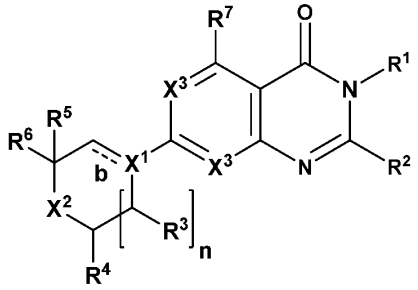
What is claimed is:

1. A compound of Formula I



I

or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

X^1 is (1) CH or N and b is a single bond; or (2) C and b is a double bond;

X^2 is CH_2, CHF, CF_2, O, or NH;

wherein, optionally, R^5 is absent and the X^2CR^6 group forms a 5- or 6-membered heteroaryl, wherein the 5-membered heteroaryl contains only one ring atom selected from N, O, and S and optionally only one further N ring atom and wherein the 6 membered heteroaryl contains only one or only two N ring atoms, and wherein said 5- or 6-membered heteroaryl is optionally substituted with halogen, C_{1-3}alkyl, or C_{1-3}alkoxy;

X^3 at each occurrence independently is CH or N;

R^1 is H, C_{1-6}alkyl, C_{1-6}haloalkyl, or C_{3-6}cycloalkyl;

R^2 is H, C_{1-3}alkyl, C_{1-3}haloalkyl, or C_{3-6}cycloalkyl;

R^3 is H or C_{1-3}alkyl;

R^4 is H or C_{1-3}alkyl;

R^5 is H or C_{1-3}alkyl;

R^6 is C_{2-6}alkyl, C_{1-6}haloalkyl, diC_{1-3}alkylamino, -C(=O)O(C_{1-6}alkyl), C_{3-6}cycloalkyl, C_{3-6}heterocycloalkyl, phenyl, 5-membered heteroaryl, or 6-membered heteroaryl; wherein

(1) C_{3-6}cycloalkyl or C_{3-6}heterocycloalkyl is optionally substituted with C=O,

(2) the phenyl, 5-membered heteroaryl, or 6-membered heteroaryl group is optionally substituted with 1 to 3 substituents independently selected from halogen, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{1-6}alkoxy, C_{1-6}haloalkoxy, -(C_{1-3}alkyl)O(C_{1-3}alkyl), -(C_{1-3}alkyl)NH_2, -(C_{1-3}alkyl)NH(C_{1-3}alkyl), -(C_{1-3}alkyl)N[(C_{1-3}alkyl)(C_{1-3}alkyl)], -CN, C_{2-4}alkenyl, C_{3-6}cycloalkyl, phenyl, and C_{3-6}heterocycloalkyl; wherein

the C_{1-6}alkyl and C_{1-6}haloalkyl of subsection (2) are optionally substituted with OH; and wherein

the C_{3-6}heterocycloalkyl of subsection (2) is optionally substituted with 1 to 3 substituents selected from halogen, C_{1-3}alkyl, and -C(=O)O(C_{1-6}alkyl);

R^7 is C_{5-6}cycloalkyl, C_{5-8}spiroalkyl, C_{5-8}tricycloalkyl, phenyl, or 6-membered heteroaryl; wherein R^7 is further optionally substituted with 1 to 4 substituents independently selected from halogen, C_{1-3}alkyl, and C_{1-3}haloalkyl; and

n is 0 or 1; provided that when X^1 is N and n is 0, X^2 is not NH or O.

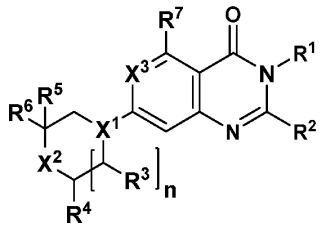
2. The compound according to Claim 1, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein the compound is not

5-(5-chloro-3-methyl-2-pyridinyl)-2,3-dimethyl-7-(2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(3-methyl-3-phenyl-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one; or

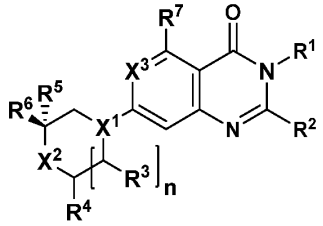
5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(3-(1-methyl-1H-imidazol-2-yl)-1-pyrrolidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one.

3. The compound according to Claim 1 or Claim 2, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein the compound is a compound of Formula II



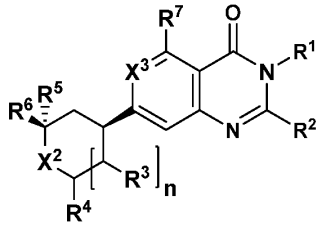
II.

4. The compound according to Claim 1 or Claim 2, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein the compound is a compound of Formula IIA



IIA.

5. The compound according to Claim 1 or Claim 2, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein the compound is a compound of Formula IIB



IIB.

6. The compound according to any one of Claims 1-4, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

X^1 is CH.

7. The compound according to any one of Claims 1-4, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

X^1 is N.

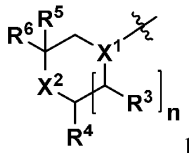
8. The compound according to any one of Claims 1-7, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

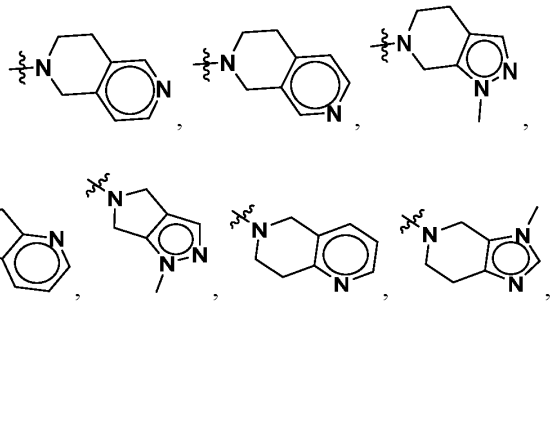
X^2 is CH_2, CF_2, or O.

9. The compound according to any one of Claims 1-7, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

X^2 is O.

10. The compound according to Claim 1, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein the



portion of Formula I is 

11. The compound according to any one of Claims 1-10, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

X^3 is CH.

12. The compound according to any one of Claims 1-10, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

X^3 is N.

13. The compound according to any one of Claims 1-12, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^1 is methyl, ethyl, propyl, $-CH_2CF_3$, cyclopropyl, or cyclohexyl.

14. The compound according to any one of Claims 1-12, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^1 is methyl.

15. The compound according to any one of Claims 1-14, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^2 is H, methyl, trifluoromethyl, or cyclopropyl.

16. The compound according to any one of Claims 1-14, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^2 is methyl.

17. The compound according to any one of Claims 1-16, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^3 is H or methyl.

18. The compound according to any one of Claims 1-16, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^3 is H.

19. The compound according to any one of Claims 1-18, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^4 is H or methyl.

20. The compound according to any one of Claims 1-18, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^4 is H.

21. The compound according to any one of Claims 1-20, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^5 is H or methyl.

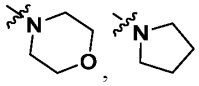
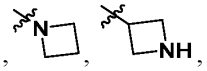
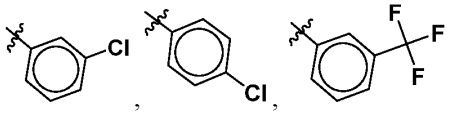
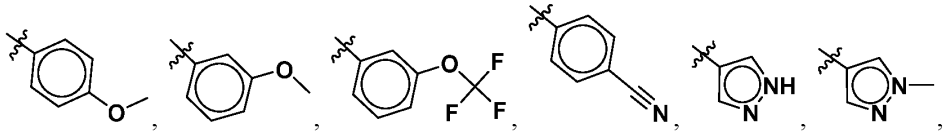
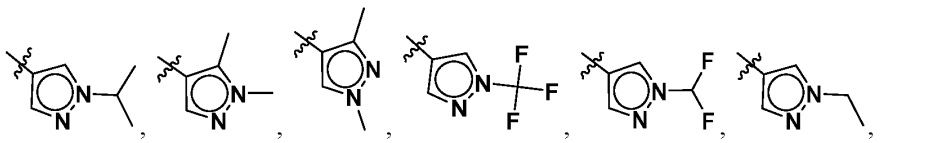
22. The compound according to any one of Claims 1-20, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

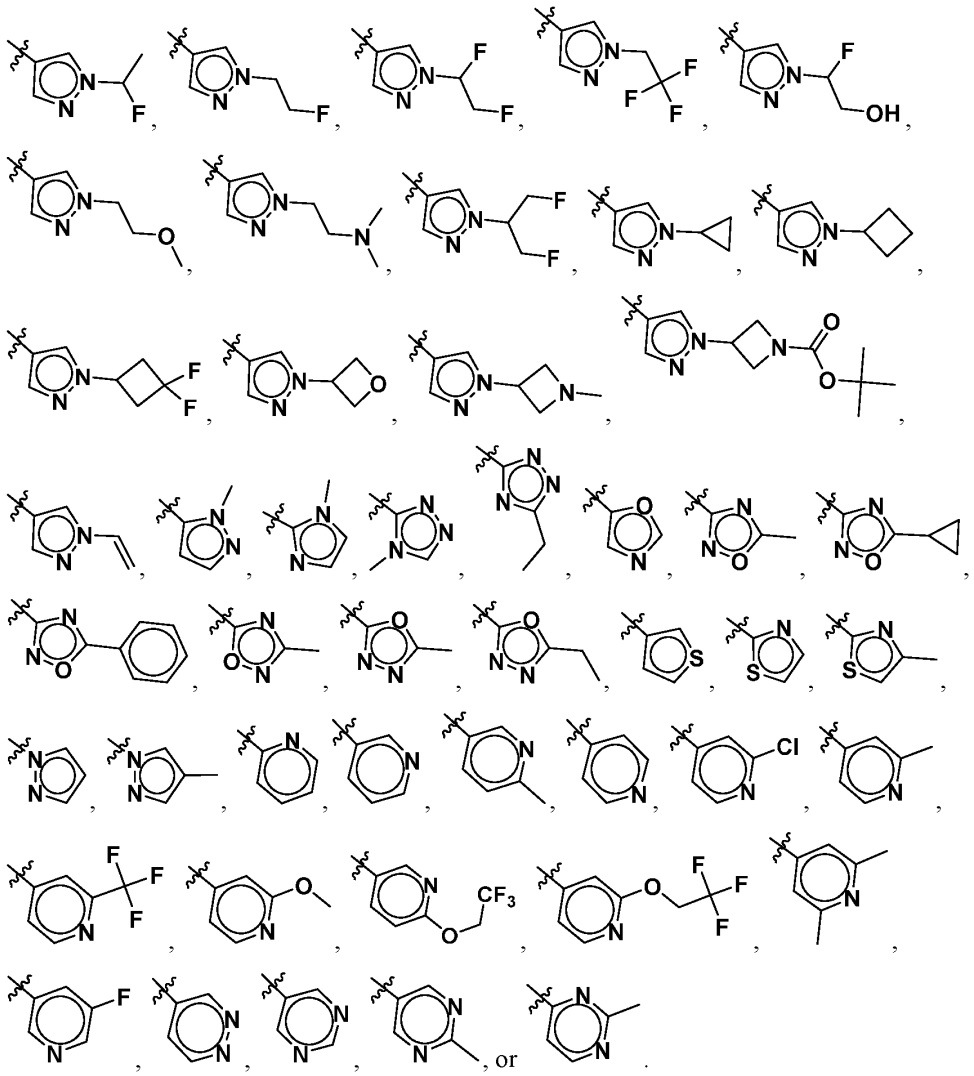
R^5 is H.

23. The compound according to any one of Claims 1-22, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

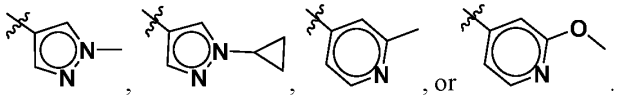
R^6 is difluoromethyl, trifluoromethyl, $-CH_2CF_3$, dimethylamino, $-C(=O)OCH_2CH_3$, optionally substituted cyclopropyl, optionally substituted cyclobutyl, optionally substituted oxetanyl, optionally substituted azetidinyl, optionally substituted tetrahydrofuranyl, optionally substituted pyrrolidinyl, optionally substituted phenyl, optionally substituted pyrazolyl, optionally substituted imidazolyl, optionally substituted 1,3-oxazolyl, optionally substituted 1,2,4-oxadiazolyl, optionally substituted 1,3,4-oxadiazolyl, optionally substituted thiophenyl, optionally substituted thiazolyl, optionally substituted pyridinyl, optionally substituted pyridazinyl, or optionally substituted pyrimidinyl.

24. The compound according to any one of Claims 1-22, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^6 is difluoromethyl, trifluoromethyl, $-CH_2CF_3$, dimethylamino, $-C(=O)OCH_2CH_3$, cyclopropyl, cyclobutyl, oxetan-2-yl, azetidine-1-yl, tetrahydrofuran-3-yl, , , phenyl, , , 



25. The compound according to any one of Claims 1-22, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^6 is 

26. The compound according to any one of Claims 1-25, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^7 is optionally substituted C_{5-6}cycloalkyl, optionally substituted phenyl, or optionally substituted 6-membered heteroaryl.

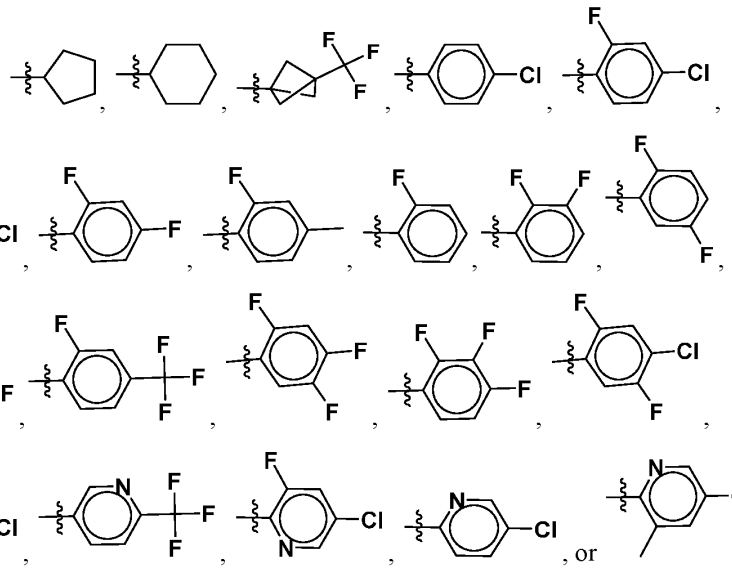
27. The compound according to any one of Claims 1-25, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^7 is optionally substituted C_{5-6}cycloalkyl, optionally substituted phenyl, or optionally substituted pyridinyl.

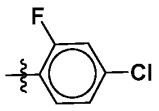
28. The compound according to any one of Claims 1-25, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^7 is optionally substituted phenyl.

29. The compound according to any one of Claims 1-25, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^7 is , or .

30. The compound according to any one of Claims 1-25, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein

R^7 is 

.

31. The compound according to any one of Claims 1-9 and 11-30, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein n is 0.

32. The compound according to any one of Claims 1-30, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein n is 1.

33. The compound according to Claim 1, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein the compound is a compound of **Table A**, or a tautomer thereof, or a pharmaceutically acceptable salt of the compound of **Table A**, or a tautomer thereof.

34. The compound according to Claim 1, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, wherein the compound is

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-4(3H)-quinazolinone;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-4(3H)-quinazolinone;

5-(4-chlorophenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chlorophenyl)-2,3-dimethyl-7-((2R)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-3-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(2,4-difluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-5-(2,3,4-trifluorophenyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-5-(2,4,5-trifluorophenyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2,5-difluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(2-fluoro-4-methylphenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(2-fluoro-4-(trifluoromethyl)phenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2,3-difluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(5-chloro-3-fluoro-2-pyridinyl)-2,3-dimethyl-7-(2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-4(3H)-quinazolinone;

2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-5-(6-(trifluoromethyl)-3-pyridinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-cyclohexyl-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-3-(2,2,2-trifluoroethyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-cyclopropyl-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

± 5-(5-chloro-3-fluoro-2-pyridinyl)-2-methyl-7-(2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-3-propylpyrido-[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-ethyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(1-ethyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,5R)-5-methyl-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,5R)-5-methyl-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,6R)-2-methyl-6-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,6S)-2-methyl-6-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,6R)-2-methyl-6-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,6S)-2-methyl-6-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-methyl-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-cyclopropyl-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(2-cyclobutyl-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S,6R)-2-cyclopropyl-6-methyl-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S,6S)-2-cyclopropyl-6-methyl-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R,6R)-2-cyclopropyl-6-methyl-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R,6S)-2-cyclopropyl-6-methyl-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-((2R)-2-oxetanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-((2S)-2-oxetanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-((2S)-2-oxetanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-((2R)-2-oxetanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-((3S)-tetrahydro-3-furanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-((3S)-tetrahydro-3-furanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-((3R)-tetrahydro-3-furanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-((3R)-tetrahydro-3-furanyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(3-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(3-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(4-pyridazinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(5-pyrimidinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(1-methyl-1H-pyrazol-5-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(2,2,2-trifluoroethyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(thiophen-3-yl)morpholino)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(3-thiophenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(5-methyl-1,2,4-oxadiazol-3-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(5-methyl-1,2,4-oxadiazol-3-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(5-methyl-1,3,4-oxadiazol-2-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(5-methyl-1,3,4-oxadiazol-2-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(6-methyl-3-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(2-methyl-4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(2-methyl-4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(2-methyl-4-pyrimidinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(2-methyl-5-pyrimidinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(2-methyl-5-pyrimidinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(1,5-dimethyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1,5-dimethyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(2-(1,3-dimethyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(2-(5-fluoro-3-pyridinyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(2-(5-ethyl-1,3,4-oxadiazol-2-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,6S)-2-methyl-6-(3-thiophenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,6R)-2-methyl-6-(3-thiophenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,6S)-2-methyl-6-(3-thiophenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,6R)-2-methyl-6-(3-thiophenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(4-methyl-1,3-thiazol-2-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(2,6-dimethyl-4-pyridinyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(2,6-dimethyl-4-pyridinyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(4-methoxyphenyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(4-methoxyphenyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(3-methoxyphenyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(3-methoxyphenyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(2-methoxy-4-pyridinyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(2-methoxy-4-pyridinyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(5-cyclopropyl-1,2,4-oxadiazol-3-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(5-cyclopropyl-1,2,4-oxadiazol-3-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(4-chlorophenyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(4-chlorophenyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(2-chloro-4-pyridinyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(2-chloro-4-pyridinyl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

4-(4-(5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-4-oxo-3,4-dihydropyrido[4,3-d]pyrimidin-7-yl)-2-morpholinyl)benzonitrile;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(3-(trifluoromethyl)phenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(3-(trifluoromethyl)phenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(5-phenyl-1,2,4-oxadiazol-3-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(2-(trifluoromethyl)-4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(2-(2,2,2-trifluoroethoxy)-4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(2-(2,2,2-trifluoroethoxy)-4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(3-(trifluoromethoxy)phenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(3-(trifluoromethoxy)phenyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3S)-3-(1-methyl-1H-pyrazol-4-yl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3R)-3-(1-methyl-1H-pyrazol-4-yl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(3,4-dihydro-2,6-naphthyridin-2(1H)-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(3,4-dihydro-2,7-naphthyridin-2(1H)-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(1-methyl-1,4,5,7-tetrahydro-6H-pyrazolo[3,4-c]pyridin-6-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(3-(1,3-oxazol-5-yl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(3-(5-oxo-3-pyrrolidinyl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3S)-3-(1H-pyrazol-4-yl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3R)-3-(1H-pyrazol-4-yl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(3-(dimethylamino)-1-piperidinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

7-(3-(1-azetidinyl)-1-piperidinyl)-5-(4-chloro-2-fluorophenyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3R)-3-(3-methyl-1,2,4-oxadiazol-5-yl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3S)-3-(3-methyl-1,2,4-oxadiazol-5-yl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3S)-3-(4-pyridinyl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((3R)-3-(4-pyridinyl)-1-piperidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

7-(8-chloro-3,4-dihydro-2,7-naphthyridin-2(1H)-yl)-5-(4-chloro-2-fluorophenyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5'-(4-chloro-2-fluorophenyl)-4-methoxy-2',3'-dimethyl-7,8-dihydro-5H-[6,7'-bipyrido[4,3-d]pyrimidin]-4'(3'H)-one;

5-(4-chloro-2-fluorophenyl)-7-((3R)-4,4-difluoro-3-(1-methyl-1H-pyrazol-4-yl)-1-piperidinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((3S)-4,4-difluoro-3-(1-methyl-1H-pyrazol-4-yl)-1-piperidinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(3-(trifluoromethyl)-1-pyrrolidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-(3-(difluoromethyl)-1-pyrrolidinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(3-(3-pyridinyl)-1-pyrrolidinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-(2-propanyl)-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-cyclobutyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-(3-oxetanyl)-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-(2,2,2-trifluoroethyl)-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(2-methoxyethyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(2-fluoroethyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(1-fluoroethyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(1-fluoro-2-hydroxyethyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(3,3-difluorocyclobutyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(2-(dimethylamino)ethyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(1,3-difluoro-2-propanyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

2-methyl-2-propanyl 3-(4-((2S)-4-(5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-4-oxo-3,4-dihydropyrido[4,3-d]pyrimidin-7-yl)-2-morpholinyl)-1H-pyrazol-1-yl)-1-azetidinecarboxylate;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-(1,2-difluoroethyl)-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-cyclopropyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S)-2-(1-ethenyl-1H-pyrazol-4-yl)-4-morpholinyl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-(1-methyl-3-azetidinyl)-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(6-methyl-3-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R)-2-(6-methyl-3-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S)-2-(1-(trifluoromethyl)-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2-cyclopropyl-3-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-2-(trifluoromethyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-ethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-2-(trifluoromethyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-ethyl-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-ethyl-2-methyl-7-((2S)-2-(5-methyl-1,2,4-oxadiazol-3-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-ethyl-2-methyl-7-((2R)-2-(5-methyl-1,2,4-oxadiazol-3-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-ethyl-2-methyl-7-((2S)-2-(2-methyl-4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(2,4-difluorophenyl)-3-ethyl-2-methyl-7-((2S)-2-(2-methyl-4-pyridinyl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

7-((2S)-2-(1-cyclopropyl-1H-pyrazol-4-yl)-4-morpholinyl)-5-(2,4-difluorophenyl)-3-ethyl-2-methylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-3-propylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(5-chloro-3-fluoro-2-pyridinyl)-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)-3-propylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-5-yl)-4-morpholinyl)-3-propylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2-methyl-7-((2R)-2-(1-methyl-1H-pyrazol-5-yl)-4-morpholinyl)-3-propylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R)-2-(difluoromethyl)-4-morpholinyl)-2-methyl-3-propylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2-methyl-7-((2S)-2-phenyl-4-morpholinyl)-3-propylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-3-methyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-cyclohexyl-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-cyclopentyl-2,3-dimethyl-7-((2S)-2-(1-methyl-1H-pyrazol-4-yl)-4-morpholinyl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,4R)-2-(1-methyl-1H-pyrazol-4-yl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one and 5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,4S)-2-(1-methyl-1H-pyrazol-4-yl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,4S)-2-(1-methyl-1H-pyrazol-4-yl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,4R)-2-(1-methyl-1H-pyrazol-4-yl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(6-(1-methyl-1H-pyrazol-4-yl)-3,6-dihydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R,4S)-2-(1-cyclopropyl-1H-pyrazol-4-yl)tetrahydro-2H-pyran-4-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S,4R)-2-(1-cyclopropyl-1H-pyrazol-4-yl)tetrahydro-2H-pyran-4-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

ethyl (2R,4S)-4-(5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-4-oxo-3,4-dihydropyrido[4,3-d]pyrimidin-7-yl)tetrahydro-2H-pyran-2-carboxylate and ethyl (2S,4R)-4-(5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-4-oxo-3,4-dihydropyrido[4,3-d]pyrimidin-7-yl)tetrahydro-2H-pyran-2-carboxylate;

ethyl (2S,4S)-4-(5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-4-oxo-3,4-dihydropyrido[4,3-d]pyrimidin-7-yl)tetrahydro-2H-pyran-2-carboxylate and ethyl (2R,4R)-4-(5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-4-oxo-3,4-dihydropyrido[4,3-d]pyrimidin-7-yl)tetrahydro-2H-pyran-2-carboxylate;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,4S)-2-(2-methyl-4-pyridinyl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,4R)-2-(2-methyl-4-pyridinyl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-(2-(6-methylpyridin-3-yl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R,4S)-2-(2-methoxy-4-pyridinyl)tetrahydro-2H-pyran-4-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2S,4R)-2-(2-methoxy-4-pyridinyl)tetrahydro-2H-pyran-4-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-7-((2R,4R)-2-(2-methoxy-4-pyridinyl)tetrahydro-2H-pyran-4-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

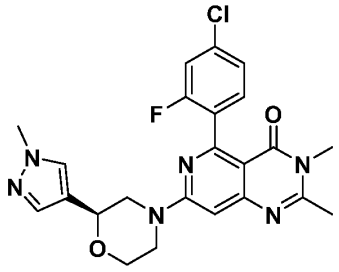
5-(4-chloro-2-fluorophenyl)-7-((2S,4S)-2-(2-methoxy-4-pyridinyl)tetrahydro-2H-pyran-4-yl)-2,3-dimethylpyrido[4,3-d]pyrimidin-4(3H)-one;

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,4R)-2-(3-pyridinyl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one and 5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,4S)-2-(3-pyridinyl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one;

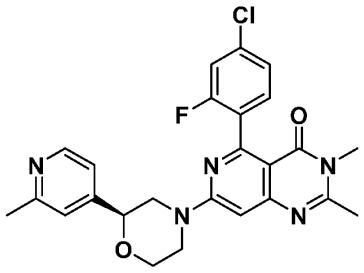
5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2R,4S)-2-(3-pyridinyl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one; or

5-(4-chloro-2-fluorophenyl)-2,3-dimethyl-7-((2S,4R)-2-(3-pyridinyl)tetrahydro-2H-pyran-4-yl)pyrido[4,3-d]pyrimidin-4(3H)-one.

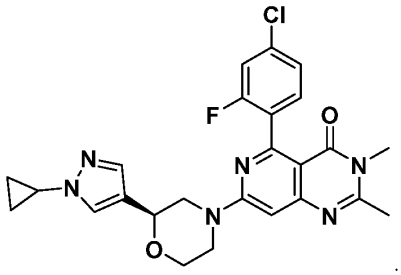
35. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



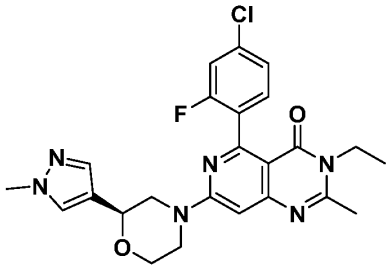
36. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



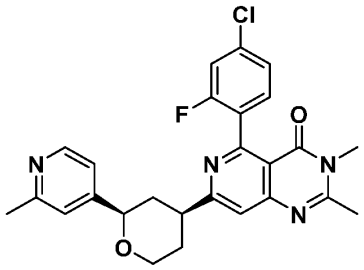
37. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



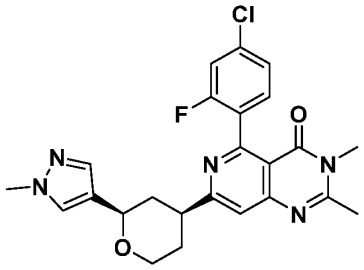
38. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



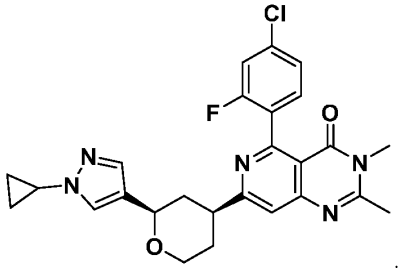
39. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



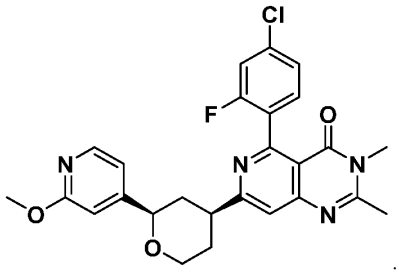
40. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



41. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



42. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound is



43. A pharmaceutical composition comprising the compound according to any one of Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, and a pharmaceutically acceptable excipient.

44. A compound according to any one of Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, or the pharmaceutical composition according to Claim 43 for use as a medicament.

45. A compound according to any one of Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, or the pharmaceutical composition according to Claim 43 for use in treating or preventing a condition associated with a loss of function of human TREM2.

46. A compound according to any one of Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, or the pharmaceutical composition according to Claim 43 for use in treating or preventing Parkinson's disease, rheumatoid arthritis, Alzheimer's disease, Nasu-Hakola disease, frontotemporal dementia, multiple sclerosis, prion disease, or stroke.

47. Use of the compound according to any one Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, or the pharmaceutical composition according to Claim 43 in the preparation of a medicament for treating or preventing a condition associated with a loss of function of human TREM2.

48. Use of the compound according to any one Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer, or the pharmaceutical composition according to Claim 43 in the preparation of a medicament for treating or preventing Parkinson's disease, rheumatoid arthritis, Alzheimer's disease, Nasu-Hakola disease, frontotemporal dementia, multiple sclerosis, prion disease, or stroke.

49. A method of treating or preventing a condition associated with a loss of function of human TREM2 in a subject in need thereof, the method comprising administering to the subject a therapeutically effective amount of the compound according to any one of Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer.

50. A method of treating or preventing Parkinson's disease, rheumatoid arthritis, Alzheimer's disease, Nasu-Hakola disease, frontotemporal dementia, multiple sclerosis, prion disease, or stroke in a subject in need thereof, the method comprising administering to the subject a therapeutically effective amount of the compound according to any one of Claims 1-42, or a tautomer thereof, or a pharmaceutically acceptable salt of said compound or said tautomer.