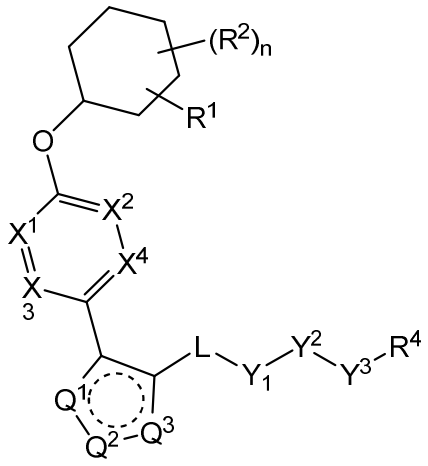
CLAIMS

1. A compound according to Formula (I):



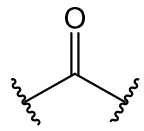
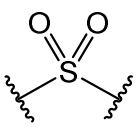
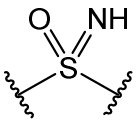
(I),

or a stereoisomer, tautomer, or pharmaceutically acceptable salt or solvate thereof, wherein:

X^1, X^2, X^3, and X^4 are each independently CR^6 or N; provided that no more than two of X^1, X^2, X^3, or X^4 are N;

one of Q^1, Q^2, and Q^3 is NR^5, and the other two are N; and the dashed circle denotes optional bonds forming an aromatic ring;

Y^1 is O or NR^3;

Y^2 is , , or ;

Y^3 is O or NR^{4a}; provided that (1) Y^1 and Y^3 are not both O, and (2) when Y^2 is C(O), Y^1 is not O;

L is a covalent bond or $C_{1\text{-}4}$ alkylene substituted with 0 to 4 R^7;

R^1 is $(\text{-}CH_2)_aR^9$;

a is an integer of 0 or 1;

R^2 is each independently halo, cyano, hydroxyl, amino, $C_{1\text{-}6}$ alkyl, $C_{3\text{-}6}$ cycloalkyl, $C_{4\text{-}6}$ heterocyclyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxy, alkoxyalkyl, haloalkoxyalkyl, or haloalkoxy;

n is an integer of 0, 1, or 2;

R^3 and R^{4a} are each independently hydrogen, $C_{1\text{-}6}$ alkyl, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy;

R^4 is $C_{1\text{-}10}$ alkyl, $C_{1\text{-}10}$ deuterated alkyl, $C_{1\text{-}10}$ haloalkyl, $C_{1\text{-}10}$ alkenyl,

C_{3-8} cycloalkyl, 6 to 10-membered aryl, 3 to 8-membered heterocyclyl, -(C_{1-6} alkylene)-(C_{3-8} cycloalkyl), -(C_{1-6} alkylene)-(6 to 10-membered aryl), -(C_{1-6} alkylene)-(3 to 8-membered heterocyclyl), or -(C_{1-6} alkylene)-(5 to 6-membered heteroaryl); wherein each of the alkyl, alkenyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl, by itself or as part of other moiety, is independently substituted with 0 to 3 R^8; or alternatively, R^3 and R^4 taken together with the atoms to which they are attached, form a 4- to 9-membered heterocyclic ring moiety which is substituted with 0 to 3 R^8;

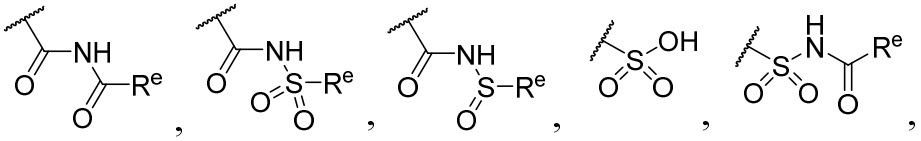
R^5 is hydrogen, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy;

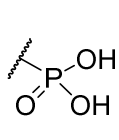
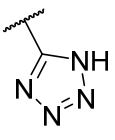
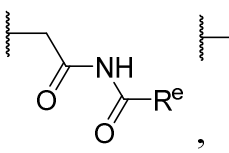
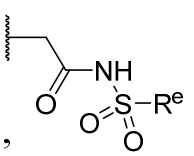
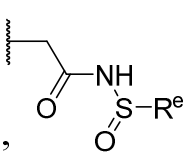
R^6 is hydrogen, halo, cyano, hydroxyl, amino, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy;

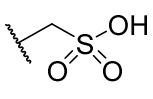
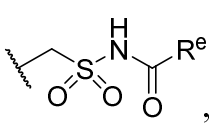
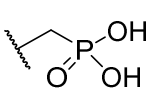
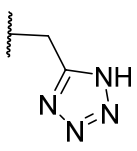
R^7 is halo, oxo, cyano, hydroxyl, amino, C_{1-6} alkyl, C_{3-6} cycloalkyl, C_{4-6} heterocyclyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy;

R^8 are each independently deuterium, halo, hydroxyl, amino, cyano, C_{1-6} alkyl, C_{1-6} deuterated alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, haloalkoxy, phenyl, or 5 to 6 membered heteroaryl; or alternatively, two R^8, taken together with the atoms to which they are attached, form a 3 to 6-membered carbocyclic ring or a 3 to 6-membered heterocyclic ring each of which is independently substituted with 0 to 3 R^{12};

R^9 is selected from –CN, –C(O)OR^{10}, –C(O)$NR^{11a}R^{11b}$,


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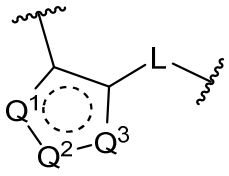
R^e is C_{1-6} alkyl, C_{3-6} cycloalkyl, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, or haloalkoxyalkyl;

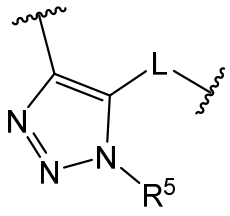
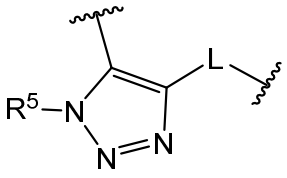
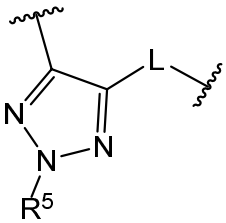
R^{10} is hydrogen or C_{1-10} alkyl;

R^{11a} and R^{11b} are each independently hydrogen, C_{1-6} alkyl, C_{3-6} cycloalkyl, C_{4-6} heterocyclyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy; and

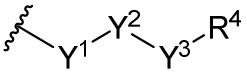
R^{12} is halo, cyano, hydroxyl, amino, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, haloalkoxy, phenyl, or 5 to 6 membered heteroaryl.

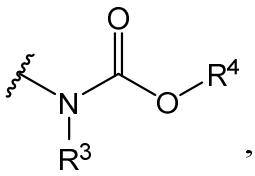
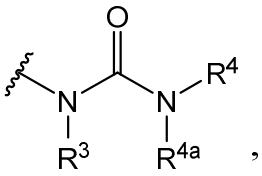
2. The compound according to claim 1, wherein

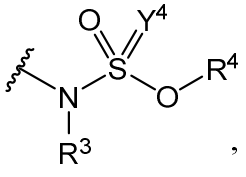
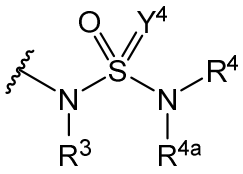
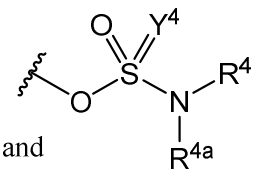
the  moiety is

 ,  , or  .

3. The compound according to claim 1 or 2, wherein

the  moiety is selected from

 ,  ,

 ,  , and  and

Y^4 is O or NH.

4. The compound according to any one of claims 1 to 3, wherein n is 0 or 1.

5. The compound according to any one of claims 1 to 4, wherein R^5 is C_{1-4} alkyl.

6. The compound according to any one of claims 1 to 5, wherein R^1 is CO_2H.

7. The compound according to any one of claims 1 to 6, wherein

R^3 and R^4, taken together with the N and O to which they are attached, form a 5 to 7-membered heterocyclic ring moiety which is substituted with 1 R^8; and

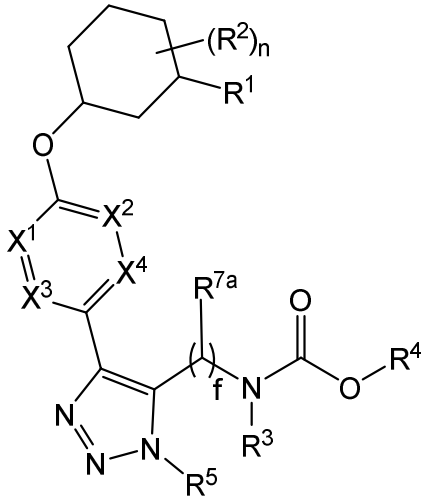
R^8 is benzyl or phenyl.

8. The compound according to any one of claim 1 to 7, wherein

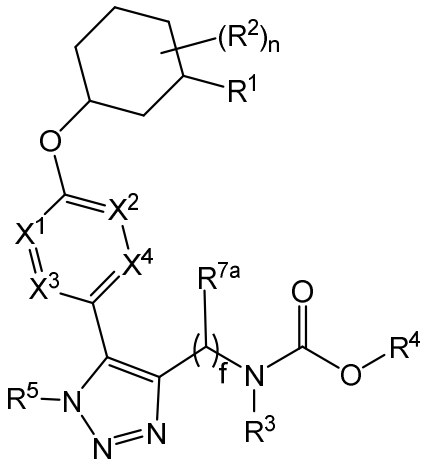
R^4 is C_{1-10} alkyl, C_{1-10} haloalkyl, C_{3-6} cycloalkyl, -(C_{1-4} alkylene)-(C_{3-6} cycloalkyl), -(C_{1-4} alkylene)-(C_{1-6} alkoxy), or -(C_{1-4} alkylene)-phenyl; wherein each of the alkyl, alkylene, cycloalkyl, and phenyl, by itself or as part of another group, is independently substituted with 0 to 3 R^8; and

R^8 is each independently halo, hydroxyl, amino, cyano, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy; or alternatively, two R^8, taken together with the atom(s) to which they are attached, form a 3 to 6-membered carbocyclic ring.

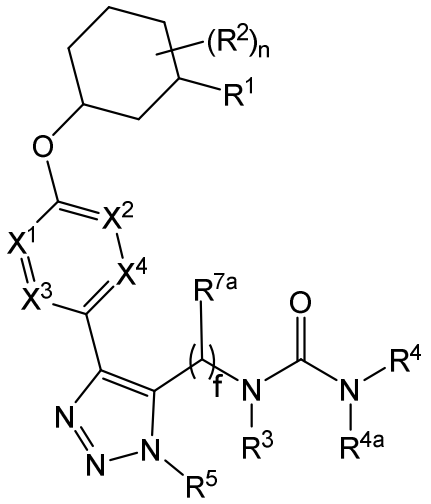
9. The compound according to any one of claims 1 to 8, which is represented by Formula (IIa), (IIb), (IIc), (IId), (IIe), or (IIf):



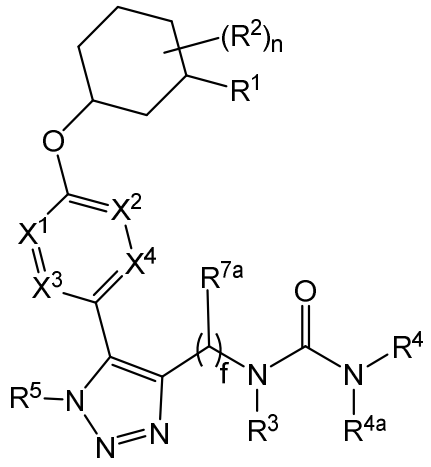
(IIa),



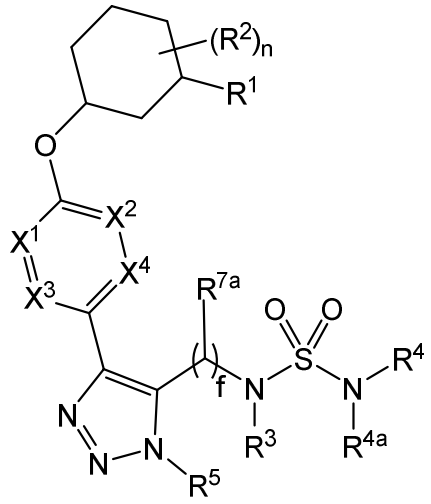
(IIb),



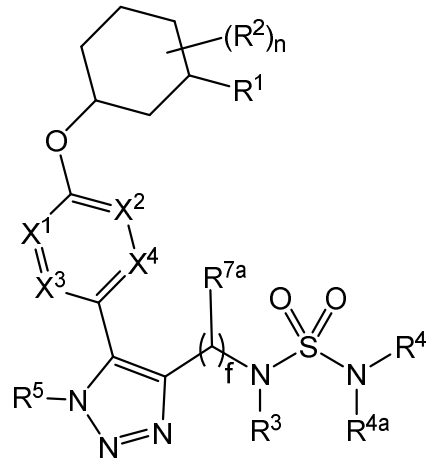
(IIc),



(IId),



(IIe),



(IIf),

or a stereoisomer, tautomer, or pharmaceutically acceptable salt or solvate thereof, wherein:

each R^{7a} is independently hydrogen, halo, oxo, cyano, hydroxyl, amino, C_{1-6} alkyl, C_{3-6} cycloalkyl, C_{4-6} heterocyclyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy;

f is an integer of 0, 1, or 2;

R^3 and R^{4a} are each independently hydrogen or C_{1-4} alkyl;

R^4 is C_{1-10} alkyl, C_{3-8} cycloalkyl, 6 to 10-membered aryl, -(C_{1-6} alkylene)-(C_{3-8} cycloalkyl), or -(C_{1-6} alkylene)-(6 to 10-membered aryl); wherein each of the alkyl, alkenyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl, by itself or as part of other moiety, is independently substituted with 0 to 3 R^8; or alternatively, R^3 and R^4, taken together with the N and O to which they are attached, form a 4- to 6-membered heterocyclic ring moiety which is substituted with 0 to 3 R^8;

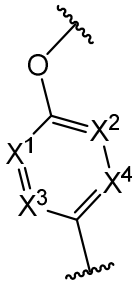
n is 0 or 1; and

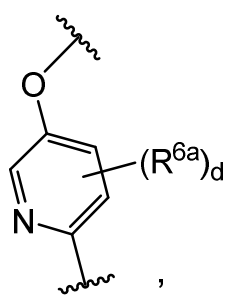
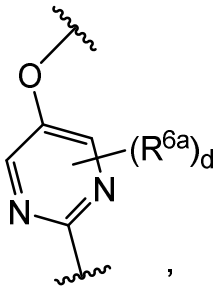
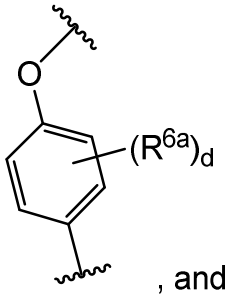
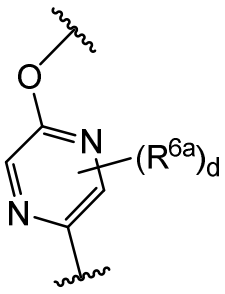
R^1, R^2, R^5, R^{5a}, R^8; X^1, X^2, X^3, X^4, and Z are the same as defined in any one of claims 1 to 7.

10. The compound according to claim 9, wherein X^1 is CR^6, where R^6 is hydrogen, C_{1-4} alkyl, C_{1-4} haloalkyl, or C_{1-4} alkoxyalkyl.

11. The compound according to claim 9 or 10, wherein X^3 is N.

12. The compound according to claim 9 or 10, wherein

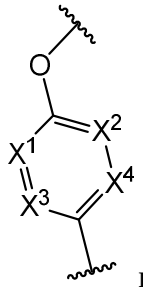
the  moiety is selected from

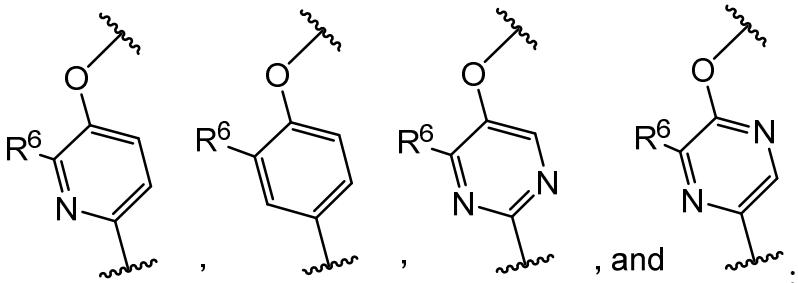
 ,  ,  , and  ;

R^{6a} is each independently halo, cyano, hydroxyl, amino, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy; and

d is an integer of 0, 1, or 2.

13. The compound according to claim 12, wherein

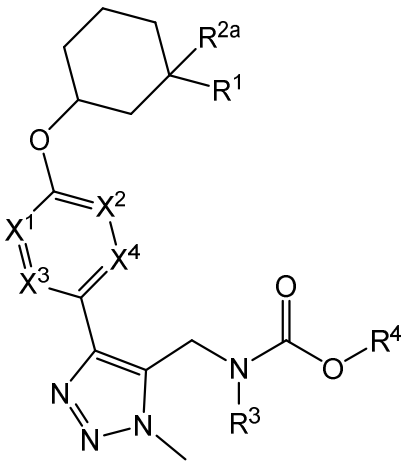
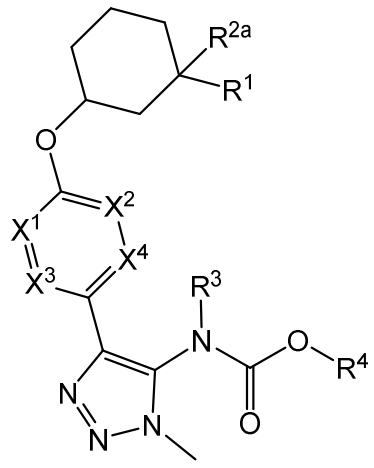
the  moiety is selected from

 ; and

R^6 is each independently hydrogen, halo, cyano, hydroxyl, amino, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy.

14. The compound according to any one of claims 9 to 13, wherein f is 0 or 1.

15. The compound according to any one of claims 1 to 14, which is represented by Formula (IIIa) or (IIIb):

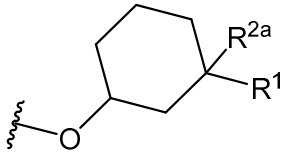
 (IIIa) or  (IIIb),

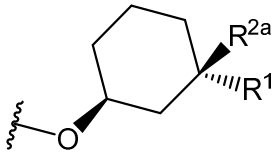
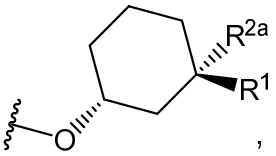
or a stereoisomer, or pharmaceutically acceptable salt or solvate thereof, wherein:

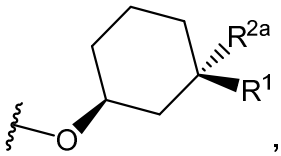
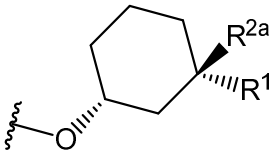
R^{2a} is hydrogen, chloro, fluoro, or C_{1-4} alkyl;

R^3 is hydrogen or C_{1-6} alkyl; and

R^1, R^4, X^1, X^2, X^3, and X^4 are the same as defined in any one of claims 1 to 14.

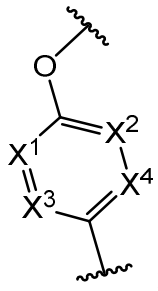
16. The compound according to claim 15, wherein the  moiety is selected from

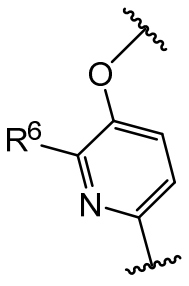
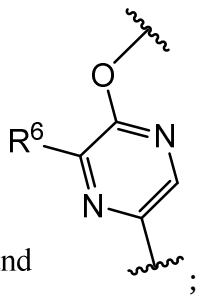
, ,

, and .

17. The compound according to claim 15 or 16, wherein R^1 is CO_2H.

18. The compound according to any one of claims 15 to 17, wherein

the  moiety is selected from

 and ;

R^6 is each independently hydrogen, CH_3, CH_2CH_3, CH_2OCH_3, CHF_2, or CF_3.

19. The compound according to any one of claims 15 to 18, wherein

R^4 is $C_{3\text{-}10}$ alkyl, $C_{3\text{-}10}$ haloalkyl, $C_{3\text{-}6}$ cycloalkyl, phenyl,

-(C_{1-4} alkylene)-(C_{1-3} alkoxy), -(C_{1-4} alkylene)-(C_{3-6} cycloalkyl), or benzyl; wherein the alkyl, alkylene, cycloalkyl, and benzyl are each independently substituted with 0 to 3 R^8; and

R^8 is each independently halo, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy; or alternatively, two R^8, taken together with the atoms to which they are attached, form a 3 to 6-membered carbocyclic ring.

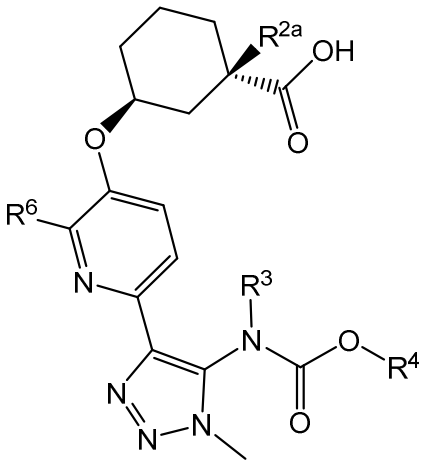
20. The compound according to any one of claims 15 to 19, wherein

R^4 is C_{3-10} alkyl, C_{3-10} haloalkyl, cyclobutyl, cyclopentyl, -$(CH_2)_{1-2}$-(C_{1-3} alkoxy), -$(CHR^{8a})_{1-2}$-cyclopropyl, -$(CHR^{8a})_{1-2}$-cyclobutyl, or –$(CHR^{8a})_{1-2}$-phenyl; wherein the cyclopropyl, cyclobutyl, cyclopentyl, and phenyl are each independently substituted with 0 to 3 R^8; or alternatively, two R^8, taken together with the atom to which they are attached, form cyclopropyl;

R^{8a} is each independently hydrogen or methyl; and

R^8 is each independently halo or C_{1-4} alkyl.

21. The compound according to claim 15, which is represented by Formula (VI):



(IV),

or a stereoisomer, or pharmaceutically acceptable salt or solvate thereof, wherein:

R^{2a} is hydrogen, chloro, fluoro, or C_{1-4} alkyl;

R^3 is hydrogen or C_{1-6} alkyl;

R^4 is C_{1-10} alkyl, C_{3-8} cycloalkyl, 6 to 10-membered aryl, -(C_{1-6} alkylene)-(C_{3-8} cycloalkyl), or -(C_{1-6} alkylene)-(6 to 10-membered aryl);

wherein each of the alkyl, alkenyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl, by itself or as part of other moiety, is independently substituted with 0 to 3 R^8; or alternatively, R^3 and R^4, taken together with the N and O to which they are attached, form a 4 to 6-membered heterocyclic ring moiety which is substituted with 0 to 3 R^8;

R^6 is hydrogen, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, or haloalkoxy;

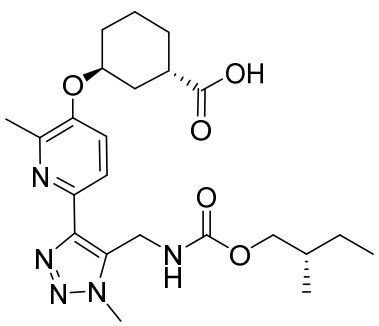
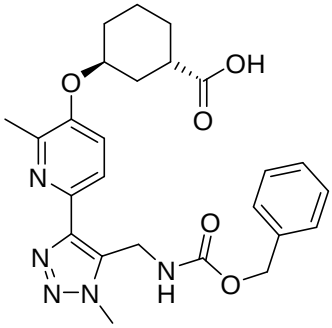
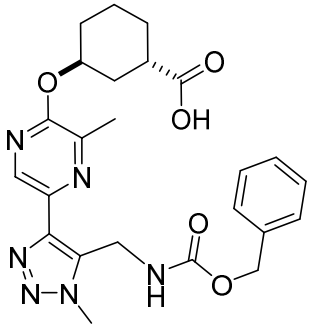
R^8 are each independently deuterium, halo, hydroxyl, amino, cyano, C_{1-6} alkyl, C_{1-6} deuterated alkyl (fully or partially deuterated), C_{2-6} alkenyl, C_{2-6} alkynyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, haloalkoxy, phenyl, or 5 to 6 membered heteroaryl; or alternatively, two R^8, taken together with the atoms to which they are attached, form a 3 to 6-membered carbocyclic ring or a 3 to 6-membered heterocyclic ring each of which is independently substituted with 0 to 3 R^{12}; and

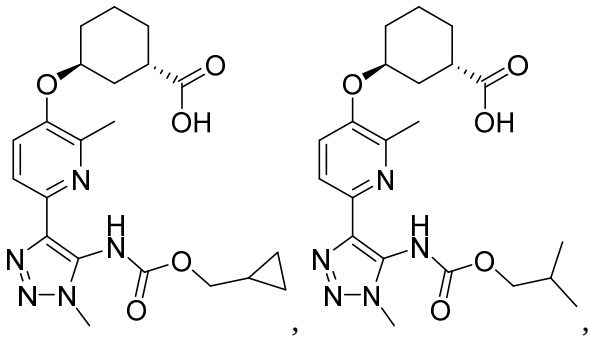
R^{12} is halo, cyano, hydroxyl, amino, C_{1-6} alkyl, alkylamino, haloalkyl, hydroxyalkyl, aminoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkoxy, haloalkoxy, phenyl, or 5 to 6 membered heteroaryl.

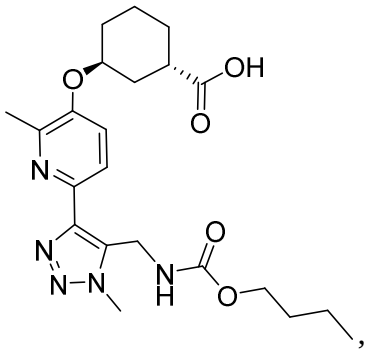
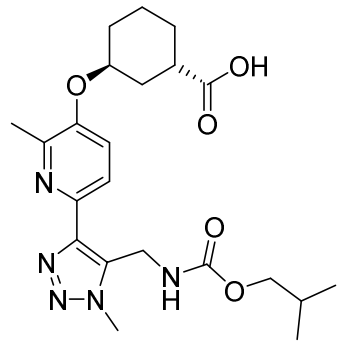
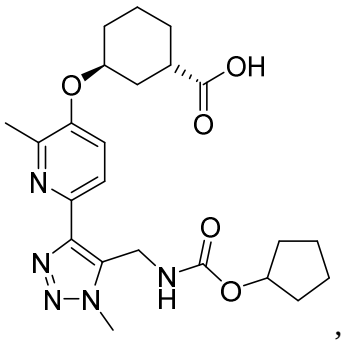
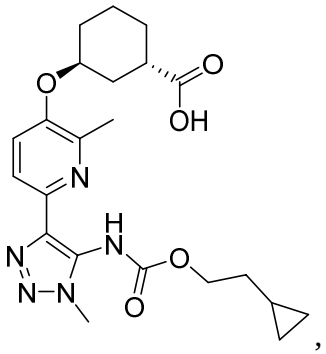
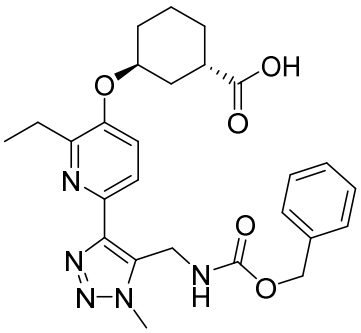
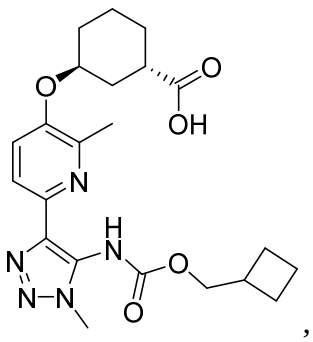
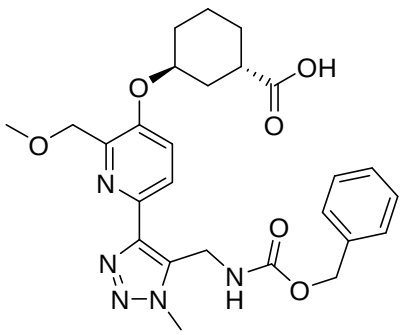
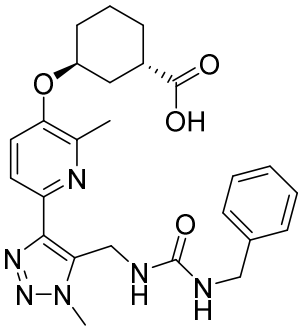
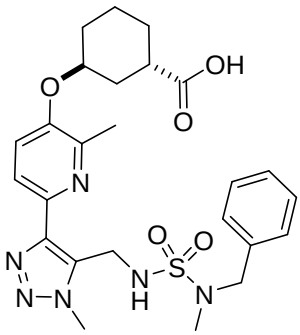
22. The compound according to claim 21, wherein:

R^6 is methyl or ethyl.

23. The compound according to claim 1, which is selected from any one of:

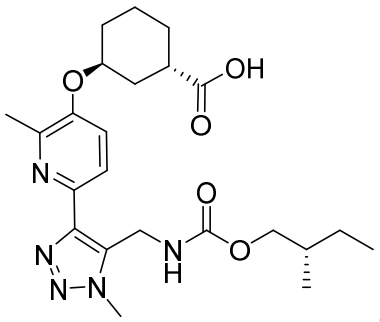

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or a stereoisomer, or a pharmaceutically acceptable salt or solvate thereof.

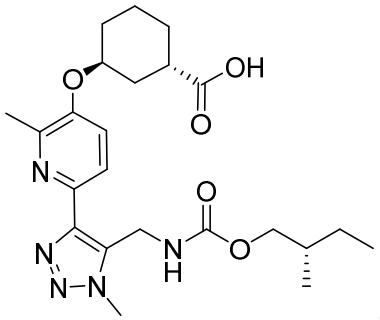
24. The compound according to claim 1 having the structure:



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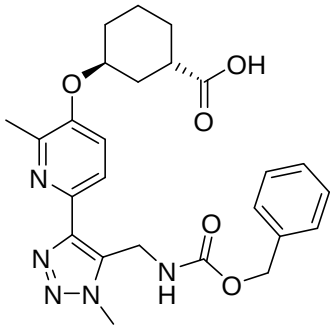
or a stereoisomer, or a pharmaceutically acceptable salt or solvate thereof.

25. The compound according to claim 1 having the structure:



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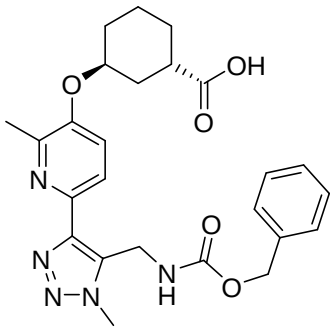
26. The compound according to claim 1 having the structure:



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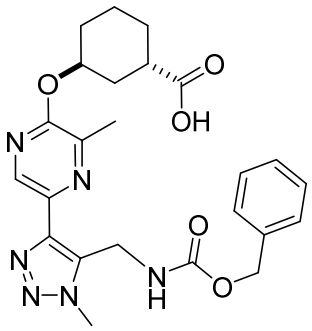
or a stereoisomer, or a pharmaceutically acceptable salt or solvate thereof.

27. The compound according to claim 1 having the structure:



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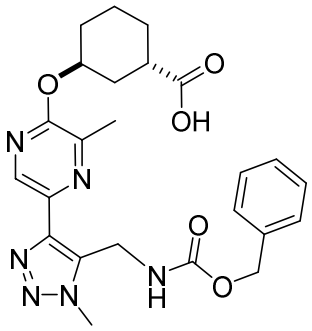
28. The compound according to claim 1 having the structure:



,

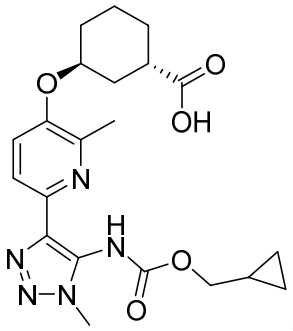
or a stereoisomer, or a pharmaceutically acceptable salt or solvate thereof.

29. The compound according to claim 1 having the structure:



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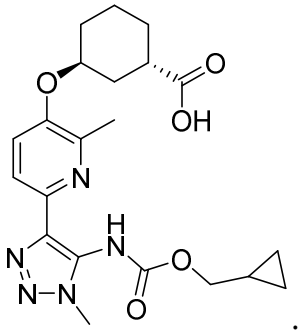
30. The compound according to claim 1 having the structure:



,

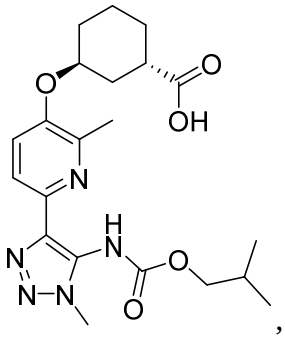
or a stereoisomer, or a pharmaceutically acceptable salt or solvate thereof.

31. The compound according to claim 1 having the structure:



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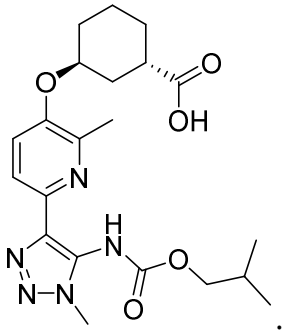
32. The compound according to claim 1 having the structure:



,

or a stereoisomer, or a pharmaceutically acceptable salt or solvate thereof.

33. The compound according to claim 1 having the structure:



.

34. A pharmaceutical composition comprising one or more compounds according to any one of claims 1 to 33, or a stereoisomer, tautomer, or pharmaceutically acceptable salt or solvate thereof; and a pharmaceutically acceptable carrier or diluent.

35. A compound according to any one of claims 1 to 33, or a stereoisomer, tautomer, or pharmaceutically acceptable salt or solvate thereof, for use in therapy.

36. A compound according to any one of claims 1 to 33 or a stereoisomer, a tautomer, or a pharmaceutically acceptable salt or solvate thereof, or a pharmaceutical composition as claimed in claim 34, for use in treating a disease, disorder, or condition associated with dysregulation of lysophosphatidic acid receptor 1 (LPA1), wherein the disease, disorder, or condition is selected from:
(A) pathological fibrosis, preferably pulmonary, liver, renal, cardiac, dernal, ocular, or pancreatic fibrosis; transplant rejection; cancer, preferably wherein the cancer is of the bladder, blood, bone, brain, breast, central nervous system, cervix, colon, endometrium, esophagus, gall bladder, genitalia, genitourinary tract, head, kidney, larynx, liver, lung, muscle tissue, neck, oral or nasal mucosa, ovary, pancreas, prostate, skin, spleen, small intestine, large intestine, stomach, testicle, or thyroid; osteoporosis; or inflammatory disorders; or
(B) idiopathic pulmonary fibrosis (IPF), non-alcoholic steatohepatitis (NASH), non-alcoholic fatty liver disease (NAFLD), chronic kidney disease, diabetic kidney disease, and systemic sclerosis.

37. A compound according to any one according to claims 1 to 33, or a stereoisomer, a tautomer, or a pharmaceutically acceptable salt or solvate thereof or a pharmaceutical composition as claimed in claim 34 for use in treating fibrosis in a mammal in need thereof, preferably wherein the fibrosis is idiopathic pulmonary fibrosis (IPF), nonalcoholic steatohepatitis (NASH), chronic kidney disease, diabetic kidney disease, and systemic sclerosis.

38. A compound according to any one according to claims 1 to 33, or a stereoisomer, a tautomer, or a pharmaceutically acceptable salt or solvate thereof or a pharmaceutical composition as claimed in claim 34 for use in treating lung fibrosis (idiopathic pulmonary fibrosis), asthma, chronic obstructive pulmonary disease (COPD), renal fibrosis, acute kidney injury, chronic kidney disease, liver fibrosis (non-alcoholic steatohepatitis), skin fibrosis, fibrosis of the gut, breast cancer, pancreatic cancer, ovarian cancer, prostate

cancer, glioblastoma, bone cancer, colon cancer, bowel cancer, head and neck cancer, melanoma, multiple myeloma, chronic lymphocytic leukemia, cancer pain, tumor metastasis, transplant organ rejection, scleroderma, ocular fibrosis, age related macular degeneration (AMD), diabetic retinopathy, collagen vascular disease, atherosclerosis, Raynaud's phenomenon, or neuropathic pain in a mammal in need thereof.