_3
4803	F	Br	F	Br	Cl
4804	F	Br	F	Br	Br
4805	F	Br	F	F	H
4806	F	Br	F	F	CH_3
4807	F	Br	F	F	OCH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4808	F	Br	F	F	Cl
4809	F	Br	F	F	Br
4810	F	Br	F	F	F
4811	F	F	CH_3	H	H
4812	F	F	CH_3	H	CH_3
4813	F	F	CH_3	H	OCH_3
4814	F	F	CH_3	H	Cl
4815	F	F	CH_3	H	Br
4816	F	F	CH_3	H	F
4817	F	F	CH_3	CH_3	H
4818	F	F	CH_3	CH_3	CH_3
4819	F	F	CH_3	CH_3	OCH_3
4820	F	F	CH_3	CH_3	Cl
4821	F	F	CH_3	CH_3	Br
4822	F	F	CH_3	CH_3	F
4823	F	F	CH_3	OCH_3	H
4824	F	F	CH_3	OCH_3	OCH_3
4825	F	F	CH_3	OCH_3	Cl
4826	F	F	CH_3	OCH_3	Br
4827	F	F	CH_3	OCH_3	F
4828	F	F	CH_3	Cl	H
4829	F	F	CH_3	Cl	OCH_3
4830	F	F	CH_3	Cl	Cl
4831	F	F	CH_3	Cl	Br
4832	F	F	CH_3	Cl	F
4833	F	F	CH_3	Br	H
4834	F	F	CH_3	Br	OCH_3
4835	F	F	CH_3	Br	Cl
4836	F	F	CH_3	Br	Br
4837	F	F	CH_3	Br	F
4838	F	F	CH_3	F	H
4839	F	F	CH_3	F	OCH_3
4840	F	F	CH_3	F	Cl
4841	F	F	CH_3	F	Br
4842	F	F	CH_3	F	F
4843	F	F	OCH_3	H	H
4844	F	F	OCH_3	H	CH_3
4845	F	F	OCH_3	H	OCH_3
4846	F	F	OCH_3	H	Cl
4847	F	F	OCH_3	H	Br

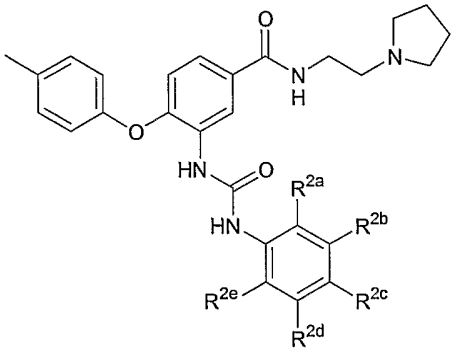
Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4848	F	F	OCH_3	H	F
4849	F	F	OCH_3	CH_3	H
4850	F	F	OCH_3	CH_3	CH_3
4851	F	F	OCH_3	CH_3	Cl
4852	F	F	OCH_3	CH_3	Br
4853	F	F	OCH_3	CH_3	F
4854	F	F	OCH_3	OCH_3	H
4855	F	F	OCH_3	OCH_3	CH_3
4856	F	F	OCH_3	OCH_3	OCH_3
4857	F	F	OCH_3	OCH_3	Cl
4858	F	F	OCH_3	OCH_3	Br
4859	F	F	OCH_3	OCH_3	F
4860	F	F	OCH_3	Cl	H
4861	F	F	OCH_3	Cl	CH_3
4862	F	F	OCH_3	Cl	Cl
4863	F	F	OCH_3	Cl	Br
4864	F	F	OCH_3	Cl	F
4865	F	F	OCH_3	Br	H
4866	F	F	OCH_3	Br	CH_3
4867	F	F	OCH_3	Br	Cl
4868	F	F	OCH_3	Br	Br
4869	F	F	OCH_3	Br	F
4870	F	F	OCH_3	F	H
4871	F	F	OCH_3	F	CH_3
4872	F	F	OCH_3	F	Cl
4873	F	F	OCH_3	F	Br
4874	F	F	OCH_3	F	F
4875	F	F	Cl	H	H
4876	F	F	Cl	H	CH_3
4877	F	F	Cl	H	OCH_3
4878	F	F	Cl	H	Cl
4879	F	F	Cl	H	Br
4880	F	F	Cl	H	F
4881	F	F	Cl	CH_3	H
4882	F	F	Cl	CH_3	CH_3
4883	F	F	Cl	CH_3	OCH_3
4884	F	F	Cl	CH_3	Br
4885	F	F	Cl	CH_3	F
4886	F	F	Cl	OCH_3	H
4887	F	F	Cl	OCH_3	CH_3

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4888	F	F	Cl	OCH_3	OCH_3
4889	F	F	Cl	OCH_3	Br
4890	F	F	Cl	OCH_3	F
4891	F	F	Cl	Cl	H
4892	F	F	Cl	Cl	CH_3
4893	F	F	Cl	Cl	OCH_3
4894	F	F	Cl	Cl	Cl
4895	F	F	Cl	Cl	Br
4896	F	F	Cl	Cl	F
4897	F	F	Cl	Br	H
4898	F	F	Cl	Br	CH_3
4899	F	F	Cl	Br	OCH_3
4900	F	F	Cl	Br	Br
4901	F	F	Cl	F	H
4902	F	F	Cl	F	CH_3
4903	F	F	Cl	F	OCH_3
4904	F	F	Cl	F	Br
4905	F	F	Cl	F	F
4906	F	F	Br	H	H
4907	F	F	Br	H	CH_3
4908	F	F	Br	H	OCH_3
4909	F	F	Br	H	Cl
4910	F	F	Br	H	Br
4911	F	F	Br	H	F
4912	F	F	Br	CH_3	H
4913	F	F	Br	CH_3	CH_3
4914	F	F	Br	CH_3	OCH_3
4915	F	F	Br	CH_3	Cl
4916	F	F	Br	CH_3	F
4917	F	F	Br	OCH_3	H
4918	F	F	Br	OCH_3	CH_3
4919	F	F	Br	OCH_3	OCH_3
4920	F	F	Br	OCH_3	Cl
4921	F	F	Br	OCH_3	F
4922	F	F	Br	Cl	H
4923	F	F	Br	Cl	CH_3
4924	F	F	Br	Cl	OCH_3
4925	F	F	Br	Cl	Cl
4926	F	F	Br	Cl	F
4927	F	F	Br	Br	H

Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4928	F	F	Br	Br	CH_3
4929	F	F	Br	Br	OCH_3
4930	F	F	Br	Br	Cl
4931	F	F	Br	Br	Br
4932	F	F	Br	Br	F
4933	F	F	Br	F	H
4934	F	F	Br	F	CH_3
4935	F	F	Br	F	OCH_3
4936	F	F	Br	F	Cl
4937	F	F	Br	F	F
4938	F	F	F	H	H
4939	F	F	F	H	CH_3
4940	F	F	F	H	OCH_3
4941	F	F	F	H	Cl
4942	F	F	F	H	Br
4943	F	F	F	H	F
4944	F	F	F	CH_3	H
4945	F	F	F	CH_3	CH_3
4946	F	F	F	CH_3	OCH_3
4947	F	F	F	CH_3	Cl
4948	F	F	F	CH_3	Br
4949	F	F	F	OCH_3	H
4950	F	F	F	OCH_3	CH_3
4951	F	F	F	OCH_3	OCH_3
4952	F	F	F	OCH_3	Cl
4953	F	F	F	OCH_3	Br
4954	F	F	F	Cl	H
4955	F	F	F	Cl	CH_3
4956	F	F	F	Cl	OCH_3
4957	F	F	F	Cl	Cl
4958	F	F	F	Cl	Br
4959	F	F	F	Br	H
4960	F	F	F	Br	CH_3
4961	F	F	F	Br	OCH_3
4962	F	F	F	Br	Cl
4963	F	F	F	Br	Br
4964	F	F	F	F	H
4965	F	F	F	F	CH_3
4966	F	F	F	F	OCH_3
4967	F	F	F	F	Cl

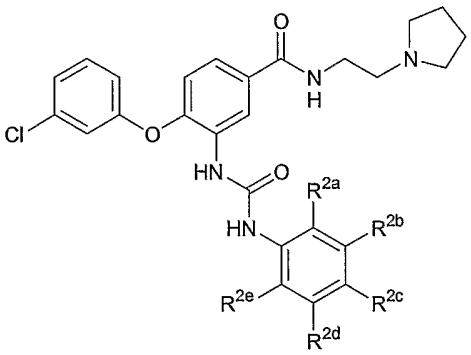
Compound No.	R^{2a}	R^{2b}	R^{2c}	R^{2d}	R^{2e}
4968	F	F	F	F	Br
4969	F	F	F	F	F

[0437] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



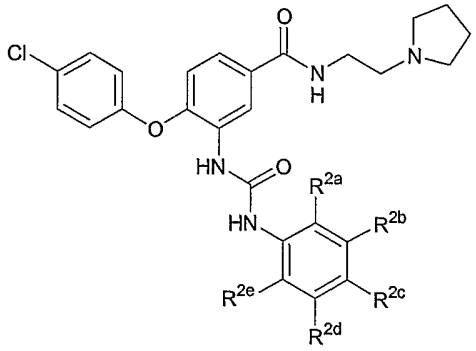
[0438] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0439] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



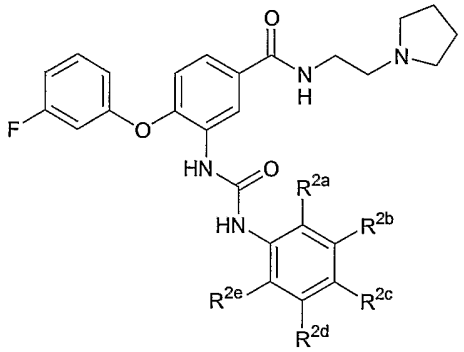
[0440] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0441] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



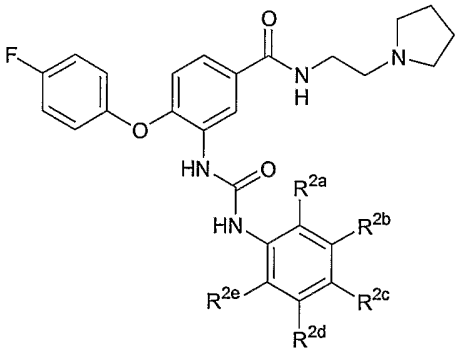
[0442] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0443] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



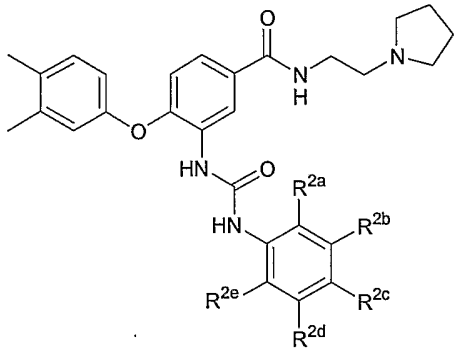
[0444] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0445] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



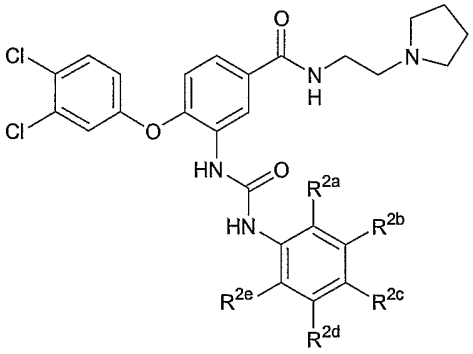
[0446] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0447] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



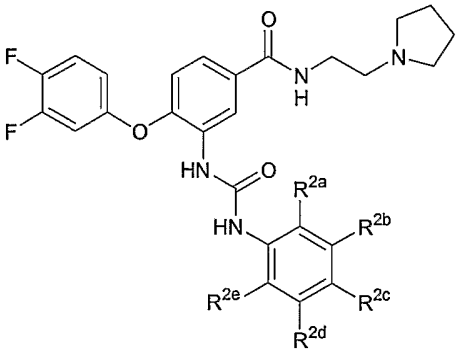
[0448] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0449] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



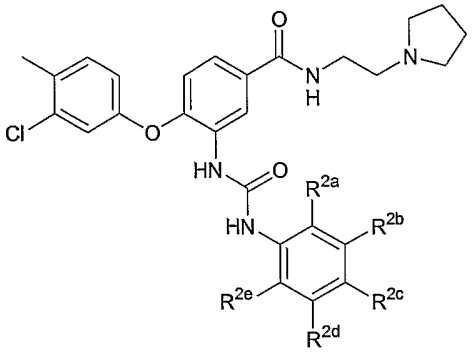
[0450] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0451] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



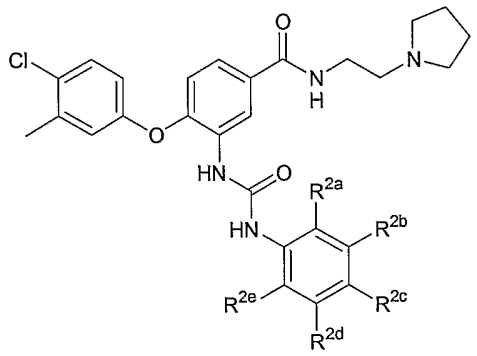
[0452] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0453] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



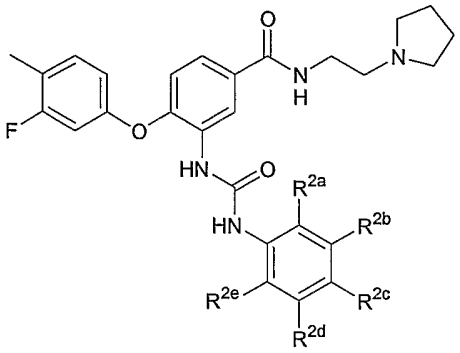
[0454] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0455] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



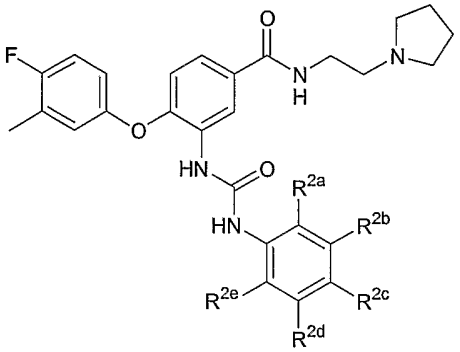
[0456] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0457] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



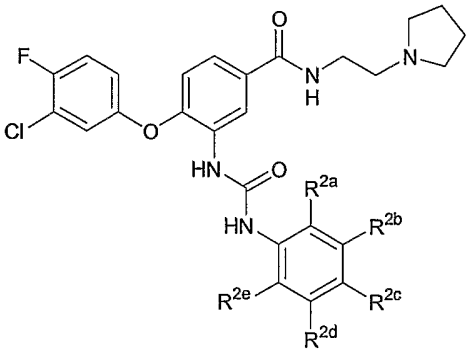
[0458] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0459] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



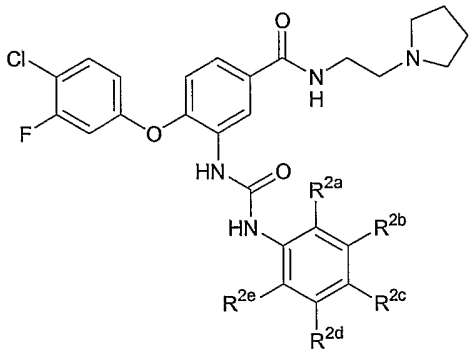
[0460] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0461] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



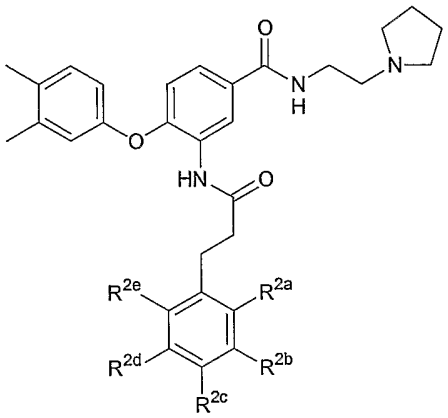
[0462] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0463] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



[0464] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

[0465] In another embodiment, the compound of Formula I is selected from the group of compounds of Formula V having the structure:



[0466] wherein R^{2a}, R^{2b}, R^{2c}, R^{2d}, and R^{2e} are as defined in Table 2.

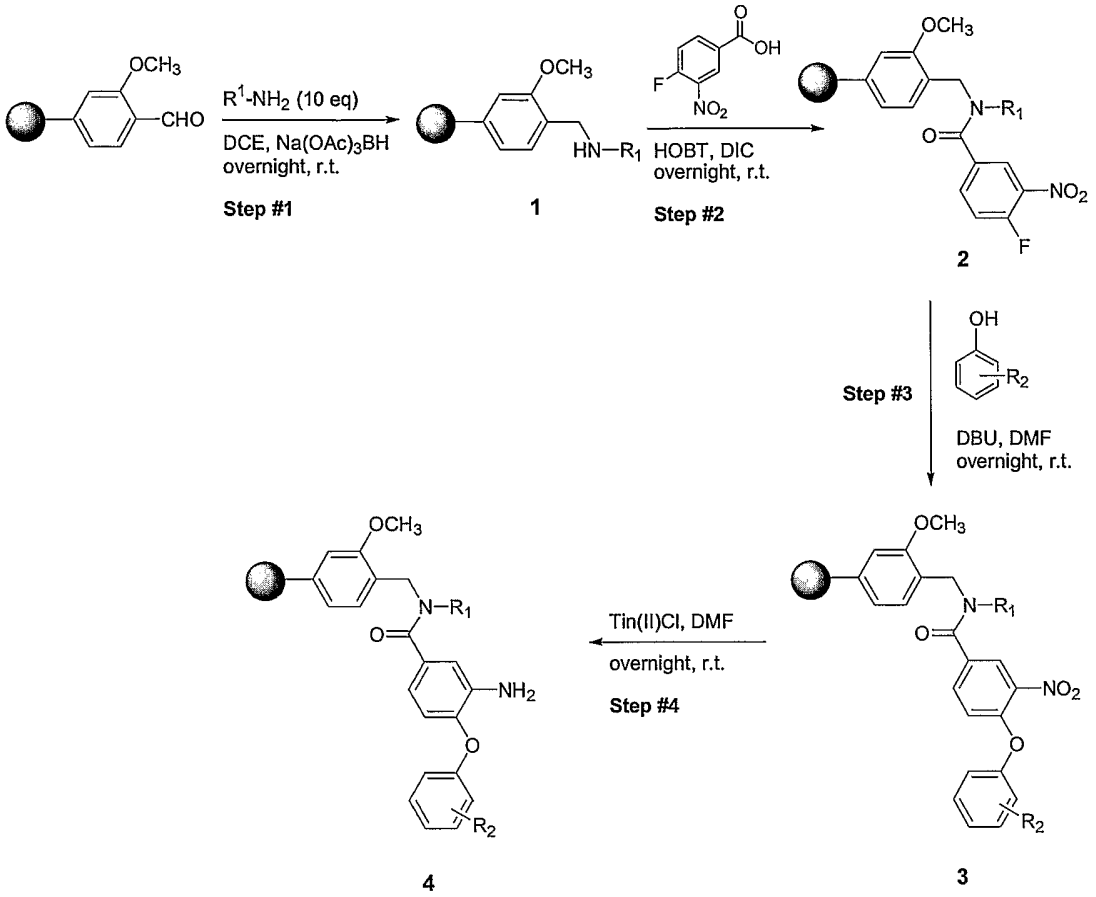
[0467] The compounds of Formula I are MCH receptor antagonists, as demonstrated by the ligand binding assays described hereinbelow. MCH receptor antagonist activity has been correlated with pharmaceutical activity for the treatment of eating disorders such as obesity and hyperphagia, and diabetes. Compounds of Formula I exhibit good activity in standard *in vitro* MCH calcium mobilization assays and/or receptor binding assays, specifically in the assays described hereinbelow, see Examples 23 and 24. Generally, compounds of Formula I have an K_i

of about 10 μM or less, preferably about 1 μM or less, more preferably about 100 nM or less, or even more preferably about 10 nM or less, as determined by a standard *in vitro* MCH receptor mediated calcium mobilization assay as exemplified by Example 23, hereinbelow. Generally compounds of Formula I are MCH receptor antagonists and exhibit IC_{50} values of about 10 μM or less, preferably about 1 μM or less, more preferably about 100 nM or less, or even more preferably about 10 nM or less, as determined by a standard *in vitro* MCH receptor binding assay such as is described hereinbelow in Example 24.

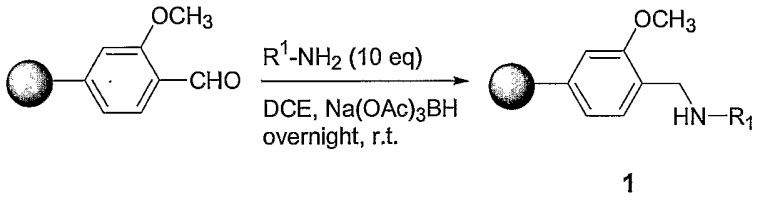
[0468] Preferably, the MCH receptor antagonists of Formula I bind specifically, and still more preferably with high affinity, to MCH receptors.

[0469] The following examples illustrate the invention.

Example 1

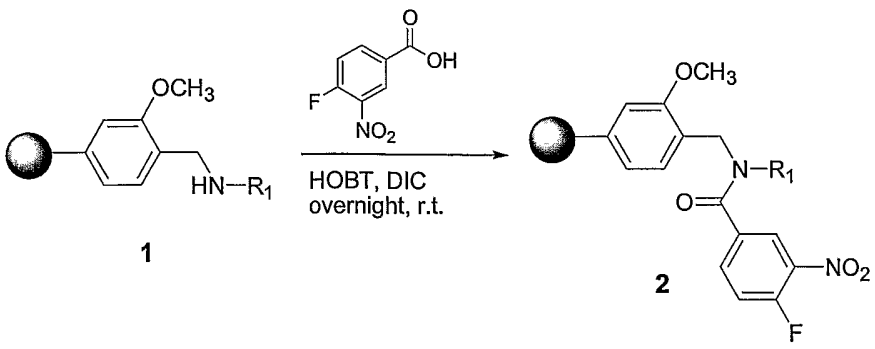


Step 1



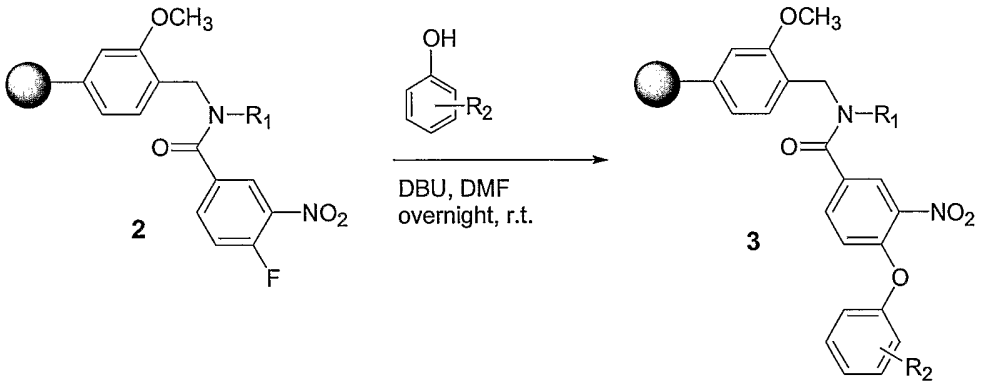
[0470] To a 2 L glass bottle was added 4-formyl-3-methoxyphenoxy-polystyrene resin (100-180 mesh, 1.1 mmol/g loading, 20 g, 22 mmol), amine (5 eq, 110 mmol), and anhydrous DCE (500 mL). The resulting mixture was shaken for one hour at room temperature. Then, $Na(OAc)_3BH$ (5 eq, 110 mmol) was added and the mixture was shaken overnight at room temperature. The mixture was degassed every half-hour for the first three hours. The resin was filtered and washed with MeOH (2x) and DCM (2x) to afford 1.

Step 2



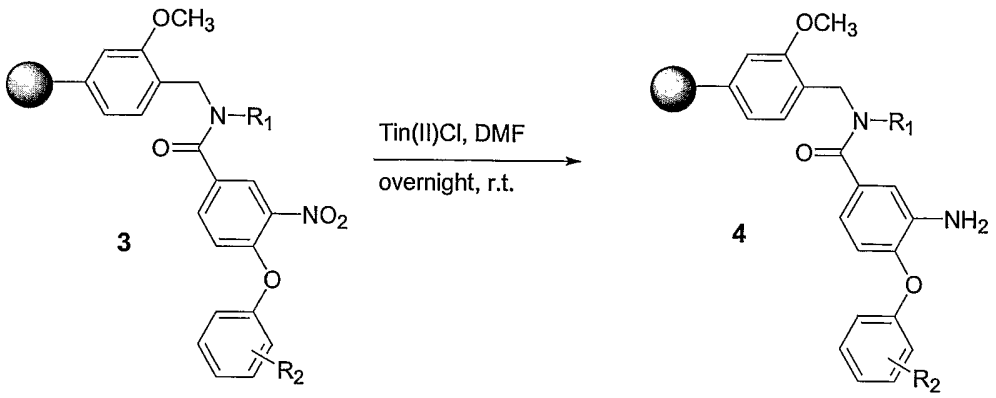
[0471] To a 2 L glass bottle was added **1**, 4-fluoro-3-nitrobenzoic acid (24.4 mmol, 132 mmol), HOBt (18 g, 132 mmol), DIC (42 mL, 264 mmol), and DMF (500 mL). The resulting mixture was shaken overnight at room temperature. The resin was filtered and washed with DMF (2x), MeOH (2x), and DCM (2x) to afford **2**.

Step 3



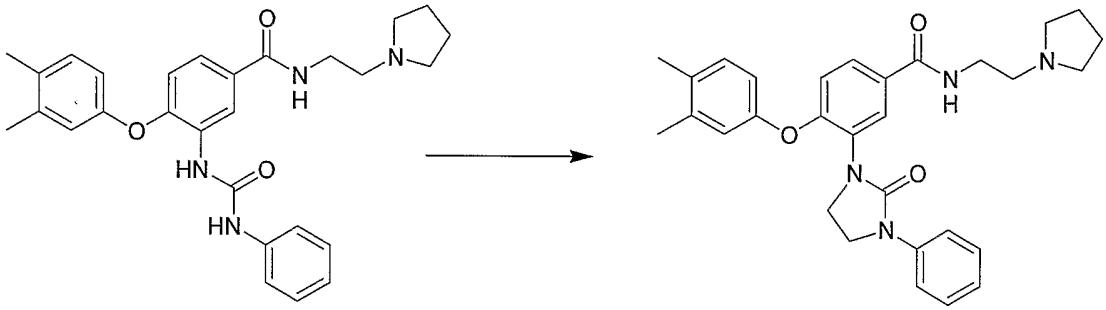
[0472] To a 2 L glass bottle was added **2**, phenol (27 g, 220 mmol), DBU (20 mL, 132 mmol), and DMF (400 mL). The resulting mixture was shaken overnight at room temperature. Then, the resin was filtered and washed with DMF (2x) and DCM (2x) to afford **3**.

Step 4



[0473] To a 2 L glass bottle was added **3**, $Tin(II)Cl \cdot 2H_2O$ (49.5 g, 220 mmol) and DMF (400 mL). The resulting mixture was then shaken overnight at room temperature. The resin was filtered and washed with DMF (2x) and DCM (2x) to afford **4**.

Example 2



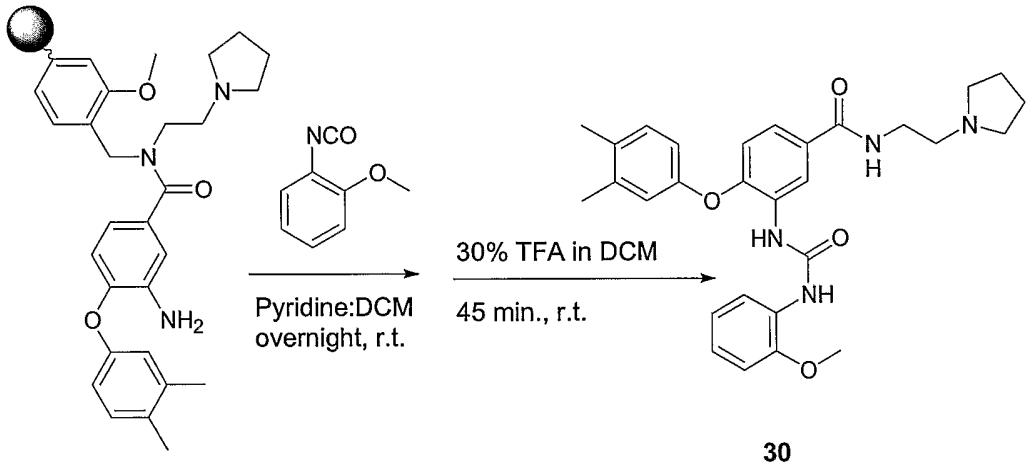
Method 1

[0474] Starting material (10 mg, 0.021 mmol) was combined with 1,2-dibromoethane (2.3 μL, 0.025 mmol) and NaH (1 mg, 0.042 mmol) in 0.5 mL DMF at room temperature. The mixture was then heated to 80°C for 1 hour. The reaction mixture was worked up with water and EtOAc.

Method 2

[0475] Starting material (20 mg, 0.04 mmol) was combined with 1,2-diiodoethane (14.3 mg, 0.05 mmol) and NaH (2 mg, 0.08 mmol) in 0.5 mL DMF, then reacted as described above.

Example 3

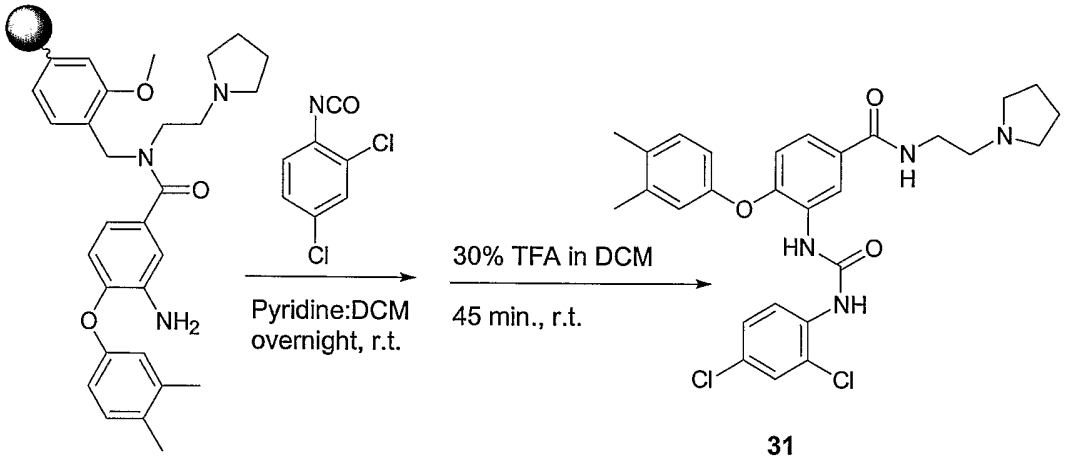


30

[0476] To a peptide vessel was added resin (1.1 mmol/g loading, 100 mg, 0.11 mmol), 2-methoxyphenylisocyanate (1.1 mmol), and pyridine: DCM (5 mL, 1:1 ratio). The resulting mixture was shaken overnight at room temperature. The resin was washed with DCM (2x). Then, 30% TFA in DCM (10 mL) was added and the resulting mixture was shaken for 45 min. at room temperature. The resin was filtered and washed with DCM (2x). The filtrate was concentrated to afford **30**.

[0477] Examples 4-16 were prepared according to the procedure shown in Example 3.

Example 4



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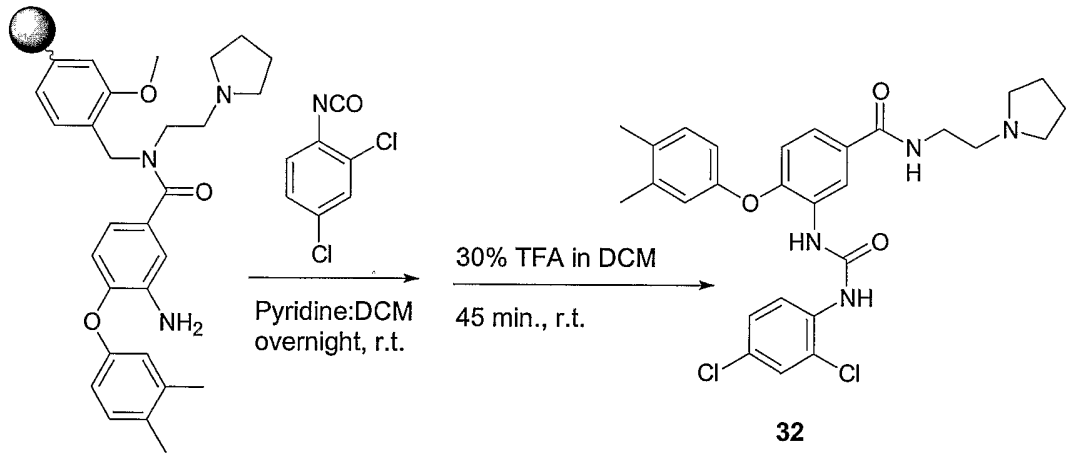
Example 5



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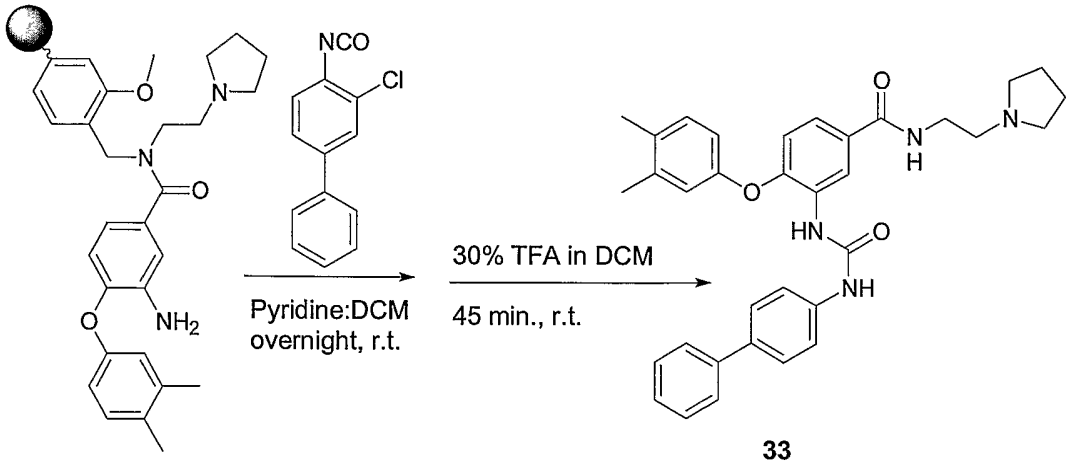
Example 6



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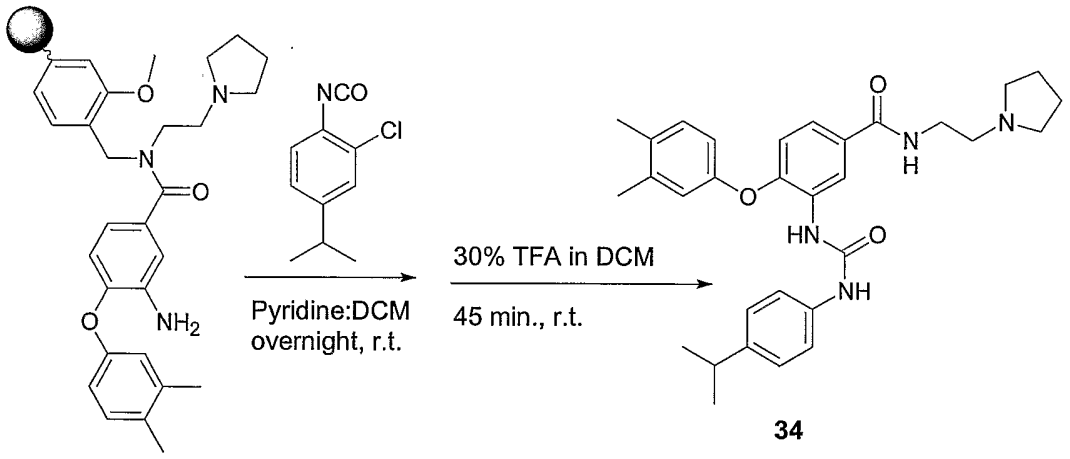
Example 7



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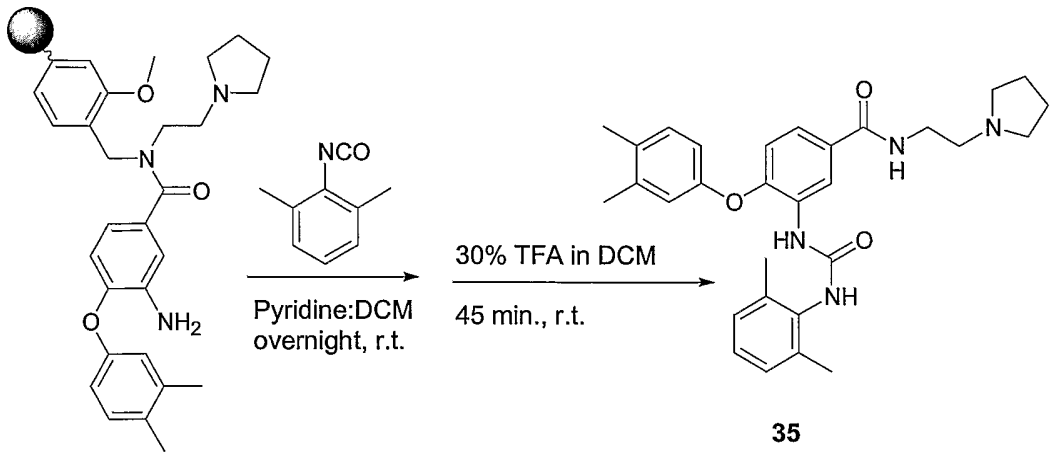
Example 8



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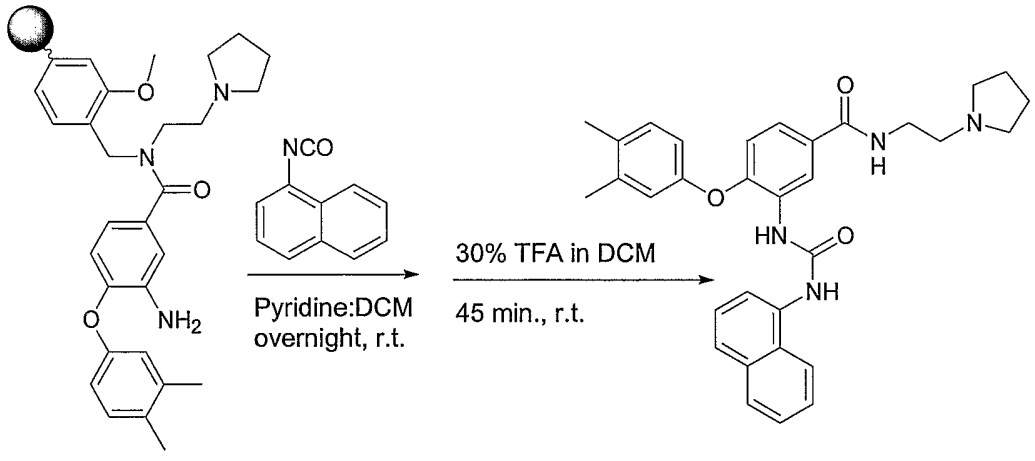
Example 9



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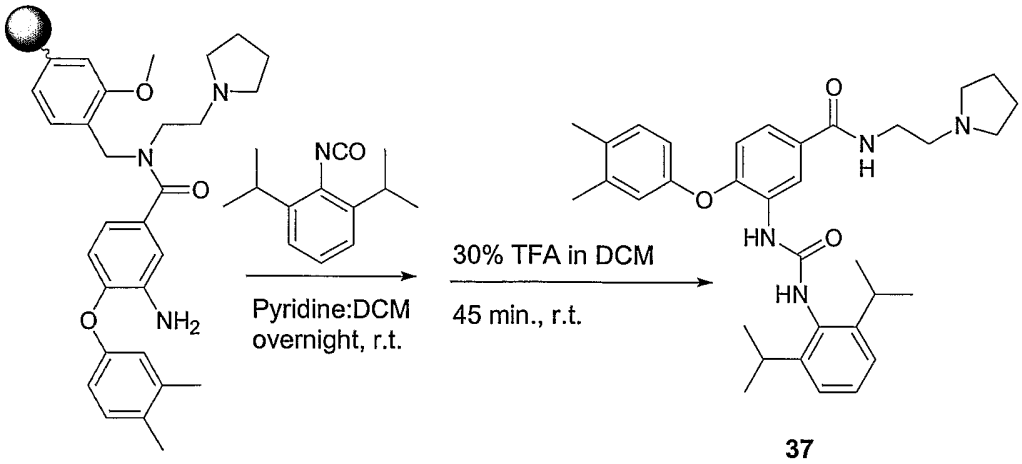
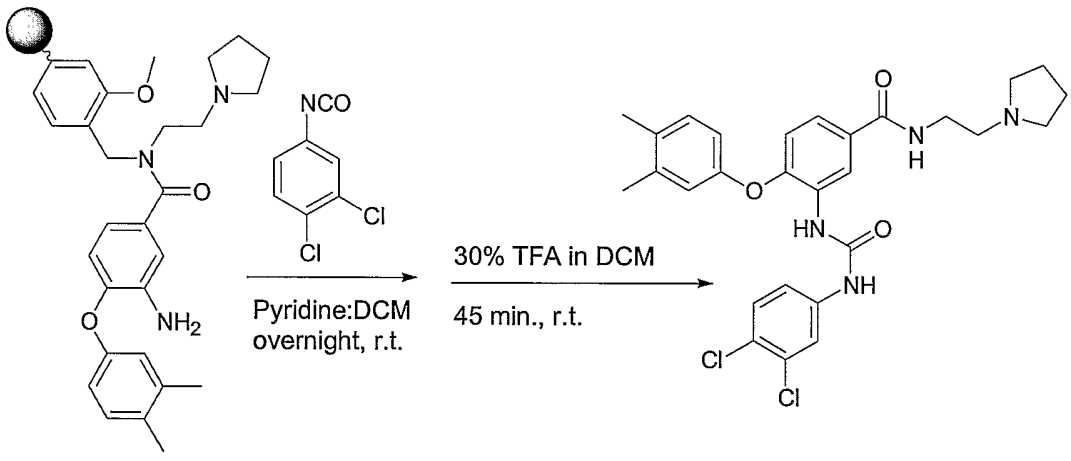
Example 10

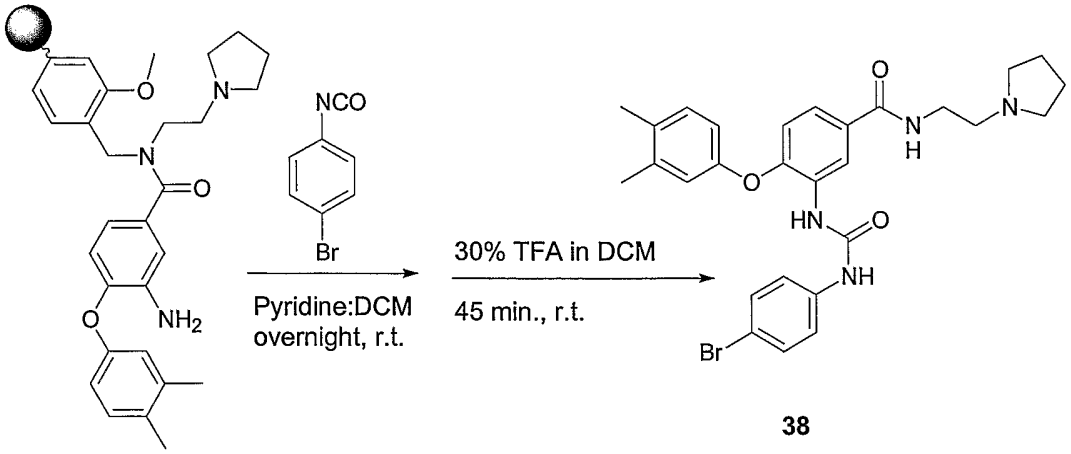


37

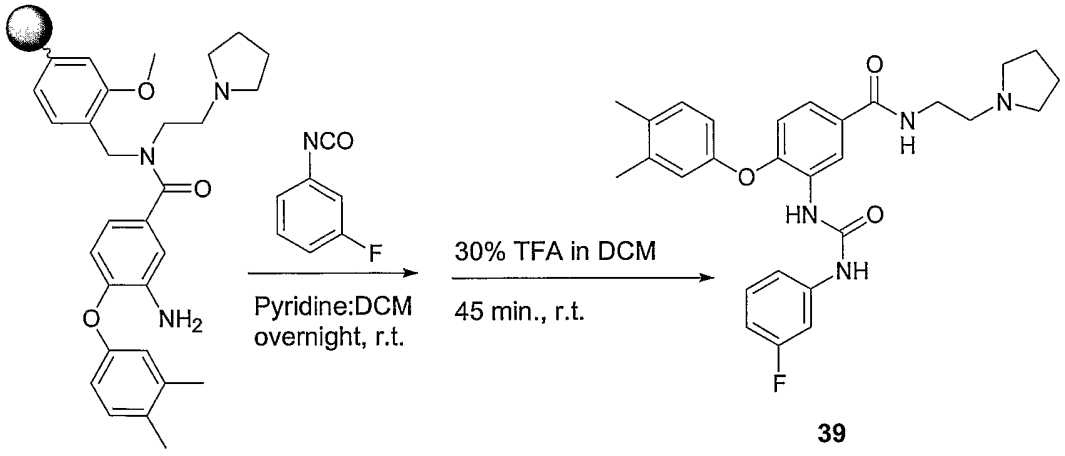
Example 11



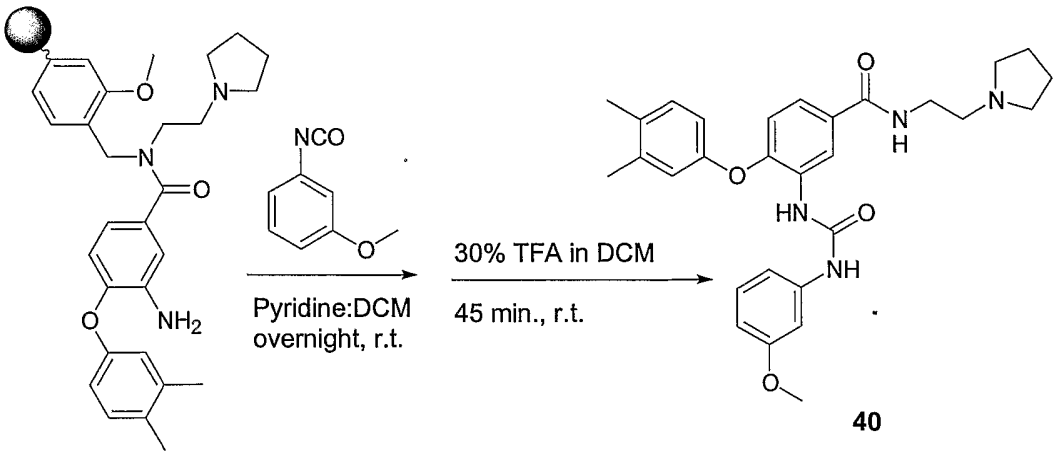
Example 12



Example 13

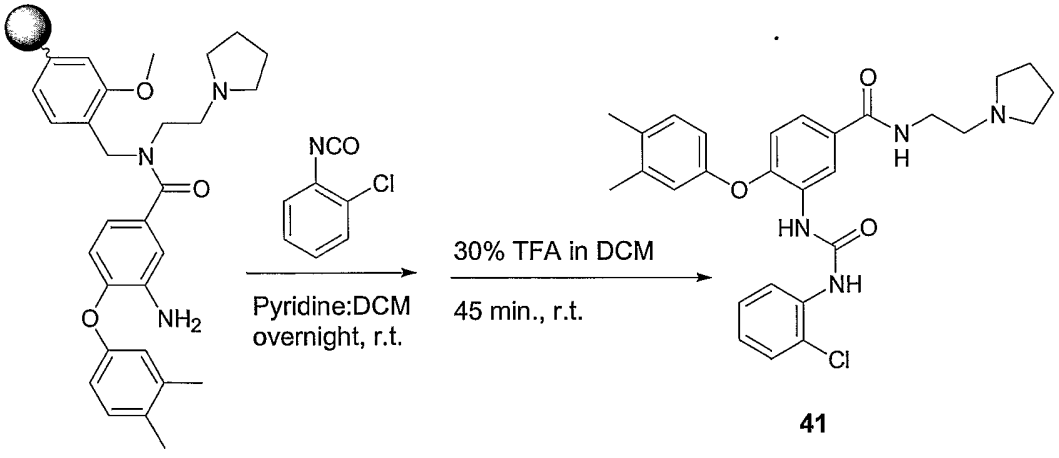


Example 14



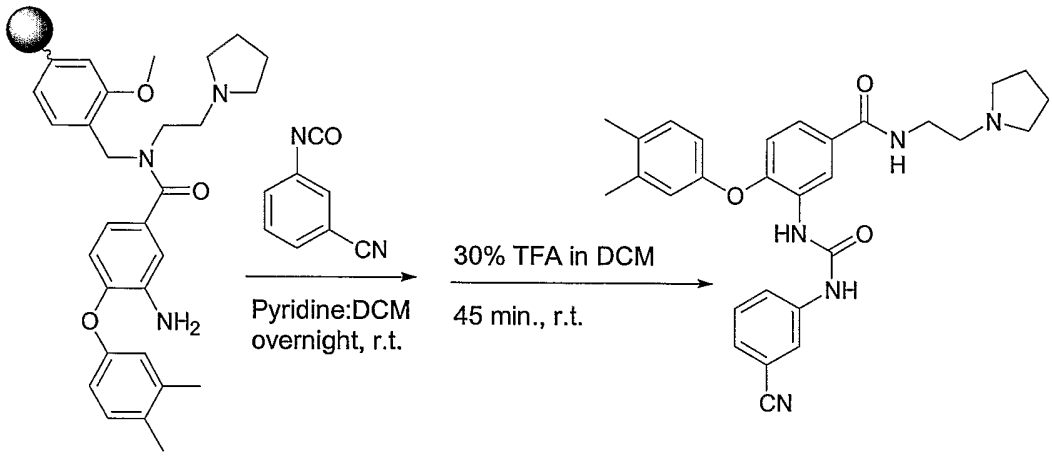
40

Example 15

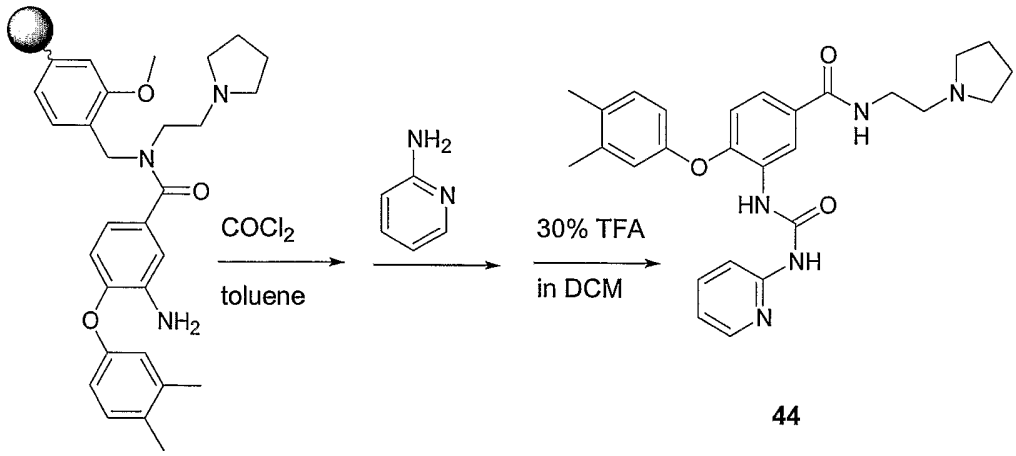


41

Example 16



Example 17

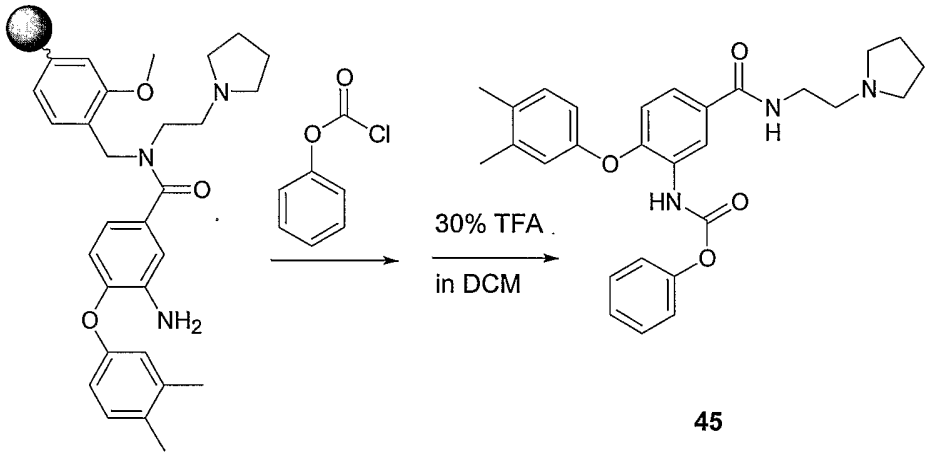


44

[0478] To a round bottom flask was added resin (500 mg, 0.55 mmol) and DCM (15 mL). The resulting mixture was cooled to -78°C. Then, 20% phosgene in toluene (540 mg) was added dropwise. The resulting mixture was warmed to room temperature and shaken for 3 hours. The resin was filtered and washed with DCM (2x). The resin was transferred to a peptide vessel and excess (10-15 eq) of aminopyridine along with 15 mL of DCM were

added. The resulting mixture was shaken overnight at room temperature. The resin was washed with DCM (2x). Then, 30% TFA in DCM (50 mL) was added and the resulting mixture was shaken for 45 min. at room temperature. The resin was filtered and washed with DCM (2x). The filtrate was concentrated to afford **44**.

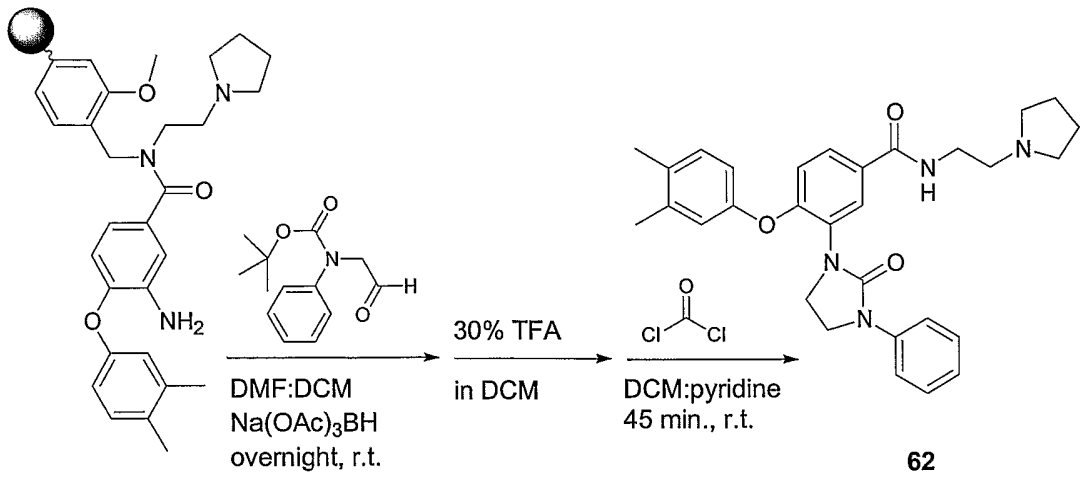
Example 18



45

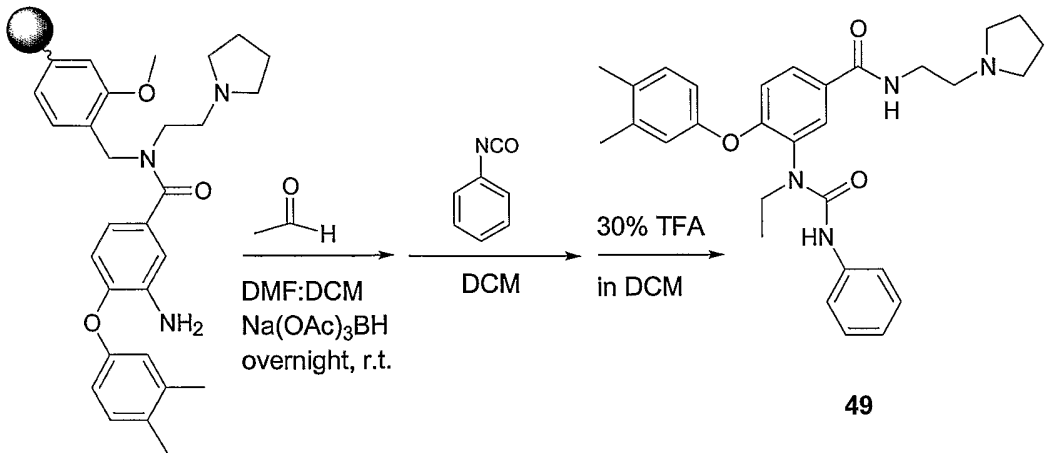
[0479] To a peptide vessel was added resin (1.1 mmol/g, 200 mg, 0.22 mmol), phenylchloroformate (143 μL, 1.1 mmol), and DCM:pyridine (7 mL, 1:1 ratio). The resulting mixture was shaken overnight at room temperature. The resin was washed with DCM (2x). Then, 30% TFA in DCM (50 mL) was added and the resulting mixture was shaken for 45 min. at room temperature. The resin was filtered and washed with DCM (2x). The filtrate was concentrated to afford **45**.

Example 19



[0480] To a peptide vessel was added resin (1.1 mmol/g, 1.1 g, 1.21 mmol), 1,1-dimethylethyl 2-oxoethyl(phenyl)carbamate (490 mg, 3.63 mmol), and DCM:DMF (10 mL, 1:1 ratio). The mixture was shaken for 30 min. at room temperature. Then, $Na(OAc)_3BH$ (1.27 g, 6.05 mmol) was added and the mixture was shaken overnight at room temperature. The mixture was degassed every half hour for the first 3 hours. The resin was washed with MeOH (2x) and DCM (2x). Then, 30%TFA in DCM (50 mL) was added and resulting mixture was shaken for 45 min. at room temperature. The resin was filtered and washed with DCM (2x). The filtrate was concentrated and dried. Then, phosgene (27.1 μL, 0.274 mmol) and DCM:pyridine (5 mL, 1:1 ratio) were added to the crude mixture. The resulting mixture was stirred at room temperature for 45 min. The mixture was concentrated and purified by column chromatography to afford **62**.

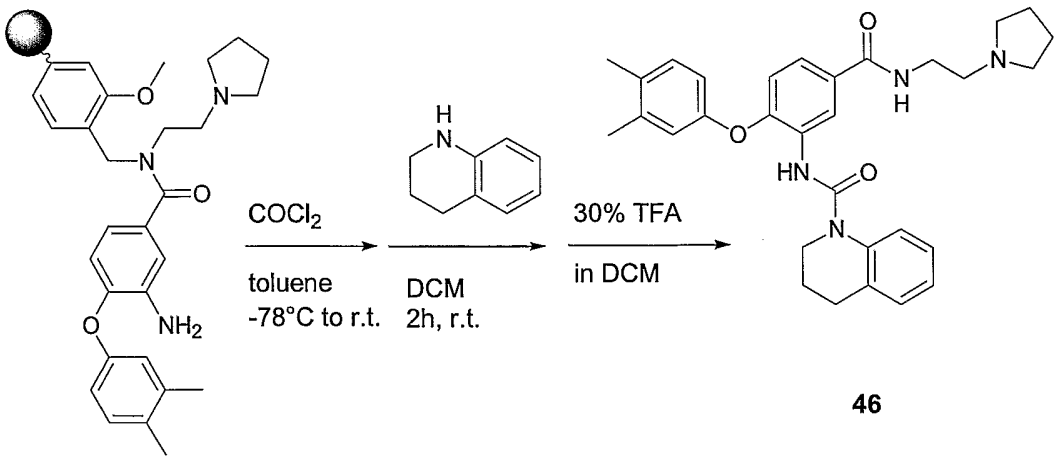
Example 20



49

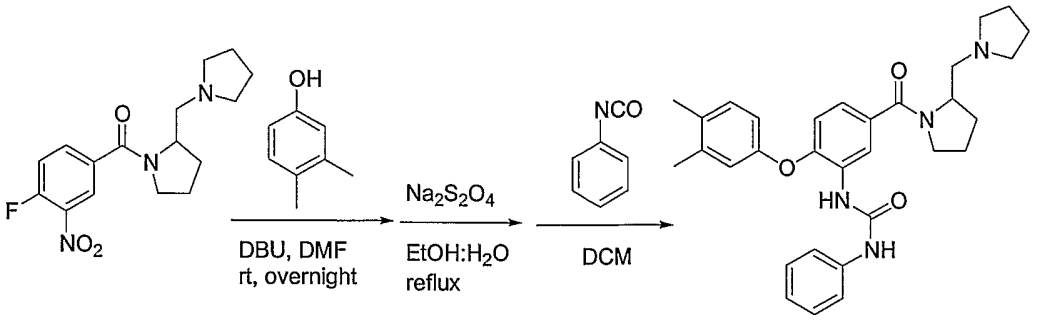
[0481] To a peptide vessel was added resin (1.1 mmol/g, 500 mg, 0.55 mmol), acetaldehyde (93 μL, 1.65 mmol), and DCM:DMF (8 mL, 1:1 ratio). The mixture was shaken for 30 min. at room temperature. Then, $Na(OAc)_3BH$ (580 mg, 2.75 mmol) was added and the mixture was shaken overnight at room temperature. The mixture was degassed every half hour for the first three hours. The resin was washed with MeOH (2x) and DCM (2x). Then, isocyanatobenzene (327 μL, 2.75 mmol) and DCM (10 mL) were added to the resin in the peptide vessel. The resulting mixture was shaken overnight at room temperature. The resin was washed with DCM (2x). Then, 30% TFA in DCM (50 mL) was added and resulting mixture was shaken for 45 min. at room temperature. The resin was filtered and washed with DCM (2x). The filtrate was concentrated to afford **49**.

Example 21



[0482] To a round bottom flask was added resin (1.1 mmol/g, 400 mg, 0.44 mmol) and DCM (7 mL). The resulting mixture was stirred at -78°C and phosgene (217 mg, 2.2 mmol) was added dropwise. The mixture was warmed up to room temperature and shaken for 3 hours. The resin was washed with DCM (2x) and transferred to a peptide vessel. Then, 1,2,3,4-tetrahydroquinoline (585 μL, 4.4 mmol) was added to the vessel. The resulting mixture was shaken for 2 hours. The resin was washed with DCM (2x). Then, 30% TFA in DCM (30 mL) was added and resulting mixture was shaken for 45 min. at room temperature. The resin was filtered and washed with DCM (2x). The filtrate was concentrated to afford **46**.

Example 22



63

[0483] To a 20 ml vial was added 1-((4-fluoro-3-nitrophenyl)carbonyl)-2-(1-pyrrolidinylmethyl)pyrrolidine (520 mg, 1.62 mmol), 3,4-dimethylphenol (237 mg, 1.94 mmol), DBU (271 μL, 1.78 mmol), and DMF (10 mL). The resulting mixture was stirred overnight at room temperature. The mixture was extracted with H_2O and EtOAc. The organic layers were combined, dried with $MgSO_4$, and concentrated to give a crude intermediate. The intermediate was purified by column chromatography to give a pure intermediate. Then, EtOH:H_2O (3:1) and $Na_2S_2O_4$ (10 eq) were added to the intermediate. The resulting mixture was refluxed overnight. Then, the mixture was cooled to room temperature and extracted with H_2O and EtOAc. The organic layers were combined, dried with $MgSO_4$, and concentrated to give a crude intermediate. The crude intermediate was purified by column chromatography to give a pure intermediate. The purified intermediate was placed in a round bottom flask and DCM and phenylisocyanate (1 eq) were added. The resulting mixture was stirred at room temperature for 1 hour. The solvent was removed and the crude desired product was purified by column chromatography to afford **63**.

Example 23

Functional Assay

[0484] Human embryonic kidney cells (293 total) expressing either human, rat, or mouse MCH receptor were harvested from 150 mm culture dishes using PBS. Spinning at 1500 rpm for 2 minutes

initially pelleted cells. The resulting pellet was then homogenized in 15 mL ice cold sucrose buffer (25 mM HEPES, 0.3 M sucrose, pH 7.4) with a motorized, glass fitted, Teflon® homogenizer. The homogenate was centrifuged at 48,000 X g at 4°C for 10 minutes, resuspended in 15 mL assay buffer (25 mM HEPES, 10 mM $MgCl_2$, 0.2% BSA, 0.1 mg/mL STI, 0.1 mg/mL Pefabloc®, 1 μM Phosphoramidon, pH 7.4) with a Tissue-Tearor® (Biospec Products) and centrifuged again at 48,000 X g for 10 minutes. The pellet was homogenized for a third time in 15 mL assay buffer using the Tissue-Tearor® and again centrifuged at 48,000 X g for 10 minutes. The resulting pellet was resuspended in assay buffer at a wet weight concentration of 10-20 mg/mL.

[0485] Pharmacological analyses were conducted using either a HT-PS100 device (Axiom Biotechnologies, San Diego, CA), which provides high-resolution dose-response fluorometric measurements of $[Ca^{++}]_i$ mobilization, or using a FLIPR® device (Molecular Devices, Sunnyvale, CA).

HT-PS100 Protocol:

[0486] Materials: HEK 293 cells were stably transfected with the rat MCH 1 receptor and maintained under G418 antibiotic pressure. HT-PS100 assay buffer consisted of Physiological Saline Solution (145 mM NaCl, 5.4 mM KCL, 1.0 mM NaH_2PO_4, 1.8 mM $CaCl_2$, 0.8 mM $MgSO_4$, 15.0 mM HEPES, pH 7.4, 11.2 mM glucose) + 50 μM Pluronic-F127. MCH peptide (Amgen, Inc.) was reconstituted in assay buffer and served as the positive agonist control for all experiments. Test compounds were prepared as 10 mM stocks in 100% DMSO and diluted to a top end working concentration of 100 μM in 96 well plates.

[0487] Methods: HEK 293 stably expressing MCH1R were maintained in Dulbeco's modified Eagle's medium (GIBCO/Life Technologies, Rockville, MD) supplemented with 2 mM glutamine and 10% dialyzed fetal bovine serum (HyClone, Logan, UT) at 37°C, 5% CO_2. Cells were harvested by 10' treatment with Versene

(GIBCO/Life Technologies) followed by trituration, washing twice with cold (4°C) hybridoma medium (Serum/Protein free, with L-glutamine, sodium bicarbonate, MOPS buffer) (Sigma-Aldrich Corp, St. Louis, MO) and resuspended at 2 x 106 cells/mL in the same medium. The resuspended cells were loaded with the fluorescent calcium indicator Fura-2 by incubating with Fura-2AM (Molecular Probes, Eugene, OR) at 1.6 μM for 60' at room temperature. The loaded cells were then washed twice with hybridoma medium, adjusted to 2 x 105 cells/mL and kept at ambient temperature in a spinner flask under gentle stirring for up to 6 hours during the experiment.

[0488] Receptor-stimulated intracellular calcium responses were detected in the flow-through detector cuvette of the HT-PS100 by monitoring increases in the ratio of Fura-2 fluorescence intensities R340/380 measured at alternating 340/380 nm excitation and 510 nm emission.

[0489] Preliminary static experiments, conducted to determine the kinetics of MCH1R's dose response to MCH peptide, indicated the optimum time point to capture the maximum Ca^{++} transients was 30 s. No interference with DMSO was seen up to 1%. Based on these observations, subsequent experiments were conducted on the HT-PS100 to generate high resolution dose response curves, characterize agonist/antagonist properties, and evaluate antagonist potencies via Schild experiments. During HT-PS100 validation, reproducible EC_{50}s for MCH of 10 nM were generated within a broad range of cell passage and harvest density. HT-PS100 gradient generation was calibrated with a standardized stock of fluorescein.

[0490] Test compounds were screened for MCH1R activity in the HT-PS100 for both agonist and antagonist action. Agonist mode challenges were conducted at a maximum gradient concentration of 100 μM. Antagonist activity was tested by 30 s pre-incubation of cells at a compound concentration of 100 μM, with subsequent introduction of MCH at a concentration 5-fold of

EC_{50} as determined in preliminary experiments. Compounds that showed inhibition of the MCH-induced Ca^{++} response were automatically tagged for re-interrogation, IC_{50} generation, and Schild analysis.

[0491] Schild experiments were conducted on the HT-PS100 for selected compounds by 30 s pre-incubation of cells with antagonist compounds prior to administering MCH peptide. Several fixed concentrations of antagonist compounds were prepared in 10-fold increments, and presented to the cells 30 s before introducing a gradient of increasing MCH concentration. Values for compound pA2 were calculated by linear regression of Log(DR - 1) MCH EC_{50} as a function of Log(antagonist concentration), where DR is the dose ratio of MCH EC_{50} values determined in the presence and absence of antagonist.

[0492] The following compounds had K_i values of 100 μM or less in the HT-PS100 assay: Compound Nos. . Of these, Compound Nos. had K_i values of 100 nM or less in this assay.

FLIPR® protocol:

[0493] Materials: Pharmacological analysis was conducted using a FLIPR® device (Molecular Devices, Sunnyvale, CA). CHOK1-Gqi cells were stably transfected with the rat MCH1 receptor and maintained under G418 antibiotic pressure. FLIPR® assay buffer consisted of phenol red-free DMEM + 2.5 mM probenecid. MCH peptide (Amgen, Inc.) was reconstituted in assay buffer and served as the positive agonist control for all experiments. Test compounds were prepared as 10 mM stocks in 100% DMSO and diluted to a top end working concentration of 10 μM in 96 well black, flat bottom, collagen-I coated plates (Becton Dickinson, Bedford, MA).

[0494] Methods: CHOK1-Gqi cells stably expressing MCH1R were maintained in Dulbeco's modified Eagle's medium (GIBCO/Life Technologies, Rockville, MD) supplemented with 2 mM glutamine and 10% dialyzed fetal bovine serum (HyClone, Logan, UT) at

37°C, 5% CO_2. Cells were harvested by 10' treatment with Versene (GIBCO/Life Technologies) followed by trituration, washing twice with cold (4°C) hybridoma medium (Serum/Protein free, with L-glutamine, sodium bicarbonate, MOPS buffer) (Sigma-Aldrich Corp, St. Louis, MO) and replated onto 96 well black, flat bottom, collagen-I coated plates to a density of 10,000 cells/well. The cells were then loaded with the fluorescent calcium indicator Fura-2 (Molecular Probes, Eugene, OR) at 1.6 μM for 60' at room temperature. The loaded cells were then washed twice with 90 μl/well of wash buffer (1XHBSS, 20 mM HEPES, 2.5 mM probenecid).

[0495] Receptor-stimulated intracellular calcium responses were detected using FLIPR® by monitoring increases in the Fura-2 fluorescence response.

[0496] Test compounds were screened for MCH1R activity in the FLIPR® for both agonist and antagonist action. Agonist mode challenges were conducted at a maximum gradient concentration of 1 μM. Antagonist activity was tested by 10 min pre-incubation of cells at a compound concentration of defined to be 300X the EC_{50} of MCH (typically 1 μM), with subsequent introduction of MCH at a concentration 5-fold of EC_{50} as determined in preliminary experiments. Compounds that showed inhibition of MCH induced MCH1R dependant Ca^{++} responses were automatically tagged for re-interogation, IC_{50} generation, and Schild analysis.

[0497] Schild experiments were conducted on the FLIPR® for selected compounds by co-administering antagonist compounds together with MCH peptide. Several fixed concentrations of antagonist compounds were prepared in 10-fold increments, and presented to the cells in a gradient of increasing MCH concentration. Values for compound pA2 were calculated by linear regression of MCH EC_{50}s as a function of antagonist concentration.

[0498] The following compounds had K_i values of 100 μM or less in the rMCH FLIPR® assay: Compound Nos. 1, 5, 6, 15, 22, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 51, 53, 54, 55,

56, 57, 58, 59, and 64. Of these, Compound Nos. 1, 6, 15, 31, 32, 38, 39, 40, and 41 had K_i values of 100 nM or less in this assay.

[0499] The following compounds had K_i values of 100 μM or less in the hMCH FLIPR® assay: Compound Nos. 1, 5, 6, 34, 35, 36, 37, 38, 40, 41, 51, 52, 53, 54, 55, 56, 57, 58, 59, and 64. Of these, Compound Nos. 1, 6, 34, 35, 38, 40, 41, 51, 56, and 57 had K_i values of 100 nM or less in this assay.

Example 24
Ligand Binding Assay

[0500] Binding assays were determined as described below using mouse, rat or human MCH 1 receptors (mMCH1R, rMCH1R, and hMCH1R, respectively) expressed in HEK 293; IC_{50} values were calculated.

[0501] Binding assays were performed in 96-well U-bottom plates. Membranes (100 μg tissue) were incubated at 30°C for 90 minutes in assay buffer with various peptides in the presence of 0.2 nM 125I native-MCH (Perkin-Elmer Life Sciences, Boston, MA) in 100 μL total volume. Non-specific binding was assessed in the presence of 1 μM cold native-MCH. The reaction was terminated by rapid filtration through Unfilter-96 GF/C glass fiber filter plates (FilterMate® 196 Harvester, Packard Instrument Co., Meriden, CT) pre-soaked in PBS/0.5% BSA, followed by three washes with 300 μL ice-cold water. Bound radioactivity was determined using a TopCount® microplate scintillation and luminescence counter (Packard Instrument Co., Meriden, CT). Nonlinear regression analyses of drug concentration curves were performed using GraphPad Prism® (GraphPad Software, Inc., San Diego, CA).

[0502] The following compounds had IC_{50} values of 100 μM or less in the rMCH assay: Compound Nos. 1, 10, 12, 13, 15, 16, 17, 18, 22, 27, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,

43, 51, 52, 53, 54, 55, 56, 57, 58, 59, 61, 63, 64, 65, and 66. Of these, Compound Nos. 1, 31, 38, 39, 40, 41, 51, 52, 53, 54, 55, 56, 57, 58, 59, 61, and 66 had IC_{50} values of 100 nM or less in the rMCH assay.

[0503] The following compounds had IC_{50} values of 100 μM or less in the hMCH assay: Compound Nos. 1, 5, 6, 8, 10, 12, 13, 15, 16, 17, 18, 20, 22, 27, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 58, 59, 64, 65, and 66. Of these, Compound Nos. 1, 6, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 58, 59, and 66 had IC_{50} values of 100 nM or less in the hMCH assay.

[0504] In view of the above, it will be seen that the several objects of the invention are achieved.

[0505] The above description of the embodiments and examples are intended only to acquaint others skilled in the art with the invention, its principles, and its practical application, so that others skilled in the art may adapt and apply the invention in its numerous forms, as may be best suited to the requirements of a particular use. The present invention, therefore, is not limited to the above embodiments, and may be variously modified.

[0506] With reference to the use of the word(s) "comprise" or "comprises" or "comprising" or "including" or "having" in the above description and/or in the following claims, it should be noted that unless the context requires otherwise, those words are used on the basis and clear understanding that they are to be interpreted inclusively, rather than exclusively, and that each of those words is to be so interpreted in construing the above description and/or the following claims. When introducing elements of the present invention or the preferred embodiment(s) thereof, the articles "a," "an," "the," and "said" are intended to mean that there are one or more of the elements.

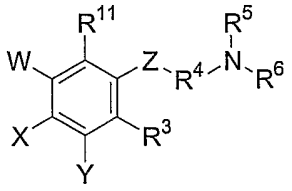
[0507] In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

[0508] As various changes could be made in the above compounds and methods without departing from the scope of the invention, it is intended that all matter contained in the above description shall be interpreted as illustrative and not in a limiting sense.

[0509] The entire texts of all U.S. Patents and other references cited herein are hereby incorporated by reference into this patent.

What is claimed is:

1. A compound of Formula I, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof:



I

wherein:

W is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, -C(O)-, $-C(O)N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

R^1 is selected from the group consisting of alkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, and heteroarylalkyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, arylcycloalkyl, and heteroarylalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^3 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

R^4 is selected from the group consisting of a bond, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and heteroarylalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, alkoxycarbonyl, and halo;

R^5 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

R^8 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^8 together with R^2 and the nitrogen to which

they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano;

R^{11} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano; and

R^{12} is selected from the group consisting of hydrogen, hydroxy, alkyl, cycloalkyl, aryl, aralkyl, halo, alkoxy, hydroxyalkyl, alkoxyalkyl, aryloxy, carboxyl, carboxyalkyl, and cyano.

2. The compound, pharmaceutically-acceptable salt or tautomer of claim 1, wherein:

W is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, lower cycloalkylalkyl, aryl, lower aralkyl, heteroaryl, and lower heteroarylalkyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower

cycloalkylalkyl, lower aralkenyl, lower arylcycloalkyl, and lower heteroarylalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^3 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, lower alkynyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower heteroarylalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, lower alkoxycarbonyl, and halo;

R^5 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

R^8 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano;

R^{11} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano; and

R^{12} is selected from the group consisting of hydrogen, hydroxy, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, halo, lower alkoxy, lower hydroxyalkyl, lower alkoxyalkyl, aryloxy, carboxyl, lower carboxyalkyl, and cyano.

3. The compound, pharmaceutically-acceptable salt or tautomer of claim 2, wherein:

W is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, chloro, bromo, fluoro,

methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl,

cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl,

naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached

may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

R^5 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^6 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy,

pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^7 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

R^8 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl,

naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

R^9 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and

cyano, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^{10} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

R^{11} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl,

pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano; and

R^{12} is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano.

4. The compound, pharmaceutically-acceptable salt or tautomer of claim 1, wherein X is $-OR^1$.

5. The compound, pharmaceutically-acceptable salt or tautomer of claim 2, wherein X is $-OR^1$.

6. The compound, pharmaceutically-acceptable salt or tautomer of claim 3, wherein X is $-OR^1$.

7. The compound, pharmaceutically-acceptable salt, tautomer or prodrug of claim 1, selected from the group of compounds consisting of

4-[(3,4-dimethylphenyl)oxy]-3-{[(phenylamino)carbonyl]amino}-N-(2-(1-pyrrolidinyl)ethyl)benzamide,

4-[(3,4-dimethylphenyl)oxy]-3-[(3-phenylpropanoyl)amino]-N-(2-(1-pyrrolidinyl)ethyl)benzamide,

4-[(3,4-dimethylphenyl)oxy]-3-({[(phenylmethyl)amino]carbonyl}amino)-N-(2-(1-pyrrolidinyl)ethyl)benzamide,

4-(phenyloxy)-N-(2-(1-pyrrolidinyl)ethyl)benzamide,

3-acetylamino-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-propionylamino-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-(3-cyclopentylpropionylamino)-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-phenylacetylamino-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-(3-phenyl-acryloylamino)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-[(2-phenyl-cyclopropanecarbonyl)amino]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

naphthalene-2-carboxylic acid [2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-ethylcarbamoyl)phenyl]amide,

4-(3,4-dimethylphenoxy)-3-(3-ethylureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

N-(2-aminoethyl)-4-(3,4-dimethylphenoxy)-3-(3-phenylpropionylamino)benzamide,

4-methoxy-3-(3-phenylpropionylamino)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(naphthalen-2-yl-oxy)-3-(3-phenylpropionylamino)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-[3-(2-methoxyphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-[3-(2,4-dichlorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-[3-(4-phenoxyphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-(3-biphenyl-4-yl-ureido)-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-[3-(4-isopropylphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-[3-(2,6-dimethylphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-(3-naphthalen-1-yl-ureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-[3-(2,6-diisopropylphenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-[3-(4-bromophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-[3-(3-methoxyphenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-[3-(2-chlorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-(3,3-diphenylureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dimethylphenoxy)-3-(3-methyl-3-phenylureido)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

1,3-dihydroisoindole-2-carboxylic acid [2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-ethylcarbamoyl)phenyl]amide,

4-(4-fluoro-3-methylphenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-dichlorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3,4-difluorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(4-fluorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

4-(3-fluorophenoxy)-3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)-4-p-tolyloxybenzamide,

3-[3-(3-fluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)-4-m-tolyloxybenzamide,

3-[3-(3,5-difluorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-[3-(3,5-dichlorophenyl)ureido]-4-(3,4-dimethylphenoxy)-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

3-[3-(3-fluorophenyl)ureido]-4-phenoxy-N-(2-pyrrolidin-1-yl-ethyl)benzamide,

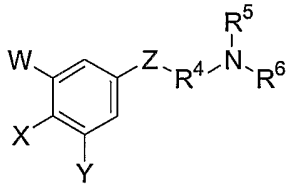
1-[2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-methylpyrrolidine-1-carbonyl)phenyl]-3-phenylurea,

1-{2-(3,4-dimethylphenoxy)-5-[(2-pyrrolidin-1-yl-ethylamino)-methyl]phenyl}-3-(3-fluorophenyl)urea,

1-[2-(3,4-dimethylphenoxy)-5-(2-pyrrolidin-1-yl-methylpyrrolidine-1-carbonyl)phenyl]-3-phenylurea, and

4-(3,4-dichlorophenoxy)-3-[3-(3,5-difluorophenyl)ureido]-N-(2-pyrrolidin-1-yl-ethyl)benzamide.

8. A compound of claim 1, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein the compound corresponds to Formula II



II

wherein:

W is selected from the group consisting of hydrogen, hydroxy, alkyl, and alkoxy;

X is selected from the group consisting of $-OR^1$, $-NR^1R^{10}$, and $-SR^1$;

Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, -C(O)-, $-CH_2N(R^9)-$, and $-N(R^{12})C(O)N(R^9)-$;

R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally

substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, alkyl, and aryl;

R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, wherein R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl; and

R^{12} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl.

9. The compound, pharmaceutically-acceptable salt or tautomer of claim 8, wherein:

W is selected from the group consisting of hydrogen, hydroxy, lower alkyl, and lower alkoxy;

R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl,

R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl; and

R^{12} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl.

10. The compound, pharmaceutically-acceptable salt or tautomer of claim 9, wherein:

W is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, methoxy, ethoxy, propoxy, butoxy, pentyloxy, and hexyloxy;

R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole,

tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is

optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl,

cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl,

methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl,

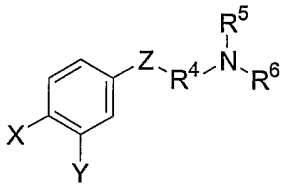
propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^{10} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl; and

R^{12} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl,

pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl

11. A compound of claim 1, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein the compound corresponds to Formula III



III

wherein:

X is selected from the group consisting of $-OR^1$ and $-SR^1$;

Y is selected from the group consisting of hydrogen, $-N(R^7)C(O)NR^2R^8$, $-N(R^7)C(O)OR^2$, $-N(R^7)C(O)R^2$, $-N(R^7)SO_2R^2$, and $-NR^2R^7$;

Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-CH_2N(R^9)-$, and $-NHC(O)NR^9-$;

R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or

6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, alkyl, and aryl;

R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl; and

R^{12} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl.

12. The compound, pharmaceutically-acceptable salt or tautomer of claim 11, wherein:

R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is

optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8

together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl; and

R^{12} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl.

13. The compound, pharmaceutically-acceptable salt or tautomer of claim 12, wherein:

R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole,

tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl,

hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy,

ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl,

triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

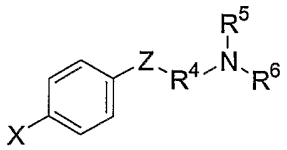
R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^{10} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl,

hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl; and

R^{12} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl.

14. A compound of claim 1, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein the compound corresponds to Formula IV



IV

wherein:

X is selected from the group consisting of $-OR^1$ and $-SR^1$;

Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-CH_2N(R^9)-$, and $-NHC(O)NR^9-$;

R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, alkyl, and aryl,

R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^8 together with R^2 and the nitrogen to

which they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl; and

R^{12} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl.

15. The compound, pharmaceutically-acceptable salt or tautomer of claim 14, wherein:

R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more

substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, wherein R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system;

R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^{10} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl; and

R^{12} is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl.

16. The compound, pharmaceutically-acceptable salt or tautomer of claim 15, wherein:

R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are

attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^3 is selected from the group consisting of hydrogen, hydroxy, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, chloro, bromo, fluoro, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, carboxyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, carboxyhexyl, and cyano;

R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl,

cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl,

or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring;

R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl,

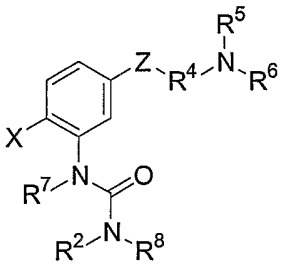
cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^{10} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl; and

R^{12} is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl,

hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl.

17. A compound of claim 1, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein the compound corresponds to Formula V



V

wherein:

X is selected from the group consisting of $-OR^1$ and $-SR^1$;

Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-CH_2N(R^9)-$, and $-NHC(O)NR^9-$;

R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the

group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, alkyl, and aryl;

R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system; and

R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring.

18. The compound, pharmaceutically-acceptable salt or tautomer of claim 17, wherein:

R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected

from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8

together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system; and

R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring.

19. The compound, pharmaceutically-acceptable salt or tautomer of claim 18, wherein:

R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl,

cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl, dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl,

cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl,

pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

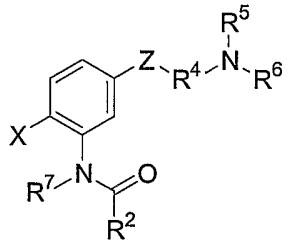
R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring; and

R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl,

pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring.

20. A compound of claim 1, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein the compound corresponds to Formula VI



VI

wherein:

X is selected from the group consisting of $-OR^1$ and $-SR^1$;

Z is selected from the group consisting of -CH=CH-, $-CH_2N(R^9)-$, $-CH_2N(R^9)-$, and $-NHC(O)NR^9-$;

R^1 is selected from the group consisting of alkyl, cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, alkyl, alkenyl, and cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed

with R^9 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, and alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, alkyl, and aryl; and

R^9 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, and carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring.

21. The compound, pharmaceutically-acceptable salt or tautomer of claim 20, wherein:

R^1 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, and heteroaryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^2 is selected from the group consisting of lower alkyl, lower cycloalkyl, aryl, heteroaryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl,or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, carboxyl, aryloxy, oxo, and halo;

R^4 is selected from the group consisting of a bond, lower alkyl, lower alkenyl, and lower cycloalkyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, and halo;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, and lower alkoxyalkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^7 is selected from the group consisting of hydrogen, lower alkyl, and aryl;

R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system; and

R^9 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, aryl, lower aralkyl, lower hydroxyalkyl, lower alkoxyalkyl, and lower carboxyalkyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring.

22. The compound, pharmaceutically-acceptable salt or tautomer of claim 21, wherein:

R^1 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl,

biphenyl, benzyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, and benzodioxolyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, phenylcyclopropyl, phenylcyclobutyl, phenylcyclopentyl, phenylcyclohexyl, biphenylcyclopropyl, biphenylcyclobutyl, biphenylcyclopentyl, biphenylcyclohexyl, naphthylcyclopropyl, naphthylcyclobutyl, naphthylcyclopentyl, naphthylcyclohexyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of hexahydroisoindolyl, tetrahydroisoindolyl, dihydroisoindolyl, isoindolinyl, hexahydroindolyl, tetrahydroindolyl,

dihydroindolyl, indolinyl, octahydroquinolinyl, hexahydroquinolinyl, tetrahydroquinolinyl, dihydroquinolinyl, and quinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy, oxo, chloro, bromo, and fluoro;

R^4 is selected from the group consisting of a bond, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, allyl, butenyl, pentenyl, acetylenyl, propynyl, butynyl, pentynyl, hexynyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, furyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, isoxazolyl, oxazolyl, indolyl, thiazolyl, isothiazolyl, oxadiazolyl, oxatriazolyl, dioxazole, tetrazolyl, benzodioxolyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, cyclopropylmethyl, cyclopropylethyl, cyclopropylpropyl, cyclopropylbutyl, cyclopropylpentyl, cyclobutylmethyl, cyclobutylethyl, cyclobutylpropyl, cyclobutylbutyl, cyclobutylpenyyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclopentylbutyl, cyclopentylpentyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, cyclohexylbutyl, cyclohexylpentyl, phenylethenyl, phenylpropenyl, phenylallyl, phenylbutenyl, phenylpentenyl, or R^4 together with R^9 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring, wherein R^4 or the ring formed with R^9 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, pentyloxy, hexyloxy, carboxyl, phenoxy, naphthyloxy, tetrahydronaphthyloxy, biphenylyloxy,

oxo, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, pentyloxycarbonyl, hexyloxycarbonyl, chloro, bromo, and fluoro;

R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, and pentoxypentyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

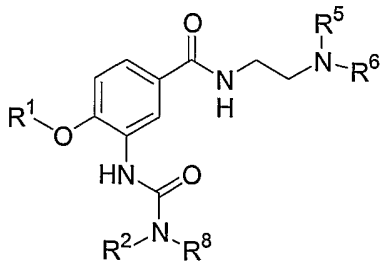
R^7 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, naphthyl, tetrahydronaphthyl, and biphenyl;

R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl,

hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^8 together with R^2 and the nitrogen to which they are attached may form an isoindolinyl ring; and

R^9 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl, benzyl, diphenylmethyl, triphenylmethyl, phenylethyl, diphenylethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methoxymethyl, methoxyethyl, methoxypropyl, methoxybutyl, methoxypentyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, ethoxybutyl, ethoxypentyl, propoxymethyl, propoxyethyl, propoxypropyl, propoxybutyl, propoxypentyl, butoxymethyl, butoxyethyl, butoxypropyl, butoxybutyl, butoxypentyl, pentoxymethyl, pentoxyethyl, pentoxypropyl, pentoxybutyl, pentoxypentyl, carboxymethyl, carboxyethyl, carboxypropyl, carboxybutyl, carboxypentyl, and carboxyhexyl, or R^9 together with R^4 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring.

23. A compound of claim 1, or a pharmaceutically-acceptable salt, tautomer or prodrug thereof, wherein the compound corresponds to Formula VII



VII

wherein:

R^1 is selected from the group consisting of cycloalkyl and aryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, and halo;

R^2 is selected from the group consisting of alkyl, aryl, aralkyl, cycloalkylalkyl, aralkenyl, and arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of alkyl, hydroxy, alkoxy, aryloxy, and halo;

R^5 is selected from the group consisting of hydrogen and alkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen and alkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring; and

R^8 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, and aryl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system.

24. The compound, pharmaceutically-acceptable salt or tautomer of claim 23, wherein:

R^1 is selected from the group consisting of lower cycloalkyl and aryl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, and halo;

R^2 is selected from the group consisting of lower alkyl, aryl, lower aralkyl, lower cycloalkylalkyl, lower aralkenyl, and lower arylcycloalkyl, or R^2 together with R^8 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system, wherein R^2 or the unsaturated fused heterocyclic ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of lower alkyl, hydroxy, lower alkoxy, aryloxy, and halo;

R^5 is selected from the group consisting of hydrogen and lower alkyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring;

R^6 is selected from the group consisting of hydrogen and lower alkyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a saturated 5- or 6-membered heterocyclic ring; and

R^8 is selected from the group consisting of hydrogen, lower alkyl, lower cycloalkyl, and aryl, or R^8 together with R^2 and the nitrogen to which they are attached may form an unsaturated fused heterocyclic ring system.

25. The compound, pharmaceutically-acceptable salt or tautomer of claim 24, wherein:

R^1 is selected from the group consisting of cyclopentyl, cyclohexyl, phenyl, naphthyl, and biphenyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, hydroxy, methoxy, ethoxy, propoxy, chloro, bromo, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, propyl, butyl, phenyl, naphthyl, tetrahydronaphthyl, biphenyl,

benzyl, phenylethyl, cyclopentylmethyl, cyclopentylethyl, cyclopentylpropyl, cyclohexylmethyl, cyclohexylethyl, cyclohexylpropyl, phenylethenyl, phenylpropenyl, phenylcyclopropyl, biphenylcyclopropyl, and naphthylcyclopropyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a ring selected from the group consisting of dihydroisoindolyl, dihydroindolyl, tetrahydroisoquinolinyl, and tetrahydroquinolinyl, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, hydroxy, methoxy, ethoxy, propoxy, phenoxy, naphthyloxy, biphenylyloxy, chloro, bromo, and fluoro;

R^5 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, and hexyl, or R^5 together with R^6 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring;

R^6 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, and hexyl, or R^6 together with R^5 and the nitrogen to which they are attached may form a pyrrolidinyl or a piperidinyl ring; and

R^8 is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, and biphenyl, or R^8 together with R^2 and the nitrogen to which they are attached may form a ring selected from the group consisting of dihydroisoindolyl, dihydroindolyl, tetrahydroisoquinolinyl, and tetrahydroquinolinyl.

26. The compound, pharmaceutically-acceptable salt or tautomer of claim 25, wherein:

R^1 is selected from the group consisting of phenyl, and naphthyl, wherein R^1 is optionally substituted with one or more substituents selected from the group consisting of methyl, chloro, and fluoro;

R^2 is selected from the group consisting of methyl, ethyl, phenyl, naphthyl, biphenyl, benzyl, phenylethyl, cyclopentylethyl, phenylethenyl, phenylcyclopropyl, or R^2 together with R^8 and the nitrogen to which they are attached may form a dihydroisoindolyl ring, wherein R^2 or the ring formed with R^8 is optionally substituted with one or more substituents selected from the group consisting of methyl, propyl, methoxy, phenoxy, chloro, bromo, and fluoro;

R^5 is hydrogen or R^5 together with R^6 and the nitrogen to which they are attached form a pyrrolidinyl ring;

R^6 is hydrogen or R^6 together with R^5 and the nitrogen to which they are attached form a pyrrolidinyl ring; and

R^8 is selected from the group consisting of hydrogen, methyl, and phenyl, or R^8 together with R^2 and the nitrogen to which they are attached may form a dihydroisoindolyl ring.

27. A pharmaceutical composition comprising a compound, pharmaceutically-acceptable salt, tautomer or prodrug according to any one of claims 1-26, and a pharmaceutically acceptable carrier, adjuvant, or diluent.

28. A method of treating or preventing a melanin concentrating hormone-mediated disorder in a subject, the method comprising administering to a subject in need of such treatment or prevention a compound, pharmaceutically-acceptable salt, tautomer or prodrug according to any one of claims 1-26, or the pharmaceutical composition of claim 27.

29. A method of treating or preventing a condition selected from the group consisting of feeding disorders, sexual disorders, reproductive disorders, depression, anxiety, epileptic seizure, hypertension, cerebral hemorrhage, congestive heart failure, and sleep disturbances, comprising administering to a subject in need of such treatment or prevention a compound, pharmaceutically-acceptable salt,

tautomer or prodrug according to any one of claims 1-26, or the pharmaceutical composition of claim 27.

30. The method of claim 29 wherein the condition being treated or prevented is a feeding disorder.

31. The method of claim 30 wherein the feeding disorder is selected from the group consisting of obesity, bulimia and bulimia nervosa.

32. The method of treating or preventing obesity, comprising administering to a subject in need of such treatment or prevention the compound, pharmaceutically-acceptable salt, tautomer or prodrug of any of claims 1-26.