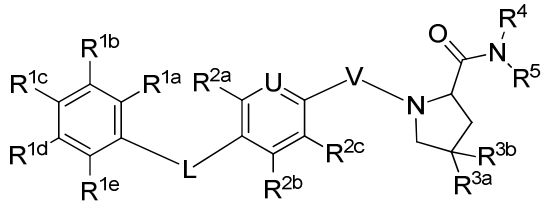
What is claimed is:

1. A compound having Formula (I) or a stereoisomer, a geometric isomer, a tautomer, an *N*-oxide, a hydrate, a solvate, a metabolite, a pharmaceutically acceptable salt or a prodrug thereof,



(I),

wherein

L is $-CH_2O-$ or $-OCH_2-$;

U is CR^u or N;

V is $-CH_2-$, $-CH_2CH_2-$ or a single bond;

each R^{1a}, R^{1b}, R^{1c}, R^{1d} and R^{1e} is independently H, D, F, Cl, Br, I, -CN, $-NO_2$, $-NH_2$, -OH, -SH, -COOH, $-C(=O)NH_2$, $-C(=O)NHCH_3$, $-C(=O)N(CH_3)_2$, $-C(=O)-(C_1-C_6$ alkyl), $-C(=O)-(C_1-C_6$ alkoxy), C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylamino, hydroxy-substituted C_1-C_6 alkyl, C_3-C_8 cycloalkyl, 3-8 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl;

R^u is H, D, F, Cl, Br, I, -CN, $-NO_2$, $-NH_2$, -OH, -SH, -COOH, $-C(=O)NH_2$, $-C(=O)NHCH_3$, $-C(=O)N(CH_3)_2$, $-C(=O)-(C_1-C_6$ alkyl), $-C(=O)-(C_1-C_6$ alkoxy), C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylamino, hydroxy-substituted C_1-C_6 alkyl, C_3-C_8 cycloalkyl, 3-8 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl;

each R^{2a}, R^{2b} and R^{2c} is independently H, D, F, Cl, Br, I, -CN, $-NO_2$, $-NH_2$, -OH, -SH, -COOH, $-C(=O)NH_2$, $-C(=O)NHCH_3$, $-C(=O)N(CH_3)_2$, $-C(=O)-(C_1-C_6$ alkyl), $-C(=O)-(C_1-C_6$ alkoxy), C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylamino, hydroxy-substituted C_1-C_6 alkyl, C_3-C_8 cycloalkyl, 3-8 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl;

R^{3a} is ~~D,~~ F, Cl, Br, I, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkoxy, C_1-C_6 haloalkoxy or hydroxy-substituted C_1-C_6 alkyl;

R^{3b} is H, D, F, Cl, Br, I, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy or hydroxy-substituted C_1-C_6 alkyl; and

each R^4 and R^5 is independently H, D, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6

haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylamino, hydroxy-substituted C_1-C_6 alkyl, C_3-C_8 cycloalkyl, 3-8 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl, wherein each of the C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylamino, hydroxy-substituted C_1-C_6 alkyl, C_3-C_8 cycloalkyl, 3-8 membered heterocyclyl, C_6-C_{10} aryl and 5-10 membered heteroaryl is independently and optionally substituted with 1, 2, 3, 4 or 5 substituents selected from D, F, Cl, Br, I, -OH, -NH_2, -NO_2, -CN, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_3-C_8 cycloalkyl or C_6-C_{10} aryl.

2. The compound of claim 1, wherein each R^{1a}, R^{1b}, R^{1c}, R^{1d} and R^{1e} is independently H, D, F, Cl, Br, I, -CN, -NO_2, -NH_2, -OH, -SH, -COOH, -C(=O)NH_2, -C(=O)$NHCH_3$, -C(=O)$N(CH_3)_2$, -C(=O)-(C_1-C_4 alkyl), -C(=O)-(C_1-C_4 alkoxy), C_1-C_4 alkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_1-C_4 alkylthio, C_1-C_4 alkylamino, hydroxy-substituted C_1-C_4 alkyl, C_3-C_6 cycloalkyl, 3-6 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl;

R^u is H, D, F, Cl, Br, I, -CN, -NO_2, -NH_2, -OH, -SH, -COOH, -C(=O)NH_2, -C(=O)$NHCH_3$, -C(=O)$N(CH_3)_2$, -C(=O)-(C_1-C_4 alkyl), -C(=O)-(C_1-C_4 alkoxy), C_1-C_4 alkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_1-C_4 alkylthio, C_1-C_4 alkylamino, hydroxy-substituted C_1-C_4 alkyl, C_3-C_6 cycloalkyl, 3-6 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl;

each R^{2a}, R^{2b} and R^{2c} is independently H, D, F, Cl, Br, I, -CN, -NO_2, -NH_2, -OH, -SH, -COOH, -C(=O)NH_2, -C(=O)$NHCH_3$, -C(=O)$N(CH_3)_2$, -C(=O)-(C_1-C_4 alkyl), -C(=O)-(C_1-C_4 alkoxy), C_1-C_4 alkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_1-C_4 alkylthio, C_1-C_4 alkylamino, hydroxy-substituted C_1-C_4 alkyl, C_3-C_6 cycloalkyl, 3-6 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl.

3. The compound of claim 1 or 2, wherein each R^{1a}, R^{1b}, R^{1c}, R^{1d} and R^{1e} is independently H, D, F, Cl, Br, I, -CN, -NO_2, -NH_2, -OH, -SH, -COOH, -C(=O)NH_2, -C(=O)$NHCH_3$, -C(=O)$N(CH_3)_2$, -C(=O)-CH_3, -C(=O)-OCH_3, methyl, ethyl, *n*-propyl, *i*-propyl, allyl, propenyl, propargyl, propinyl, -CHF_2, -CF_3, -$CHFCH_2F$, -CF_2CHF_2, -CH_2CF_3, -$CH_2CF_2CHF_2$, methoxy, ethoxy, *n*-propoxy, isopropoxy, -$OCHF_2$, -OCF_3, -$OCHFCH_2F$, -OCF_2CHF_2, -OCH_2CF_3, -$OCH_2CF_2CHF_2$, methylthio, ethylthio, methylamino, dimethylamino, ethylamino, hydroxymethyl, 2-hydroxyethyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, azetidinyl, pyrrolidinyl, tetrahydrofuranyl, piperidyl, piperazinyl, morpholinyl, phenyl, indenyl, naphthyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, tetrazolyl, furanyl, thienyl, thiazolyl, oxazolyl,

pyridyl, pyrimidyl, pyrazinyl, pyridazyl, benzimidazolyl, indolyl or quinolyl;

R^u is H, D, F, Cl, Br, I, -CN, $-NO_2$, $-NH_2$, -OH, -SH, -COOH, $-C(=O)NH_2$, $-C(=O)NHCH_3$, $-C(=O)N(CH_3)_2$, $-C(=O)-CH_3$, $-C(=O)-OCH_3$, methyl, ethyl, *n*-propyl, *i*-propyl, allyl, propenyl, propargyl, propinyl, $-CHF_2$, $-CF_3$, $-CHFCH_2F$, $-CF_2CHF_2$, $-CH_2CF_3$, $-CH_2CF_2CHF_2$, methoxy, ethoxy, *n*-propoxy, isopropoxy, $-OCHF_2$, $-OCF_3$, $-OCHFCH_2F$, $-OCF_2CHF_2$, $-OCH_2CF_3$, $-OCH_2CF_2CHF_2$, methylthio, ethylthio, methylamino, dimethylamino, ethylamino, hydroxymethyl, 2-hydroxyethyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, azetidinyl, pyrrolidinyl, tetrahydrofuranyl, piperidyl, piperazinyl, morpholinyl, phenyl, indenyl, naphthyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, tetrazolyl, furanyl, thienyl, thiazolyl, oxazolyl, pyridyl, pyrimidyl, pyrazinyl, pyridazyl, benzimidazolyl, indolyl or quinolyl;

each R^{2a}, R^{2b} and R^{2c} is independently H, D, F, Cl, Br, I, -CN, $-NO_2$, $-NH_2$, -OH, -SH, -COOH, $-C(=O)NH_2$, $-C(=O)NHCH_3$, $-C(=O)N(CH_3)_2$, $-C(=O)-CH_3$, $-C(=O)-OCH_3$, methyl, ethyl, *n*-propyl, *i*-propyl, allyl, propenyl, propargyl, propinyl, $-CHF_2$, $-CF_3$, $-CHFCH_2F$, $-CF_2CHF_2$, $-CH_2CF_3$, $-CH_2CF_2CHF_2$, methoxy, ethoxy, *n*-propoxy, isopropoxy, $-OCHF_2$, $-OCF_3$, $-OCHFCH_2F$, $-OCF_2CHF_2$, $-OCH_2CF_3$, $-OCH_2CF_2CHF_2$, methylthio, ethylthio, methylamino, dimethylamino, ethylamino, hydroxymethyl, 2-hydroxyethyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, azetidinyl, pyrrolidinyl, tetrahydrofuranyl, piperidyl, piperazinyl, morpholinyl, phenyl, indenyl, naphthyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, tetrazolyl, furanyl, thienyl, thiazolyl, oxazolyl, pyridyl, pyrimidyl, pyrazinyl, pyridazyl, benzimidazolyl, indolyl or quinolyl.

4. The compound of any one of claims 1 to 3, wherein R^{3a} is ~~D,~~ F, Cl, Br, I, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_2-C_4 alkoxy, C_1-C_4 haloalkoxy or hydroxy-substituted C_1-C_4 alkyl;

R^{3b} is H, D, F, Cl, Br, I, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy or hydroxy-substituted C_1-C_4 alkyl.

5. The compound of any one of claims 1 to 4, wherein R^{3a} is ~~D,~~ F, Cl, Br, I, methyl, ethyl, *n*-propyl, *i*-propyl, $-CHF_2$, $-CF_3$, $-CHFCH_2F$, $-CF_2CHF_2$, $-CH_2CF_3$, $-CH_2CF_2CHF_2$, ethoxy, *n*-propoxy, isopropoxy, $-OCHF_2$, $-OCF_3$, $-OCHFCH_2F$, $-OCF_2CHF_2$, $-OCH_2CF_3$, $-OCH_2CF_2CHF_2$, hydroxymethyl or 2-hydroxyethyl;

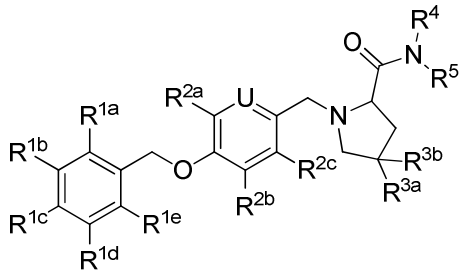
R^{3b} is H, D, F, Cl, Br, I, methyl, ethyl, *n*-propyl, *i*-propyl, $-CHF_2$, $-CF_3$, $-CHFCH_2F$, $-CF_2CHF_2$, $-CH_2CF_3$, $-CH_2CF_2CHF_2$, methoxy, ethoxy, *n*-propoxy, isopropoxy, $-OCHF_2$, $-OCF_3$, $-OCHFCH_2F$, $-OCF_2CHF_2$, $-OCH_2CF_3$, $-OCH_2CF_2CHF_2$, hydroxymethyl or 2-hydroxyethyl.

6. The compound of any one of claims 1 to 5, wherein each R^4 and R^5 is independently H,

D, C_1-C_4 alkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_1-C_4 alkylthio, C_1-C_4 alkylamino, hydroxy-substituted C_1-C_4 alkyl, C_3-C_6 cycloalkyl, 3-6 membered heterocyclyl, C_6-C_{10} aryl or 5-10 membered heteroaryl, wherein each of the C_1-C_4 alkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_1-C_4 alkylthio, C_1-C_4 alkylamino, hydroxy-substituted C_1-C_4 alkyl, C_3-C_6 cycloalkyl, 3-6 membered heterocyclyl, C_6-C_{10} aryl and 5-10 membered heteroaryl is independently and optionally substituted with 1, 2, 3, 4 or 5 substituents selected from D, F, Cl, Br, I, -OH, -NH_2, -NO_2, -CN, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_3-C_6 cycloalkyl or C_6-C_{10} aryl.

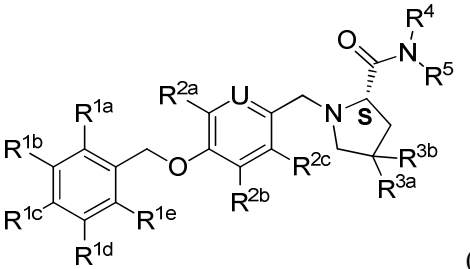
7. The compound of any one of claims 1 to 6, wherein each R^4 and R^5 is independently H, D, methyl, ethyl, *n*-propyl, *i*-propyl, allyl, propenyl, propargyl, propinyl, -CHF_2, -CF_3, -$CHFCH_2F$, -CF_2CHF_2, -CH_2CF_3, -$CH_2CF_2CHF_2$, methoxy, ethoxy, *n*-propoxy, isopropoxy, -$OCHF_2$, -OCF_3, -$OCHFCH_2F$, -OCF_2CHF_2, -OCH_2CF_3, -$OCH_2CF_2CHF_2$, methylthio, ethylthio, methylamino, dimethylamino, ethylamino, hydroxymethyl, 2-hydroxyethyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, azetidinyl, pyrrolidinyl, tetrahydrofuranyl, piperidyl, piperazinyl, morpholinyl, phenyl, indenyl, naphthyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, tetrazolyl, furanyl, thienyl, thiazolyl, oxazolyl, pyridyl, pyrimidyl, pyrazinyl, pyridazyl, benzimidazolyl, indolyl or quinolyl, wherein each of the methyl, ethyl, *n*-propyl, *i*-propyl, allyl, propenyl, propargyl, propinyl, -CHF_2, -$CHFCH_2F$, -CF_2CHF_2, -CH_2CF_3, -$CH_2CF_2CHF_2$, methoxy, ethoxy, *n*-propoxy, isopropoxy, -$OCHF_2$, -$OCHFCH_2F$, -OCF_2CHF_2, -OCH_2CF_3, -$OCH_2CF_2CHF_2$, methylthio, ethylthio, methylamino, dimethylamino, ethylamino, hydroxymethyl, 2-hydroxyethyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, azetidinyl, pyrrolidinyl, tetrahydrofuranyl, piperidyl, piperazinyl, morpholinyl, phenyl, indenyl, naphthyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, tetrazolyl, furanyl, thienyl, thiazolyl, oxazolyl, pyridyl, pyrimidyl, pyrazinyl, pyridazyl, benzimidazolyl, indolyl and quinolyl is independently and optionally substituted with 1, 2, 3, 4 or 5 substituents selected from D, F, Cl, Br, I, -OH, -NH_2, -NO_2, -CN, methyl, ethyl, *n*-propyl, *i*-propyl, -CHF_2, -CF_3, -$CHFCH_2F$, -CF_2CHF_2, -CH_2CF_3, -$CH_2CF_2CHF_2$, methoxy, ethoxy, *n*-propoxy, isopropoxy, -$OCHF_2$, -OCF_3, -$OCHFCH_2F$, -OCF_2CHF_2, -OCH_2CF_3, -$OCH_2CF_2CHF_2$, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, indenyl or naphthyl.

8. The compound of any one of claims 1 to 7 having Formula (II), or a stereoisomer, a geometric isomer, a tautomer, an *N*-oxide, a hydrate, a solvate, a metabolite, a pharmaceutically acceptable salt or a prodrug thereof,



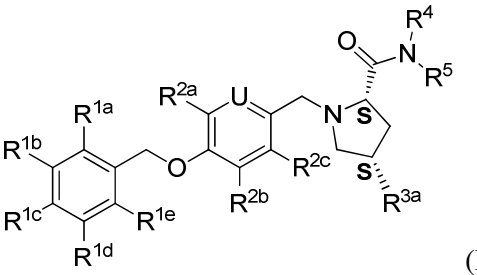
(II).

9. The compound of any one of claims 1 to 8 having Formula (III), or a stereoisomer, a geometric isomer, a tautomer, an *N*-oxide, a hydrate, a solvate, a metabolite, a pharmaceutically acceptable salt or a prodrug thereof,



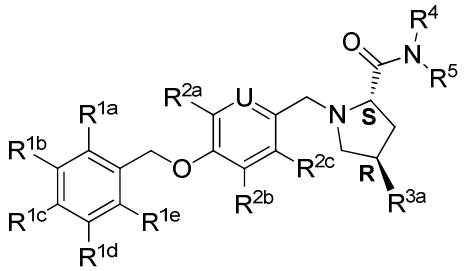
(III).

10. The compound of any one of claims 1 to 9 having Formula (IV), or a stereoisomer, a geometric isomer, a tautomer, an *N*-oxide, a hydrate, a solvate, a metabolite, a pharmaceutically acceptable salt or a prodrug thereof,



(IV).

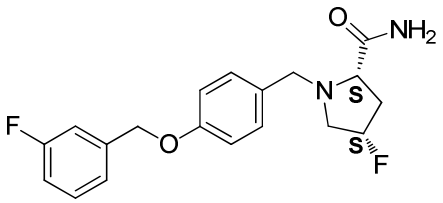
11. The compound of any one of claims 1 to 9 having Formula (V), or a stereoisomer, a geometric isomer, a tautomer, an *N*-oxide, a hydrate, a solvate, a metabolite, a pharmaceutically acceptable salt or a prodrug thereof,



(V).

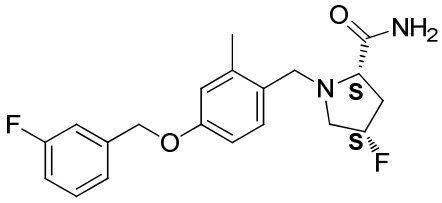
12. The compound of any one of claims 1 to 11 having one of the following structures or

a stereoisomer, a geometric isomer, a tautomer, an *N*-oxide, a hydrate, a solvate, a metabolite, a pharmaceutically acceptable salt or a prodrug thereof:



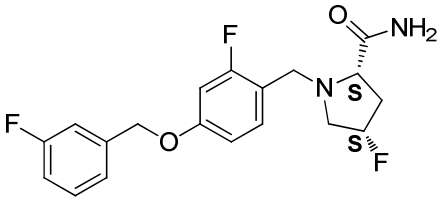
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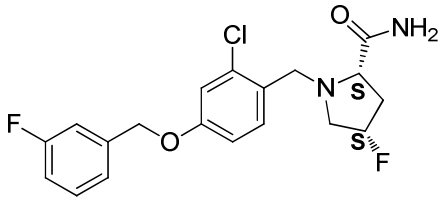
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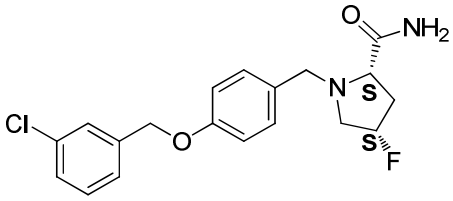
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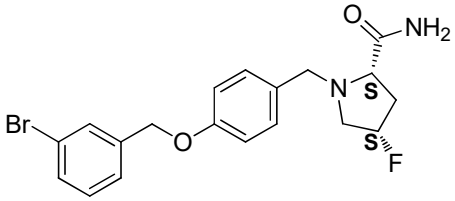
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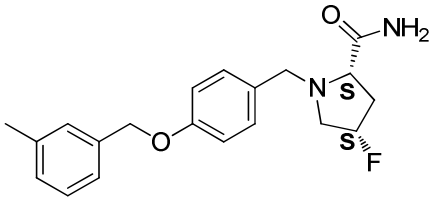
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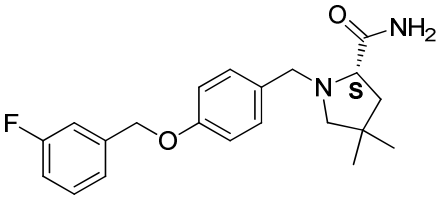
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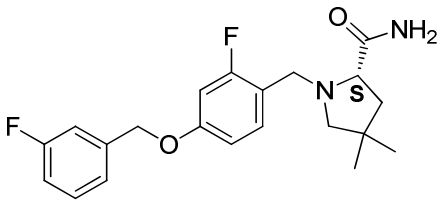
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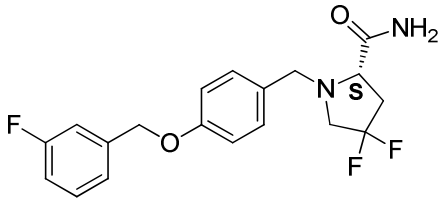
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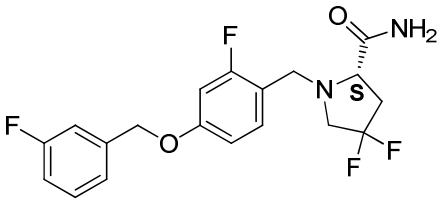
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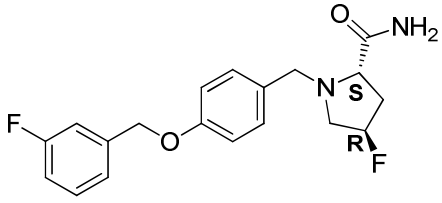
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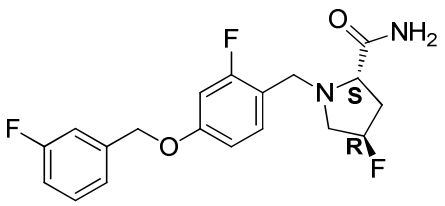
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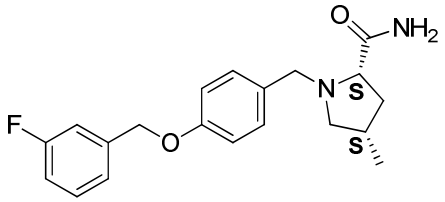


(12)

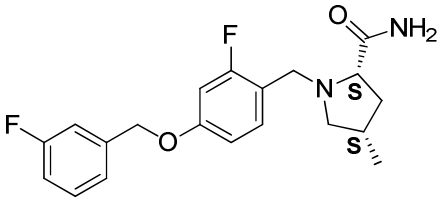
,



(13) ,



(14) or



(15) .

13. A pharmaceutical composition comprising the compound of any one of claims 1 to 12.

14. The pharmaceutical composition according to claim 13, wherein the pharmaceutical composition optionally comprises a pharmaceutically acceptable excipient, carrier, adjuvant or a combination thereof.

15. Use of the compound of any one of claims 1 to 12 ~~or the pharmaceutical composition of any one of claims 13 to 14~~ in the manufacture of a medicament for preventing, treating or lessening a disease regulated by MAO-B in a subject~~.~~

~~16. The use of claim 15~~, wherein the disease regulated by MAO-B is a neurodegenerative disease, psychosis or cancer.

~~17~~16. The use of claim ~~16~~15, wherein the neurodegenerative disease is Parkinson's disease, cerebral ischemia, Alzheimer's disease, amyotrophic lateral sclerosis, bovine spongiform encephalopathy, Huntington's chorea, Creutzfeldt-Jakob disease, ataxia telangiectasia, cerebellar atrophy, spinal muscular atrophy, primary lateral sclerosis or multiple sclerosis.

~~18~~17. The ~~compound of any one of claims 1 to 12 or the~~ pharmaceutical composition of any one of claims 13 to 14 for use in preventing, treating or lessening a disease regulated by MAO-B in a subject~~.~~

~~19. The compound or the pharmaceutical composition of claim 18~~, wherein the disease regulated by MAO-B is a neurodegenerative disease, psychosis or cancer.

~~20~~18. The ~~compound or the~~ pharmaceutical composition of claim ~~19~~17, wherein the neurodegenerative disease is Parkinson's disease, cerebral ischemia, Alzheimer's disease, amyotrophic lateral sclerosis, bovine spongiform encephalopathy, Huntington's chorea, Creutzfeldt-Jakob disease, ataxia telangiectasia, cerebellar atrophy, spinal muscular atrophy,

primary lateral sclerosis or multiple sclerosis.

~~21. A method of preventing, treating or lessening a disease regulated by MAO B comprising administering a therapeutically effective amount of the compound of any one of claims 1 to 12 or the pharmaceutical composition of any one of claims 13 to 14 to the subject.~~

~~22. The method of claim 21, wherein the disease regulated by MAO B is a neurodegenerative disease, psychosis or cancer.~~

~~23. The method of claim 22, wherein the neurodegenerative disease is Parkinson's disease, cerebral ischemia, Alzheimer's disease, amyotrophic lateral sclerosis, bovine spongiform encephalopathy, Huntington's chorea, Creutzfeldt-Jakob disease, ataxia telangiectasia, cerebellar atrophy, spinal muscular atrophy, primary lateral sclerosis or multiple sclerosis.~~