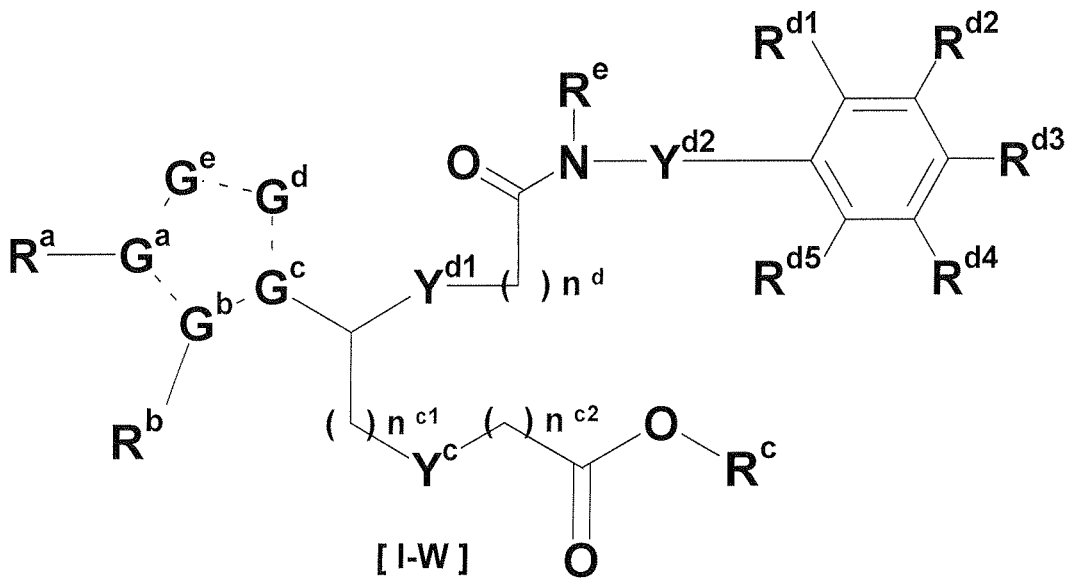
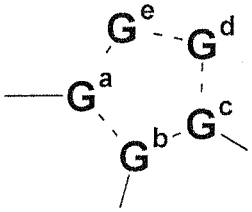
CLAIMS

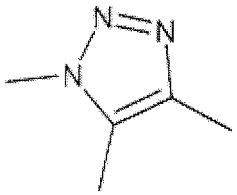
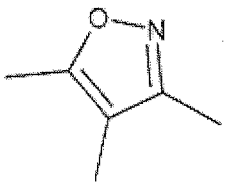
1. A compound of formula [I-W]:



[I-W]

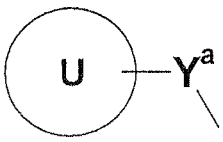
wherein



is  or ;

R^a is

(1) C_{5-12} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(2)  wherein

Y^a is

(i) single bond, or

(ii) C_{1-6} alkylene group,

cyclic moiety U is

(i) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(ii) C_{5-11} spirocyclic cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(iii) C_{6-10} aryl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^b is a group selected from the following (1) to (3):

(1) C_{1-3} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(2) C_{2-3} alkenyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^c is

(1) hydrogen atom, or

(2) C_{1-6} alkyl group;

Y^c is a group selected from the following (1) to (7):

(1) single bond,

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) $-NR^{C1}-$ wherein R^{C1} is hydrogen atom or C_{1-6} alkyl group,

(4) -O-,

(5) C_{3-10} cycloalkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(6) C_{6-10} arylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(7) thiazolylene group which may be substituted with 1 substituent selected from Group A;

Y^{d1} is

(1) single bond, or

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A; or alternatively

both Y^{c} and Y^{d1} may be methine and be linked each other directly or via C_{1-4} alkylene group to form C_{3-7} cycloalkyl ring;

Y^{d2} is

(1) single bond, or

(2) C_{1-6} alkylene group;

R^{d1}, R^{d2}, R^{d3}, R^{d4}, and R^{d5} are the same or different group selected from the following (1) to (7):

(1) hydrogen atom

(2) halogen atom,

(3) C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(4) $-OR^{d10}$ wherein R^{d10} is hydrogen atom or C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(5) $-COOR^{d11}$ wherein R^{d11} is hydrogen atom or C_{1-6} alkyl group,

(6) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(7) cyano group, or alternatively

R^{d1} and R^{d2}, or R^{d2} and R^{d3} can be taken together to form a C_{6-10} aryl ring fused to the benzene ring to which they are all attached wherein the C_{6-10} aryl ring may be substituted with the same or different 1 to 4 substituents selected from Group A;

R^e is

(1) hydrogen atom, or

(2) C_{1-3} alkyl group, or alternatively

R^e and R^{d1}, or R^e and R^{d5} can be taken together to form C_{1-4} alkylene;

n^{c1} is an integer selected from 0 or 1 to 4,

n^{c2} is an integer selected from 0 or 1 to 3,

n^d is an integer selected from 0 or 1 to 3,

Group A is

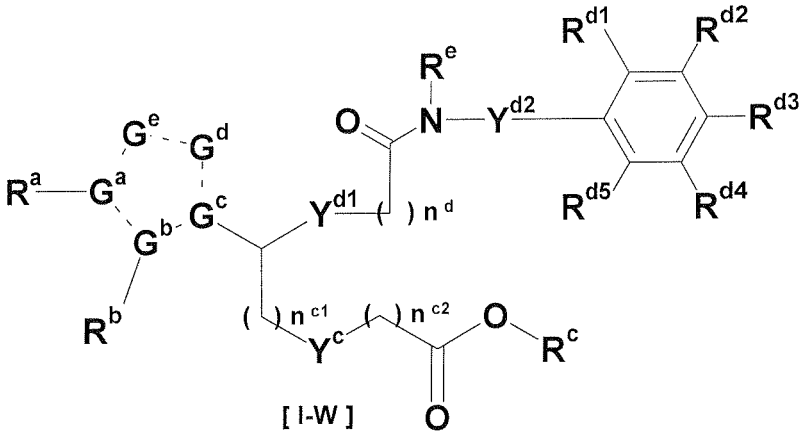
(a) C_{1-6} alkyl group,

(b) halogen atom, and

(c) $-OR^{A1}$ wherein R^{A1} is hydrogen atom or C_{1-6} alkyl group,

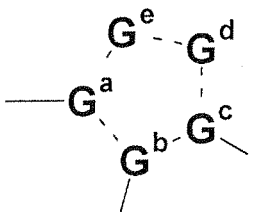
or a pharmaceutically acceptable salt thereof.

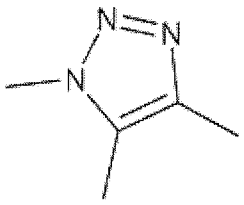
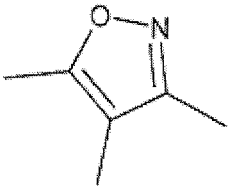
2. The compound of formula [I-W] according to claim 1:



[I-W]

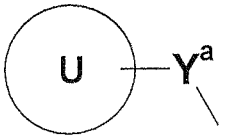
wherein



is  or ;

R^a is

(1) C_{5-12} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(2)  wherein

Y^a is

(i) single bond, or

(ii) C_{1-6} alkylene group,

cyclic moiety U is

(i) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(ii) C_{5-11} spirocyclic cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^b is a group selected from the following (1) to (3):

(1) C_{1-3} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(2) C_{2-3} alkenyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^c is

(1) hydrogen atom, or

(2) C_{1-6} alkyl group;

Y^c is a group selected from the following (1) to (7):

(1) single bond,

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) $-NR^{C1}-$ wherein R^{C1} is hydrogen atom or C_{1-6} alkyl group,

(4) -O-,

(5) C_{3-10} cycloalkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(6) C_{6-10} arylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(7) thiazolylene group which may be substituted with 1 substituent selected from Group A;

Y^{d1} is

(1) single bond, or

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

Y^{d2} is

(1) single bond, or

(2) C_{1-6} alkylene group;

R^{d1}, R^{d2}, R^{d3}, R^{d4}, and R^{d5} are the same or different group selected from the following (1) to (4):

(1) hydrogen atom

(2) halogen atom,

(3) C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(4) $-OR^{d10}$ wherein R^{d10} is hydrogen atom or C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or alternatively

R^{d1} and R^{d2}, or R^{d2} and R^{d3} can be taken together to form a C_{6-10} aryl ring fused to the benzene ring to which they are all attached wherein the C_{6-10} aryl ring may be substituted with the same or different 1 to 4 substituents selected from Group A;

n^{c1} is an integer selected from 0 or 1 to 3,

n^{c2} is an integer selected from 0 or 1 to 3,

n^{d} is an integer selected from 0 or 1 to 3,

R^{e} is hydrogen atom,

Group A is

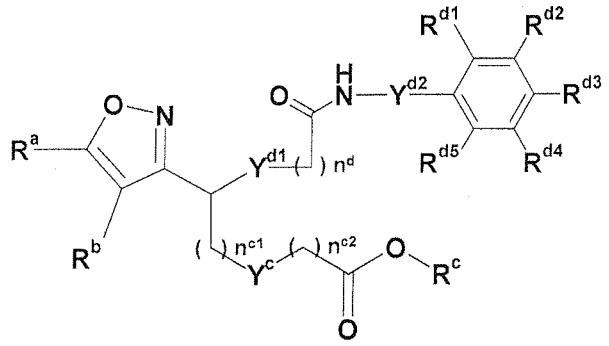
(a) C_{1-6} alkyl group,

(b) halogen atom, and

(c) $-OR^{A1}$ wherein R^{A1} is hydrogen atom or C_{1-6} alkyl group,

or a pharmaceutically acceptable salt thereof.

3. The compound of formula [II] according to claim 1:

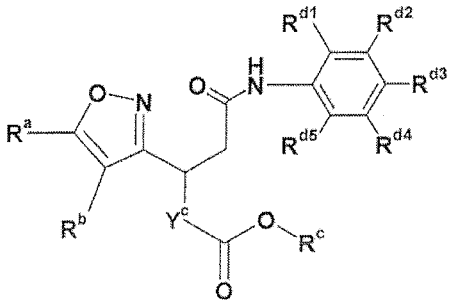


[II]

wherein each symbol is as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

4. The compound of formula [III] according to claim 3:

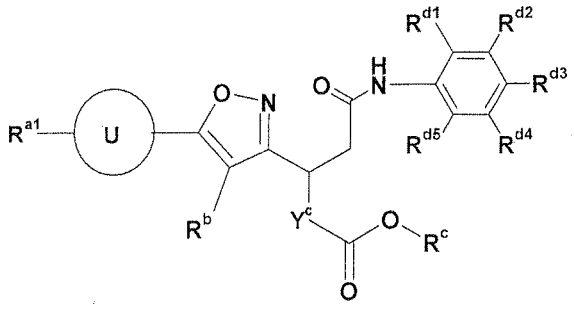


[III]

wherein each symbol is as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

5. The compound of formula [IV] according to claim 4:

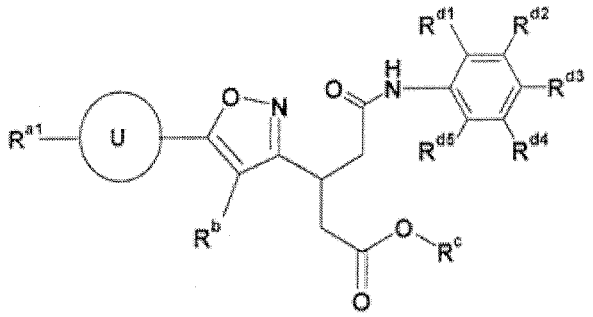


[IV]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

6. The compound of formula [IV-D1] according to claim 5:

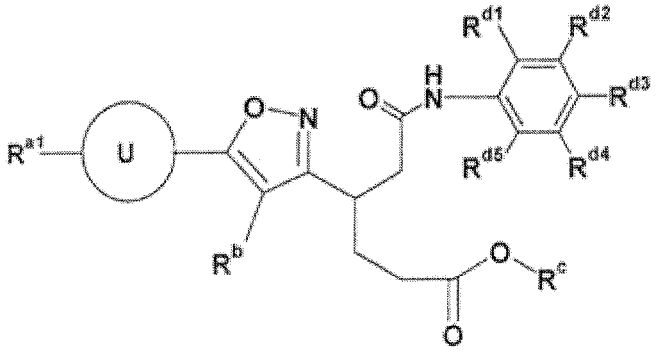


[IV-D1]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

7. The compound of formula [IV-D2] according to claim 5:

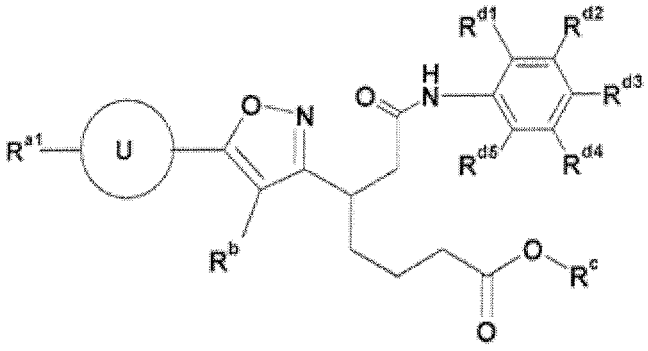


[IV-D2]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

8. The compound of formula [IV-D3] according to claim 5:

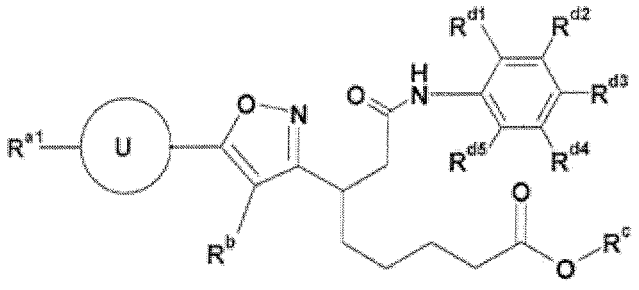


[IV-D3]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

9. The compound of formula [IV-D4] according to claim 5:

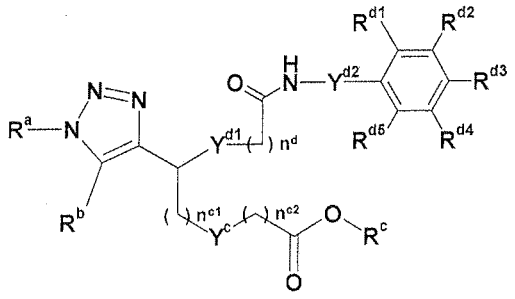


[IV-D4]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

10. The compound of formula [V] according to claim 1:



[V]

wherein each symbol is as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

11. The compound according to any one of claims 1 to 10 wherein:

R^b is C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

or a pharmaceutically acceptable salt thereof.

12. The compound according to any one of claims 1 to 11 wherein:

R^b is cyclopropyl group,

or a pharmaceutically acceptable salt thereof.

13. The compound according to any one of claims 1 to 12 wherein:

the cyclic moiety U is C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

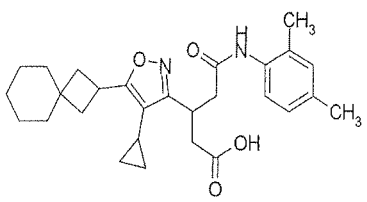
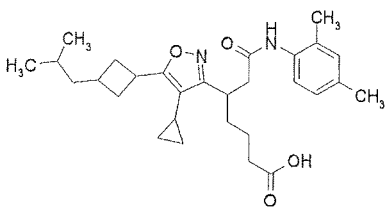
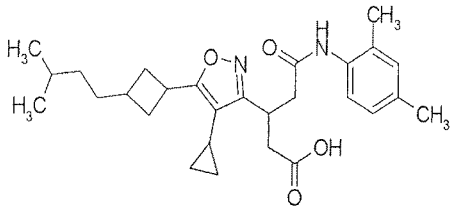
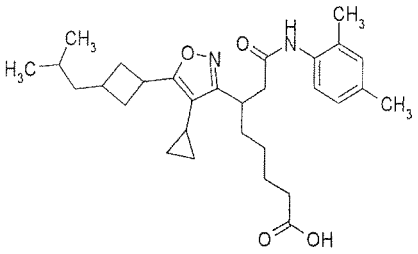
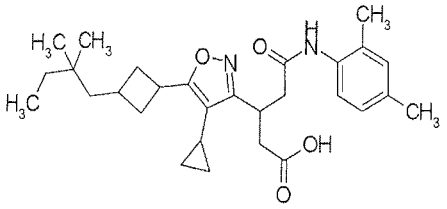
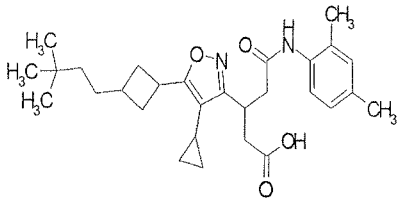
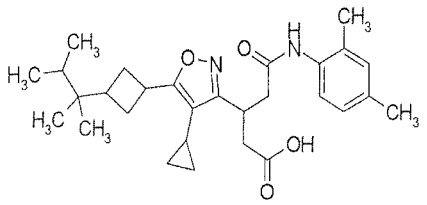
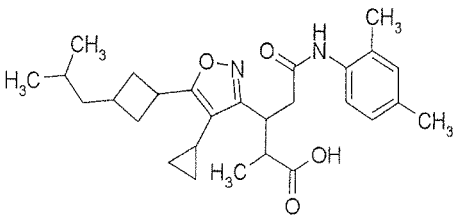
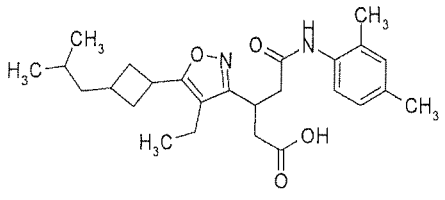
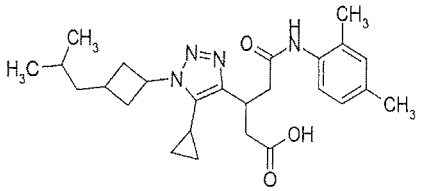
or a pharmaceutically acceptable salt thereof.

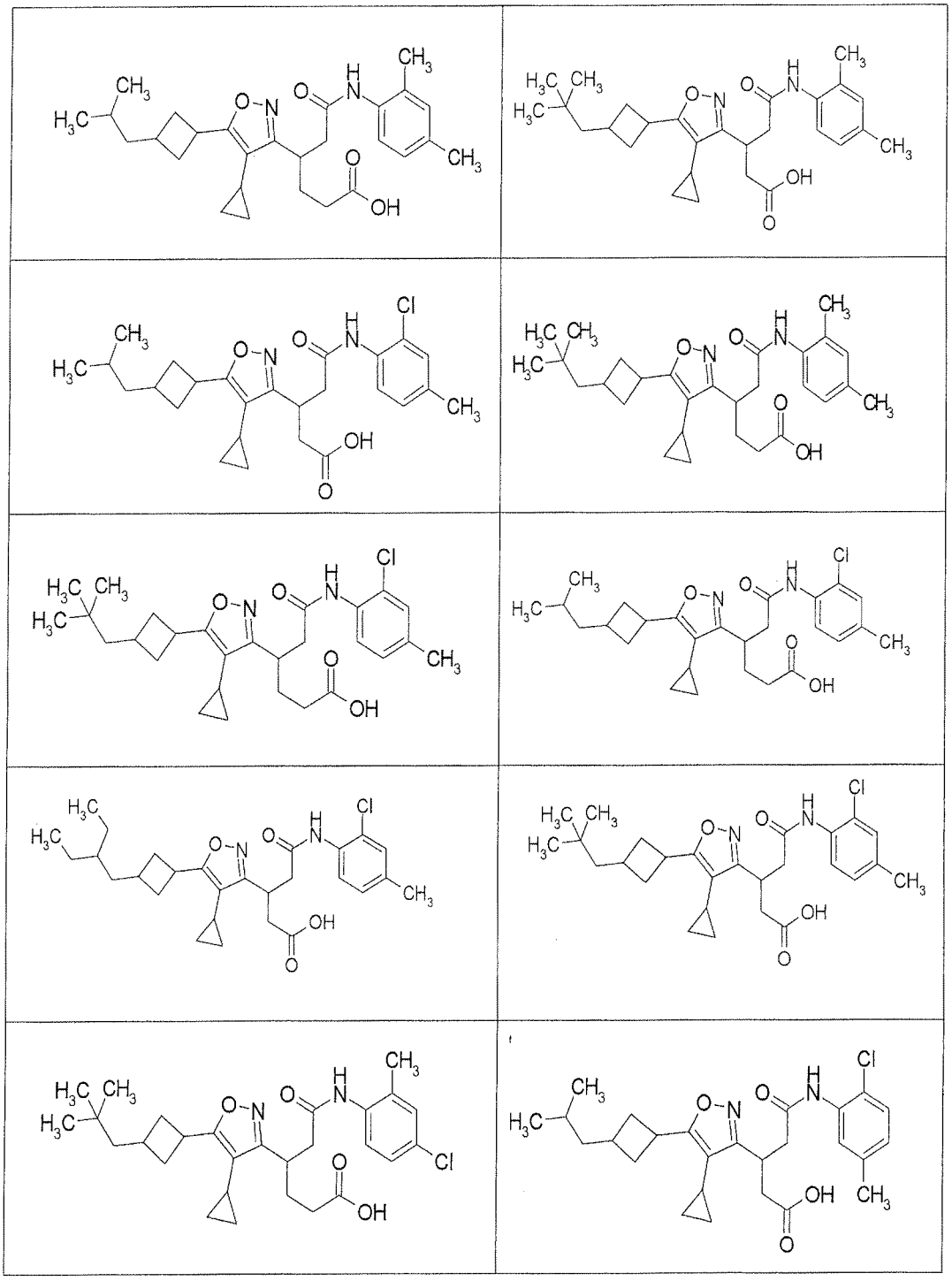
14. The compound according to any one of claims 1 to 13 wherein:

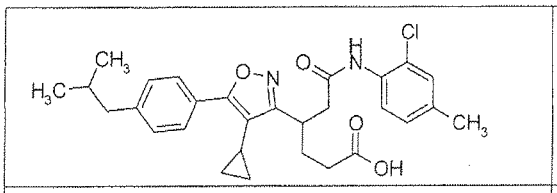
the cyclic moiety U is cyclobutyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

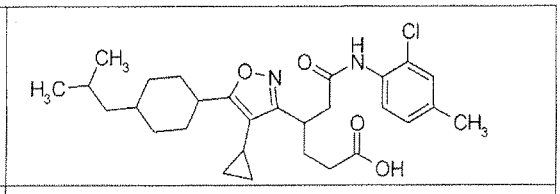
or a pharmaceutically acceptable salt thereof.

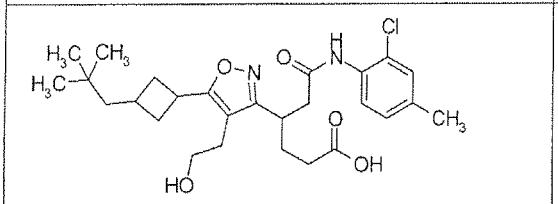
15. The compound according to claim 1 or 2 which is selected from the group consisting of the following formulas, or a pharmaceutically acceptable salt thereof:

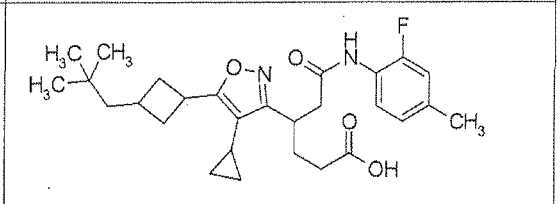
	
	
	
	
	

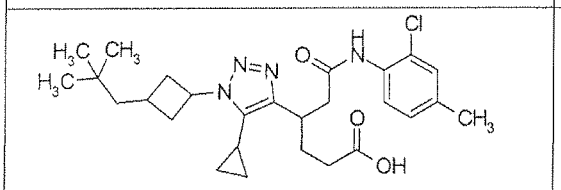


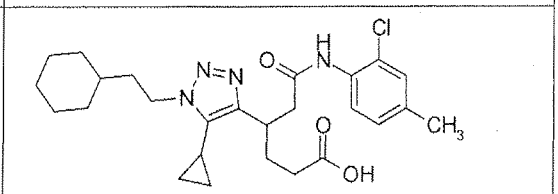


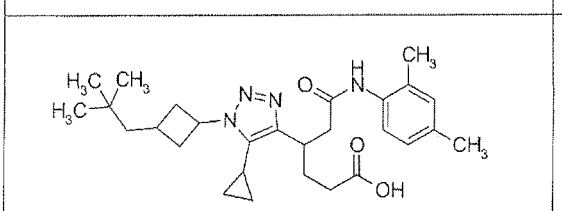


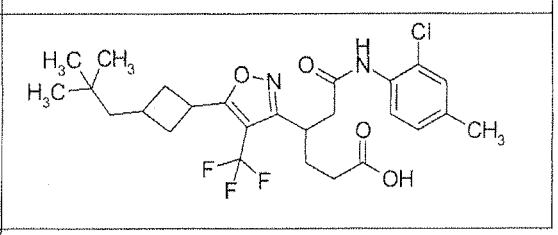


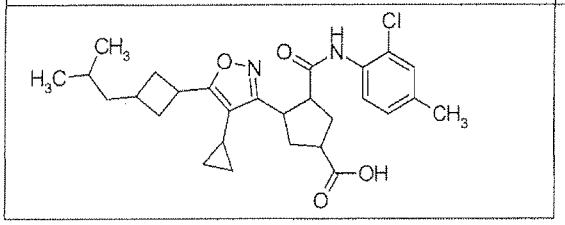


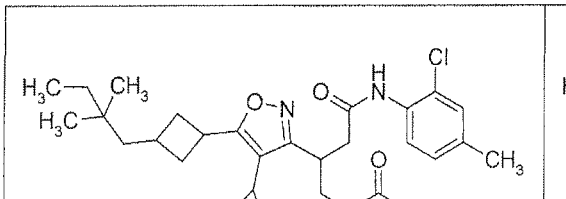




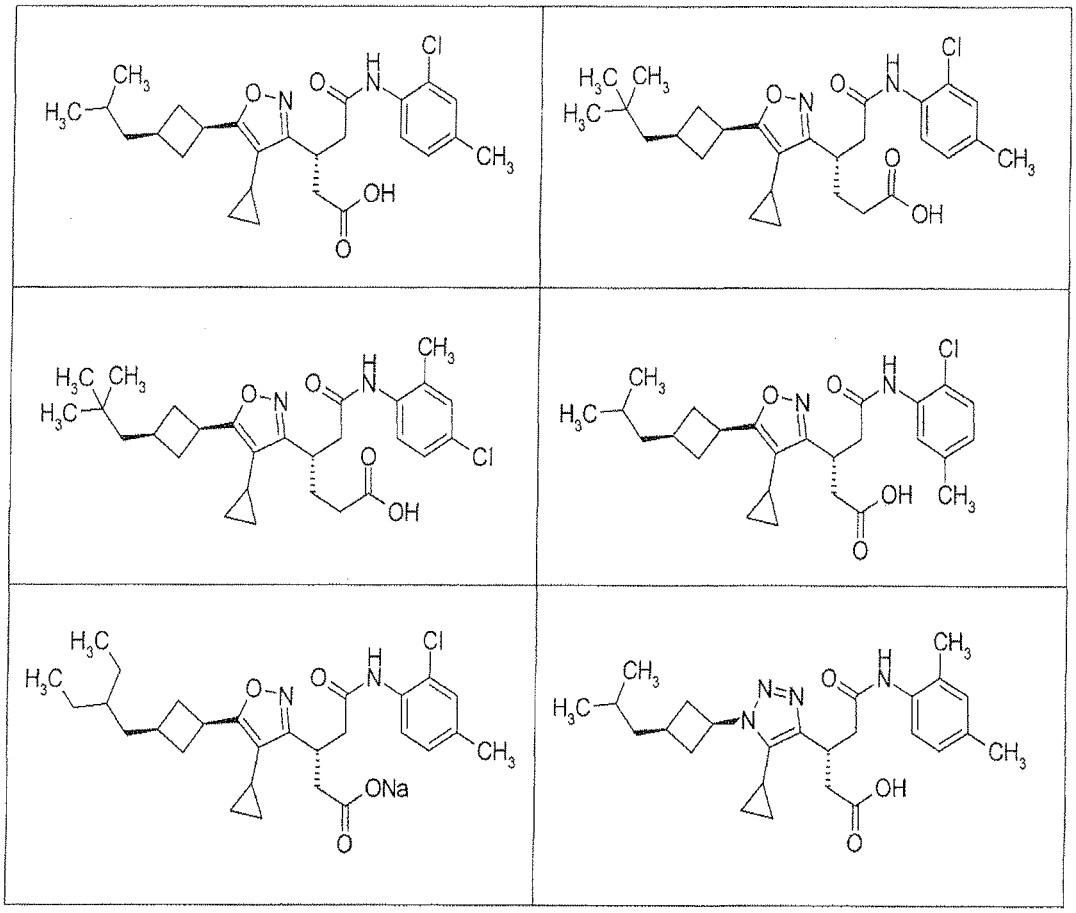




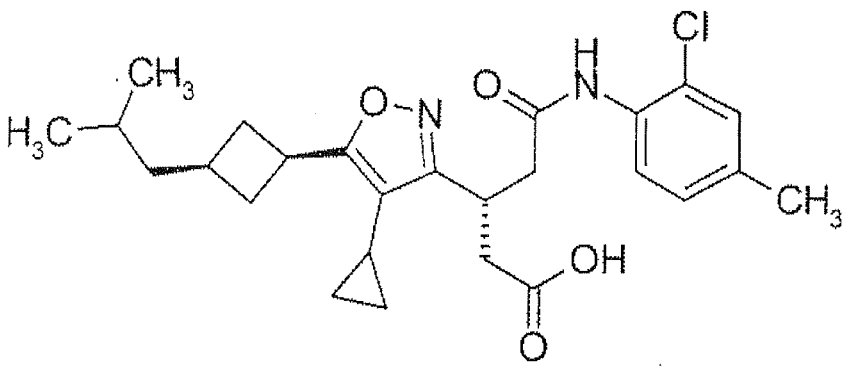




16. The compound according to claim 1 or 2 which is selected from the group consisting of the following formulas, or a pharmaceutically acceptable salt thereof:

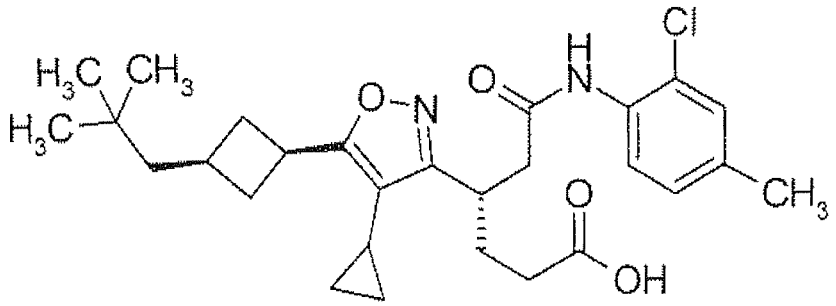


17. The compound according to claim 1 or 2, which is



or a pharmaceutically acceptable salt thereof.

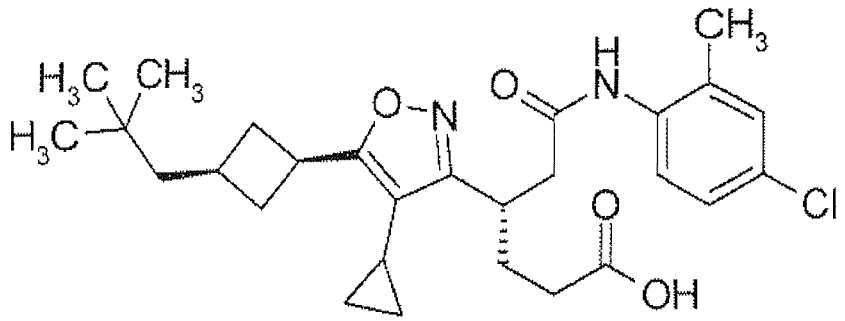
18. The compound according to claim 1 or 2, which is



,

or a pharmaceutically acceptable salt thereof.

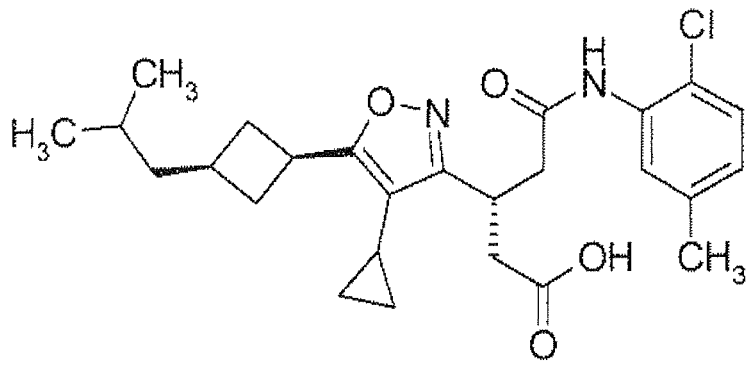
19. The compound according to claim 1 or 2, which is



,

or a pharmaceutically acceptable salt thereof.

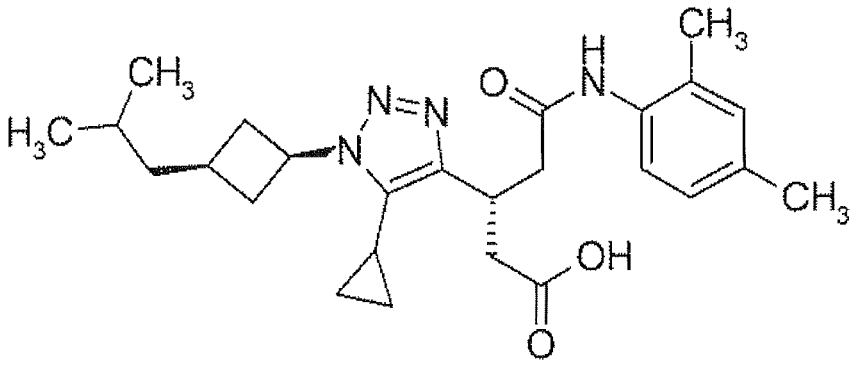
20. The compound according to claim 1 or 2, which is



,

or a pharmaceutically acceptable salt thereof.

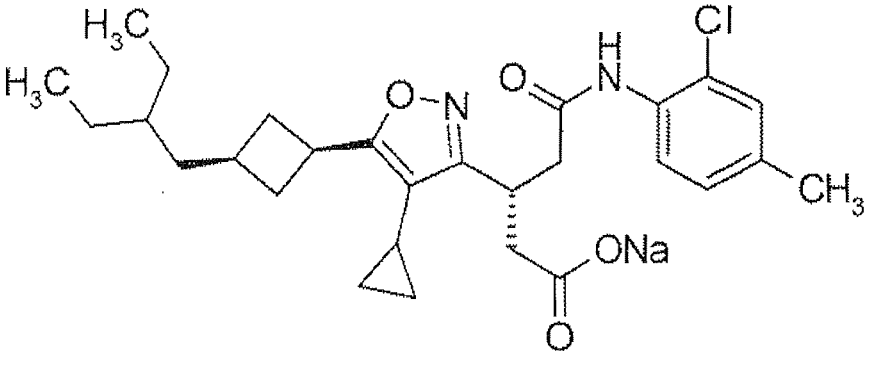
21. The compound according to claim 1 or 2, which is



,

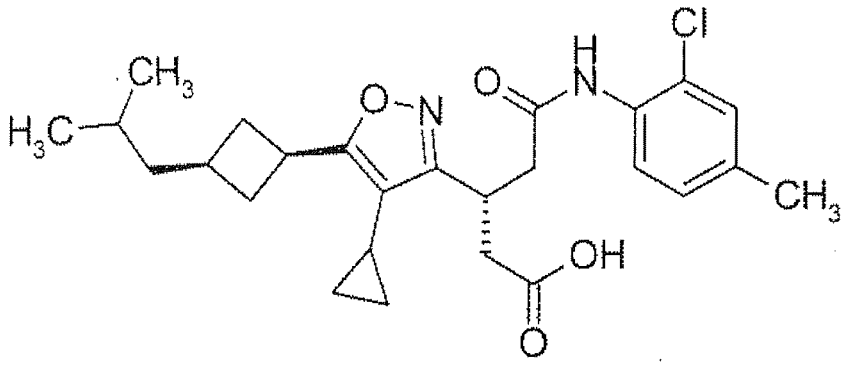
or a pharmaceutically acceptable salt thereof.

22. The compound according to claim 1 or 2, which is



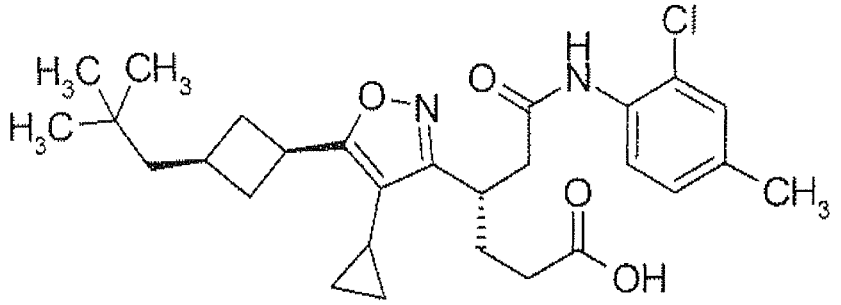
.

23. The compound according to claim 1 or 2, which is



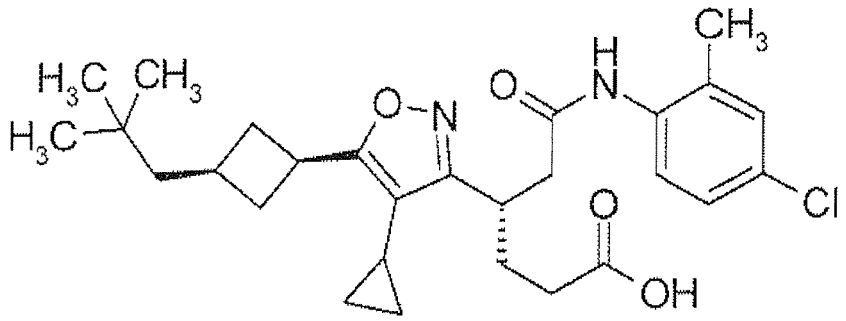
.

24. The compound according to claim 1 or 2, which is



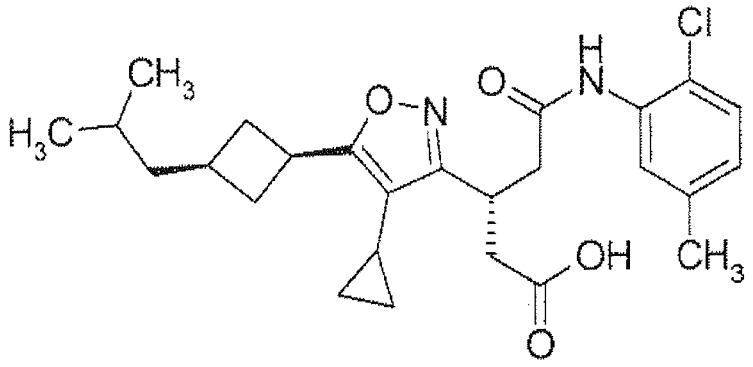
.

25. The compound according to claim 1 or 2, which is



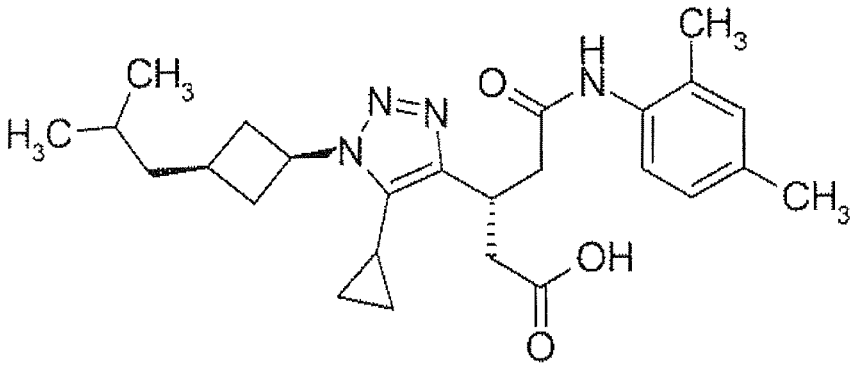
.

26. The compound according to claim 1 or 2, which is



.

27. The compound according to claim 1 or 2, which is



.

28. A pharmaceutical composition comprising the compound according to any one of claims 1 to 27, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

29. A RORγ antagonist comprising the compound according to any one of claims 1 to 27, or a pharmaceutically acceptable salt thereof.

30. A medicament for use in treating or preventing a disease selected from the group consisting of autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease, comprising the compound according to any one of claims 1 to 27, or a pharmaceutically acceptable salt thereof.

31. The medicament for use according to claim 30, wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

32. The medicament for use according to claim 31, wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

33. The medicament for use according to claim 30, wherein the allergic disease is asthma.

34. The medicament for use according to claim 30, wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

35. The medicament for use according to claim 30, wherein the metabolic disease is diabetes.

36. The medicament for use according to claim 35, wherein the diabetes is type I diabetes or type II diabetes.

37. A compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 27 for use in inhibiting RORγ in a mammal.

38. A compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 27 for use in treating or preventing a disease in a mammal selected from the group consisting of autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease.

39. The compound or the pharmaceutically acceptable salt thereof, for use according to claim 38, wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

40. The compound or the pharmaceutically acceptable salt thereof, for use according to claim 39, wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

41. The compound or the pharmaceutically acceptable salt thereof, for use according to claim 38, wherein the allergic disease is asthma.

42. The compound or the pharmaceutically acceptable salt thereof, for use according to claim 38, wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

43. The compound or the pharmaceutically acceptable salt thereof, for use according to claim 38, wherein the metabolic disease is diabetes.

44. The compound or the pharmaceutically acceptable salt thereof, for use according to claim 43, wherein the diabetes is type I diabetes or type II diabetes.

45. Use of the compound according to any one of claims 1 to 27, or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating or preventing a disease selected from the group consisting of

autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease.

46. The use according to claim 45, wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

47. The use according to claim 46, wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

48. The use according to claim 45, wherein the allergic disease is asthma.

49. The use according to claim 45, wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

50. The use according to claim 45, wherein the metabolic disease is diabetes.

51. The use according to claim 50, wherein the diabetes is type I diabetes or type II diabetes.

52. Use of a compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 27 in the manufacture of a medicament for inhibiting RORγ in a mammal.

53. Use of a compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 27 in the manufacture of a medicament for treating or preventing a disease in a mammal selected from the group consisting of autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease.

54. The use according to claim 53, wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

55. The use according to claim 54, wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

56. The use according to claim 53, wherein the allergic disease is asthma.

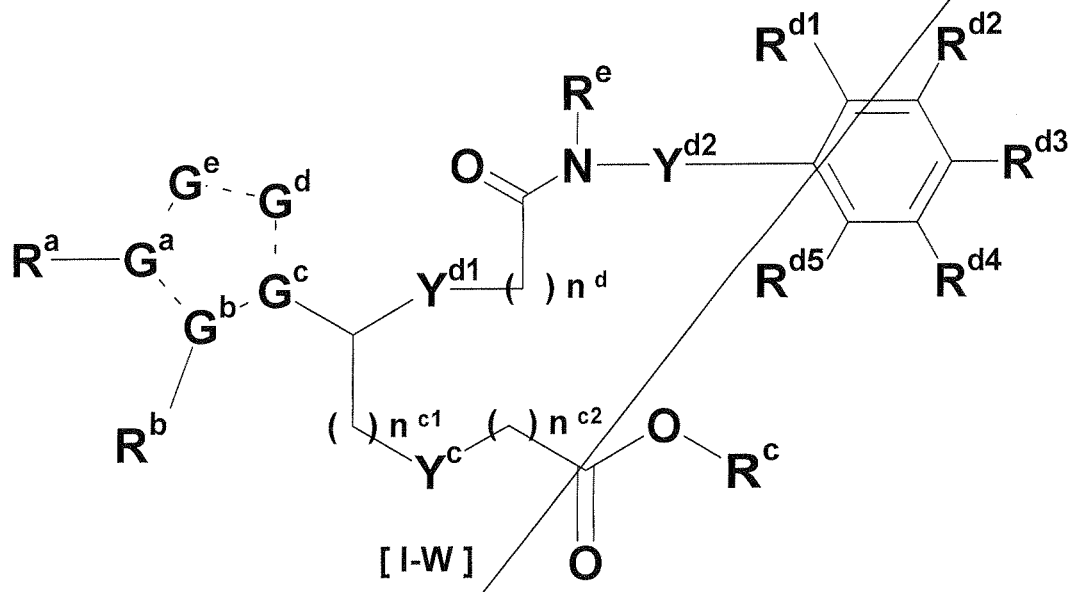
57. The use according to claim 53, wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

58. The use according to claim 53, wherein the metabolic disease is diabetes.

59. The use according to claim 58, wherein the diabetes is type I diabetes or type II diabetes.

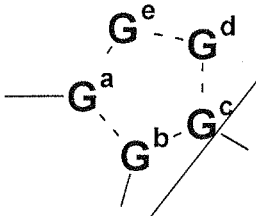
CLAIMS

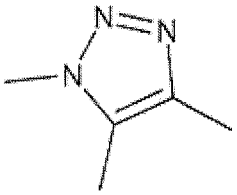
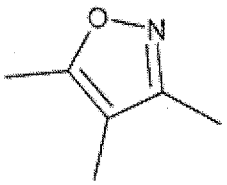
1. A compound of formula [I-W]:



[I-W]

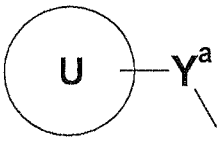
wherein



is  or ;

R^a is

(1) C_{5-12} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(2)  wherein

Y^a is

(i) single bond, or

(ii) C_{1-6} alkylene group,

cyclic moiety U is

(i) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(ii) C_{5-11} spirocyclic cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(iii) C_{6-10} aryl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^b is a group selected from the following (1) to (3):

(1) C_{1-3} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(2) C_{2-3} alkenyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^c is

(1) hydrogen atom, or

(2) C_{1-6} alkyl group;

Y^c is a group selected from the following (1) to (7):

(1) single bond,

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) $-NR^{C1}-$ wherein R^{C1} is hydrogen atom or C_{1-6} alkyl group,

(4) -O-,

(5) C_{3-10} cycloalkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(6) C_{6-10} arylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(7) thiazolylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

Y^{d1} is

(1) single bond, or

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A; or alternatively

both Y^{c} and Y^{d1} may be methine and be linked each other directly or via C_{1-4} alkylene group to form C_{3-7} cycloalkyl ring;

Y^{d2} is

(1) single bond, or

(2) C_{1-6} alkylene group;

R^{d1}, R^{d2}, R^{d3}, R^{d4}, and R^{d5} are the same or different

group selected from the following (1) to (7):

(1) hydrogen atom

(2) halogen atom,

(3) C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(4) $-OR^{d10}$ wherein R^{d10} is hydrogen atom or C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(5) $-COOR^{d11}$ wherein R^{d11} is hydrogen atom or C_{1-6} alkyl group,

(6) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(7) cyano group, or alternatively

R^{d1} and R^{d2}, or R^{d2} and R^{d3} can be taken together to form a C_{6-10} aryl ring fused to the benzene ring to which they are all attached wherein the C_{6-10} aryl ring may be substituted with the same or different 1 to 4 substituents selected from Group A;

R^e is

(1) hydrogen atom, or

(2) C_{1-3} alkyl group, or alternatively

R^e and R^{d1}, or R^e and R^{d5} can be taken together to form C_{1-4} alkylene;

n^{c1} is an integer selected from 0 or 1 to 4,

n^{c2} is an integer selected from 0 or 1 to 3,

n^d is an integer selected from 0 or 1 to 3,

Group A is

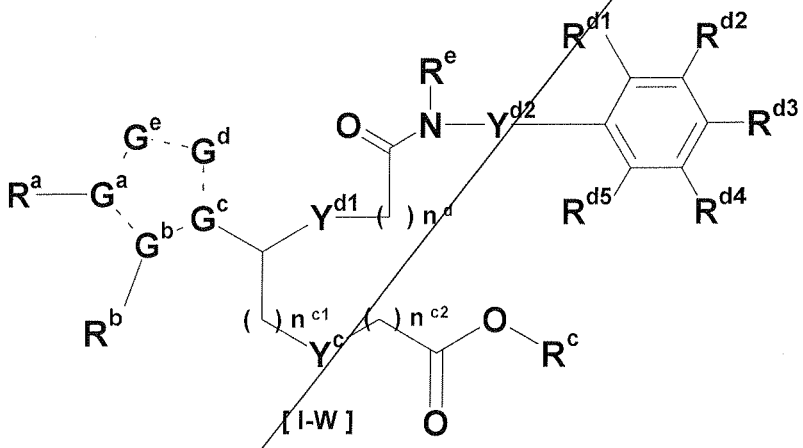
(a) C_{1-6} alkyl group,

(b) halogen atom, and

(c) $-OR^{A1}$ wherein R^{A1} is hydrogen atom or C_{1-6} alkyl group,

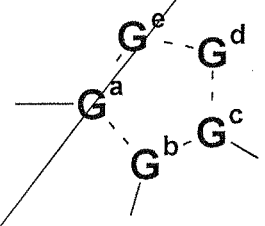
or a pharmaceutically acceptable salt thereof.

2. The compound of formula [I-W] according to claim 1:

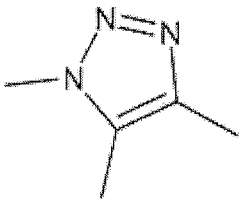


[I-W]

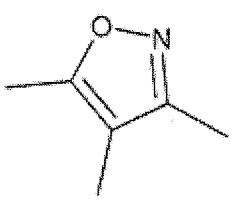
wherein



is



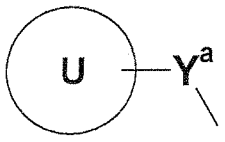
or



;

R^a is

(1) C_{5-12} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(2)  wherein

Y^a is

(i) single bond, or

(ii) C_{1-6} alkylene group,

cyclic moiety U is

(i) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or

(ii) C_{5-11} spirocyclic cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^b is a group selected from the following (1) to (3):

(1) C_{1-3} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(2) C_{2-3} alkenyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

R^c is

(1) hydrogen atom, or

(2) C_{1-6} alkyl group;

Y^c is a group selected from the following (1) to (7):

(1) single bond,

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(3) $-NR^{c1}-$ wherein R^{c1} is hydrogen atom or C_{1-6} alkyl group,

(4) -O-,

(5) C_{3-10} cycloalkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(6) C_{6-10} arylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(7) thiazolylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

Y^{d1} is

(1) single bond, or

(2) C_{1-6} alkylene group which may be substituted with the same or different 1 to 5 substituents selected from Group A;

Y^{d2} is

(1) single bond, or

(2) C_{1-6} alkylene group;

R^{d1}, R^{d2}, R^{d3}, R^{d4}, and R^{d5} are the same or different group selected from the following (1) to (4):

(1) hydrogen atom

(2) halogen atom,

(3) C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

(4) $-OR^{d10}$ wherein R^{d10} is hydrogen atom or C_{1-6} alkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A, or alternatively

R^{d1} and R^{d2}, or R^{d2} and R^{d3} can be taken together to form a C_{6-10} aryl ring fused to the benzene ring to which they are all attached wherein the C_{6-10} aryl ring may be substituted with the same or different 1 to 4 substituents selected from Group A;

n^{c1} is an integer selected from 0 or 1 to 3,

n^{c2} is an integer selected from 0 or 1 to 3,

n^{d} is an integer selected from 0 or 1 to 3,

R^{e} is hydrogen atom,

Group A is

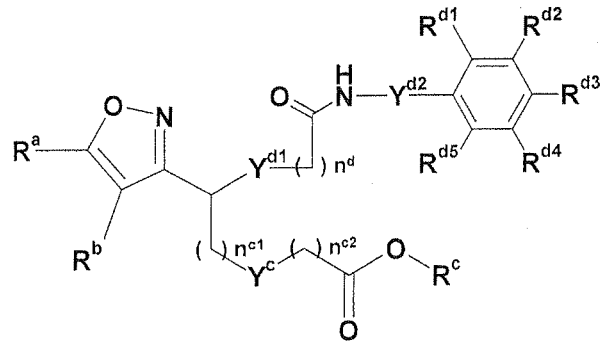
(a) C_{1-6} alkyl group,

(b) halogen atom, and

(c) $-OR^{A1}$ wherein R^{A1} is hydrogen atom or C_{1-6} alkyl group,

or a pharmaceutically acceptable salt thereof.

3. The compound of formula [II] according to claim 1:

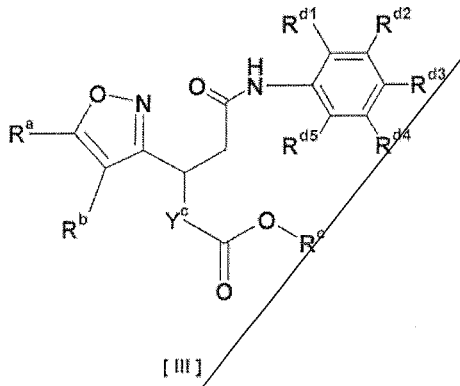


[II]

wherein each symbol is as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

4. The compound of formula [III] according to claim 3:

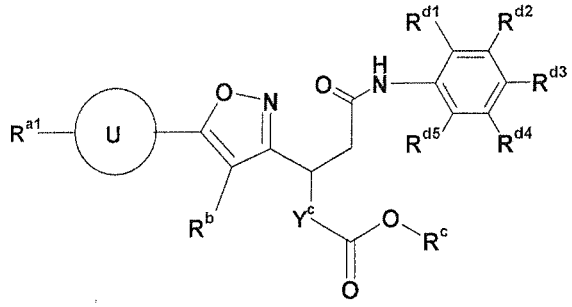


[III]

wherein each symbol is as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

5. The compound of formula [IV] according to claim 4:

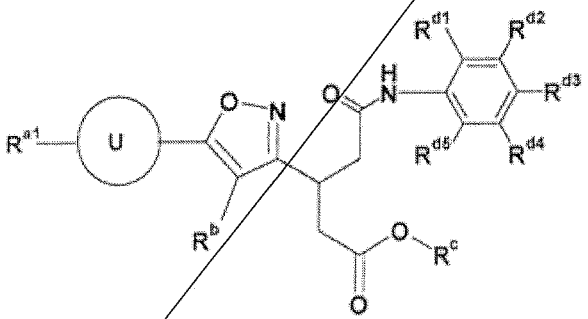


[IV]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

6. The compound of formula [IV-D1] according to claim 5:

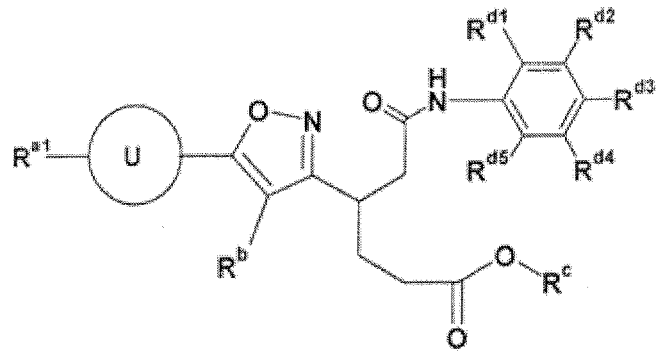


[IV-D1]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

7. The compound of formula [IV-D2] according to claim 5:

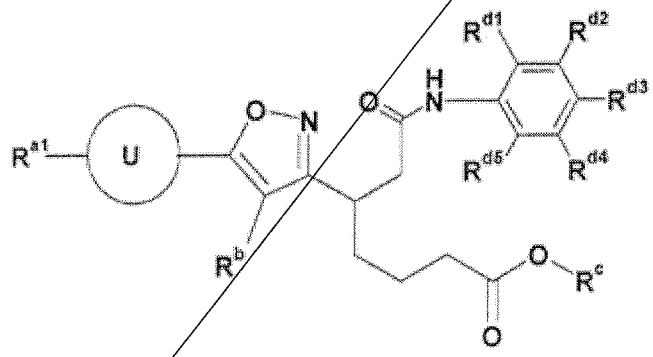


[IV-D2]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

8. The compound of formula [IV-D3] according to claim 5:

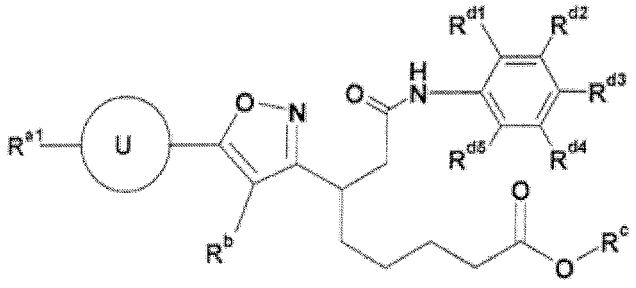


[IV-D3]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

9. The compound of formula [IV-D4] according to claim 5:

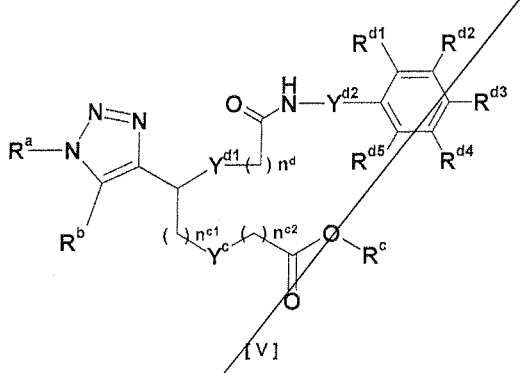


[IV-D4]

wherein R^{a1} is C_{1-6} alkyl group, and the other symbols are as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

10. The compound of formula [V] according to claim 1:



[V]

wherein each symbol is as defined in claim 1,

or a pharmaceutically acceptable salt thereof.

11. The compound according to any one of claims 1 to 10 wherein:

R^b is C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

or a pharmaceutically acceptable salt thereof.

12. The compound according to any one of claims 1 to 11 wherein:

R^b is cyclopropyl group,

or a pharmaceutically acceptable salt thereof.

13. The compound according to any one of claims 1 to 12 wherein:

the cyclic moiety U is C_{3-7} cycloalkyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

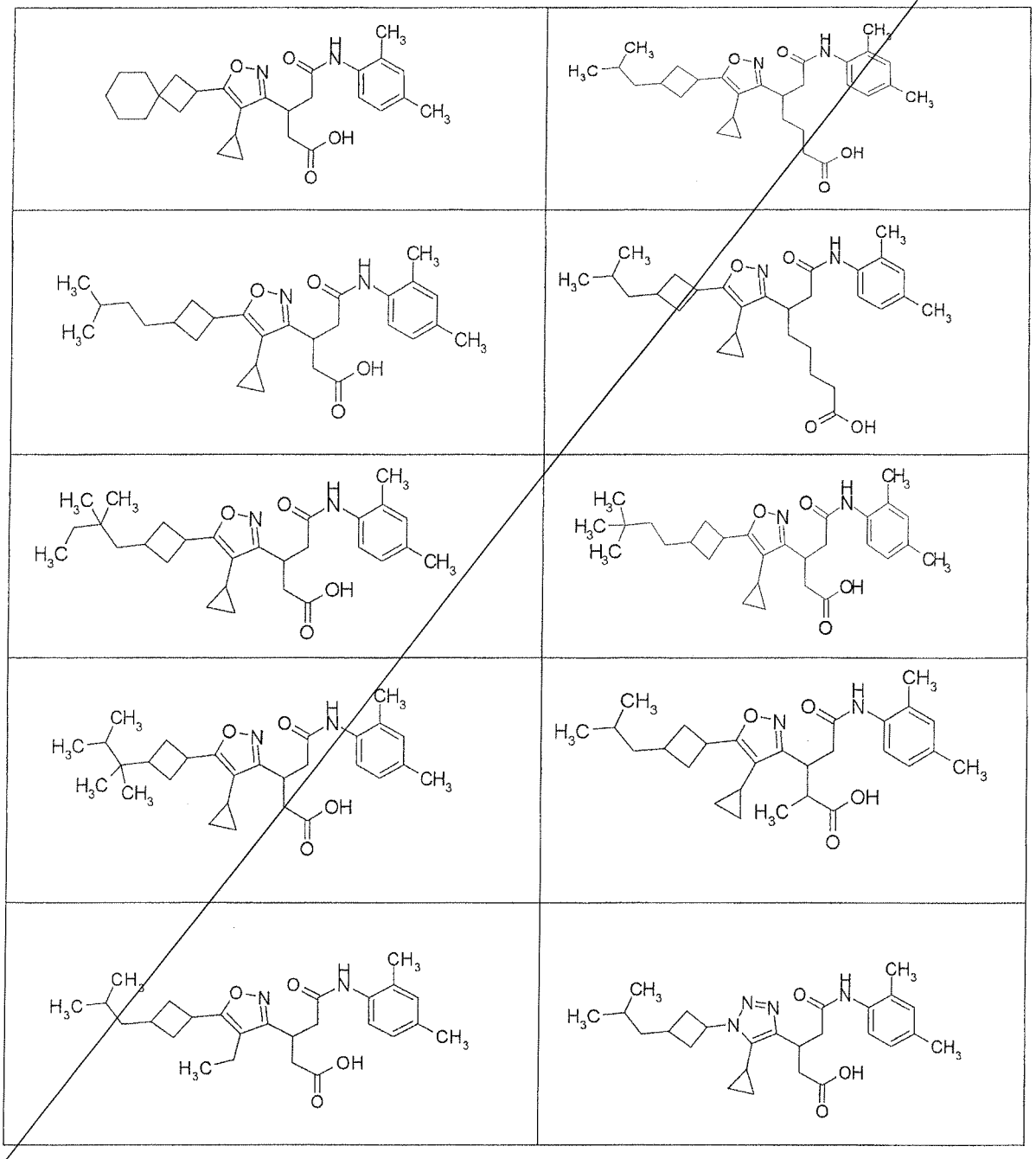
or a pharmaceutically acceptable salt thereof.

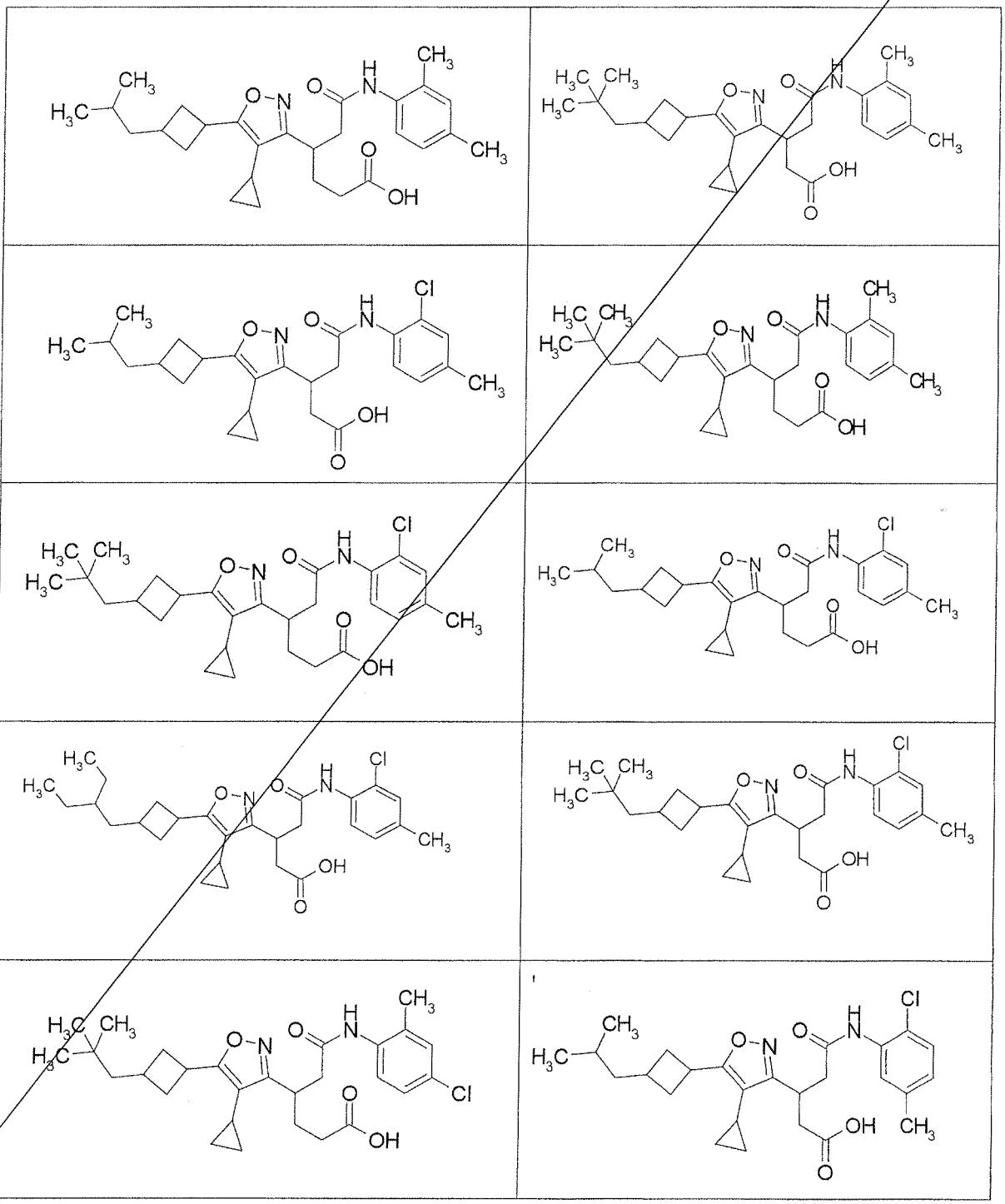
14. The compound according to any one of claims 1 to 13 wherein:

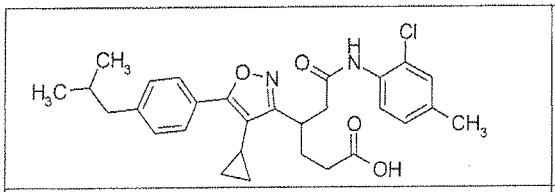
the cyclic moiety U is cyclobutyl group which may be substituted with the same or different 1 to 5 substituents selected from Group A,

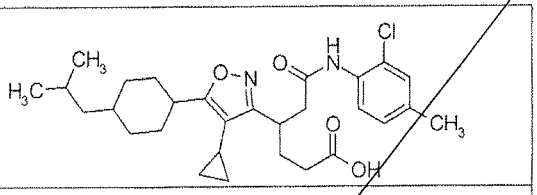
or a pharmaceutically acceptable salt thereof.

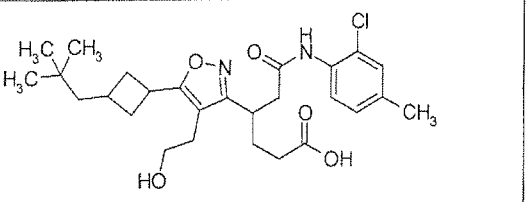
15. The compound according to claim 1 or 2 which is selected from the group consisting of the following formulas or a pharmaceutically acceptable salt thereof:

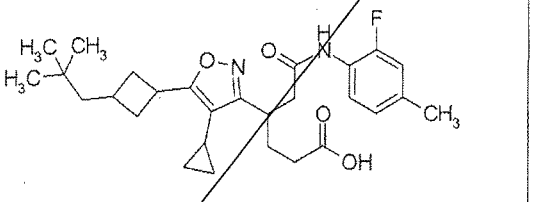


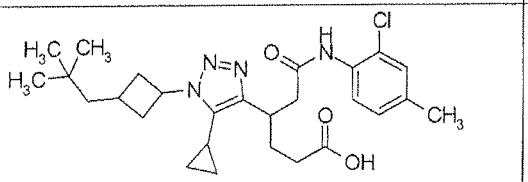


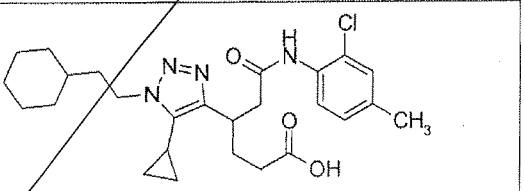


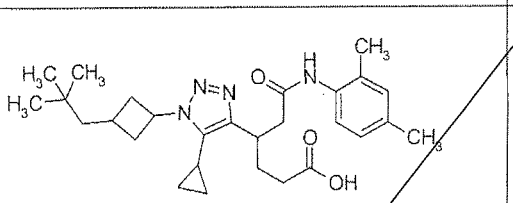


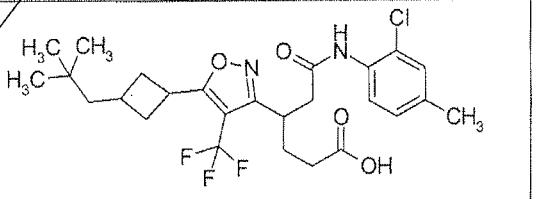


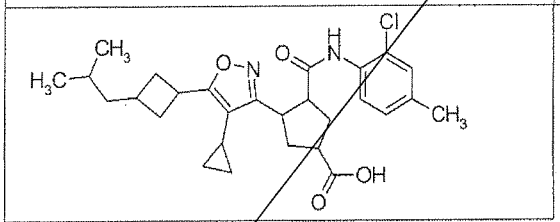


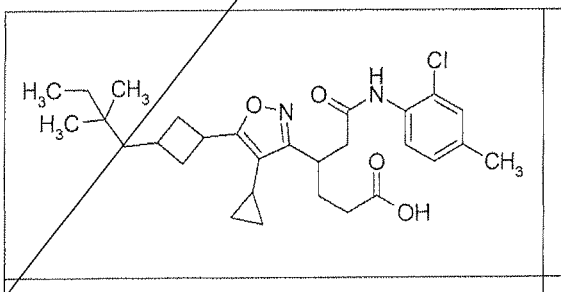


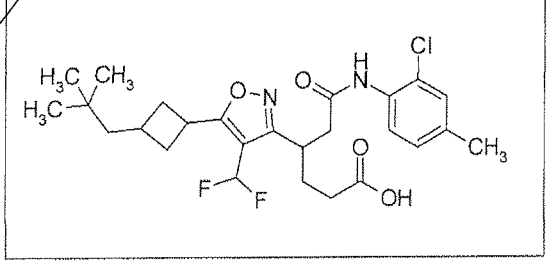


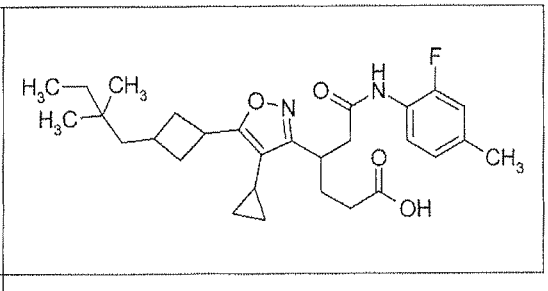




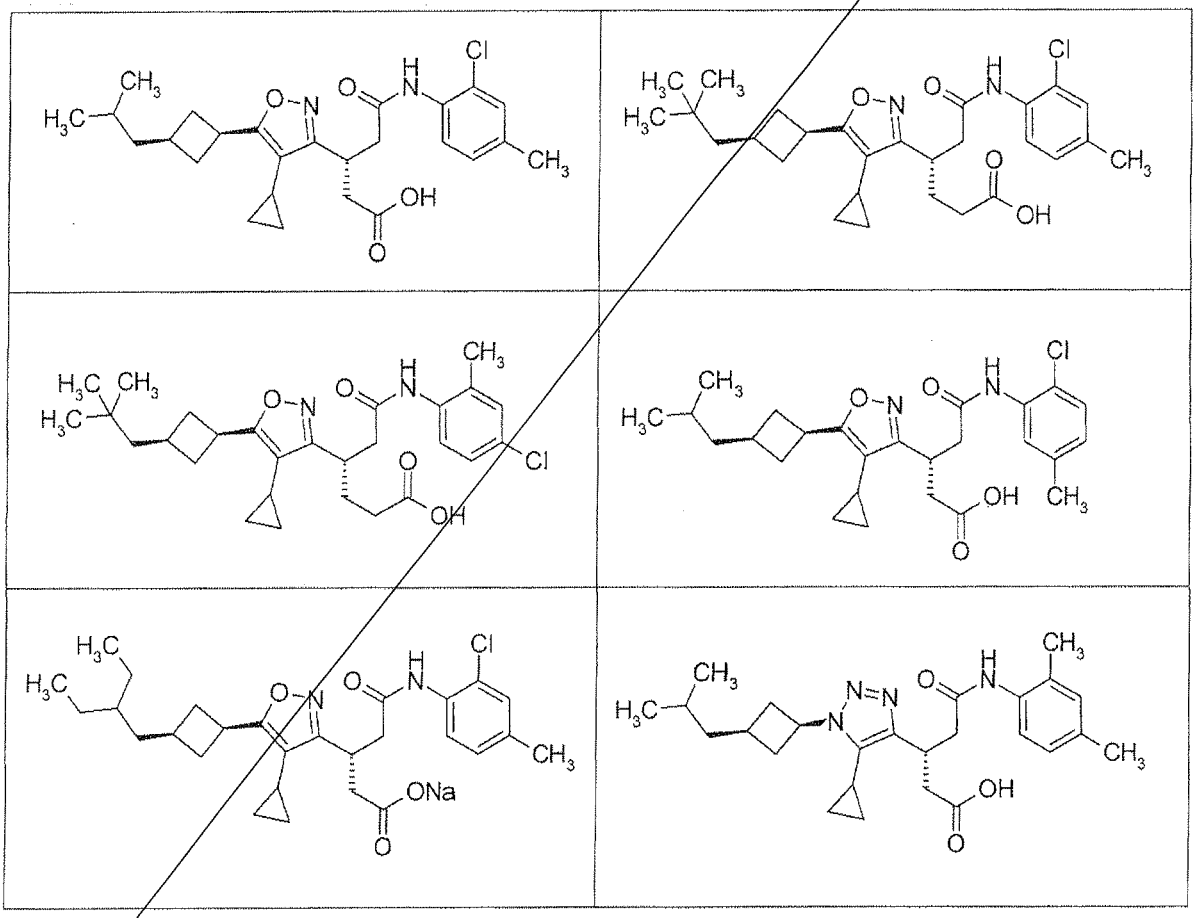




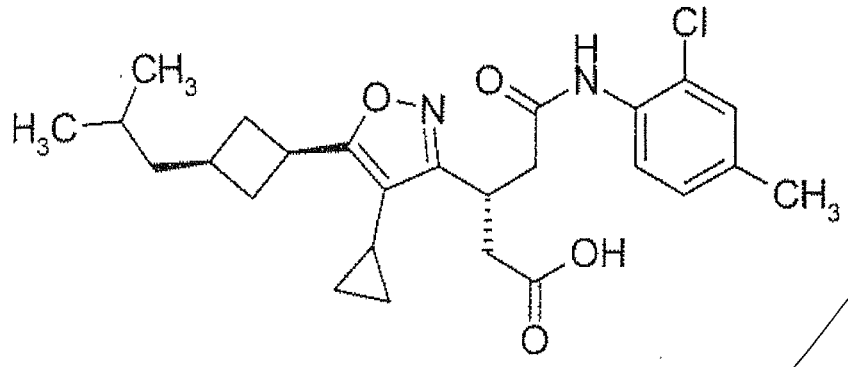




16. The compound according to claim 1 or 2 which is selected from the group consisting of the following formulas or a pharmaceutically acceptable salt thereof:

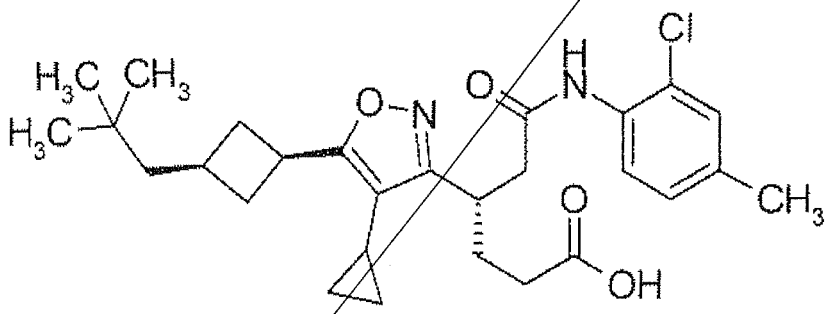


17. The compound according to claim 1 or 2, which is



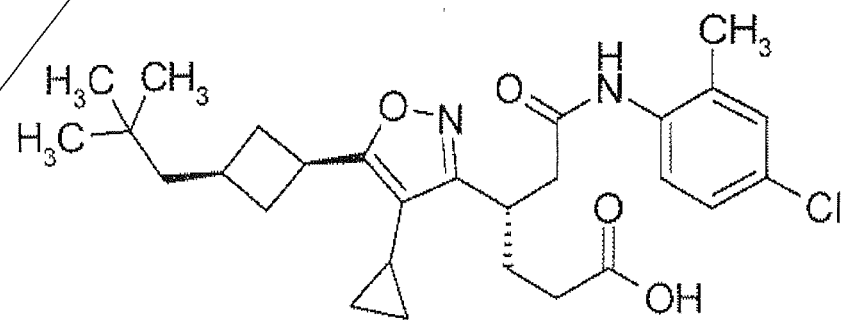
or a pharmaceutically acceptable salt thereof.

18. The compound according to claim 1 or 2, which is



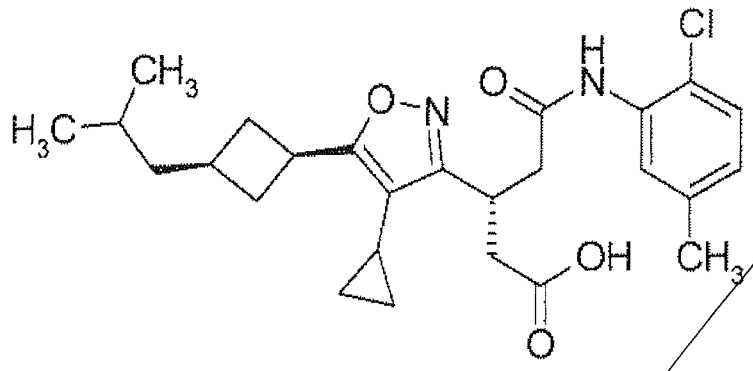
or a pharmaceutically acceptable salt thereof.

19. The compound according to claim 1 or 2, which is



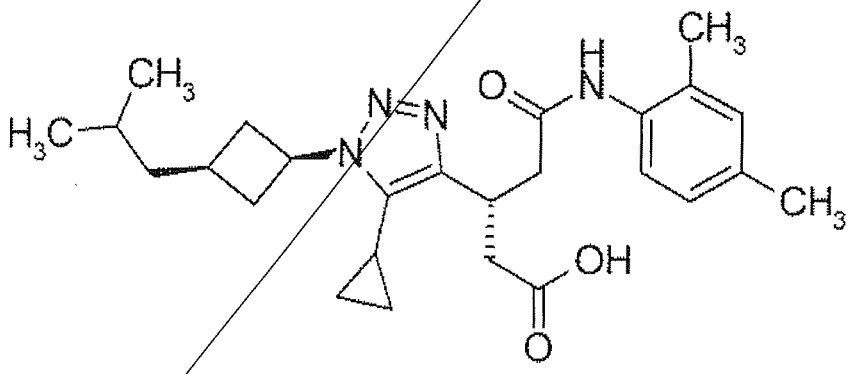
or a pharmaceutically acceptable salt thereof.

20. The compound according to claim 1 or 2, which is



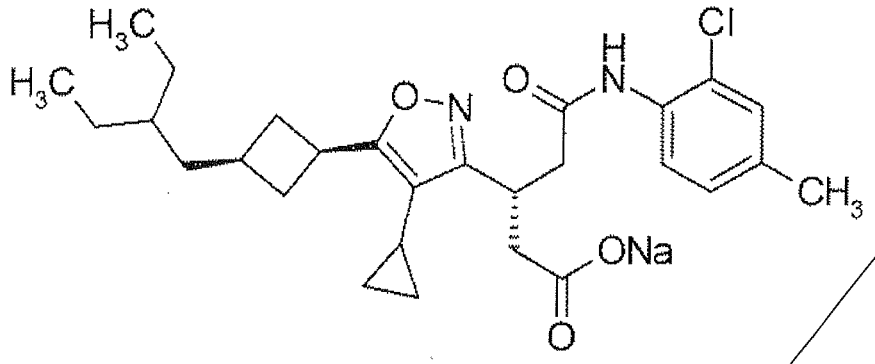
or a pharmaceutically acceptable salt thereof.

21. The compound according to claim 1 or 2, which is

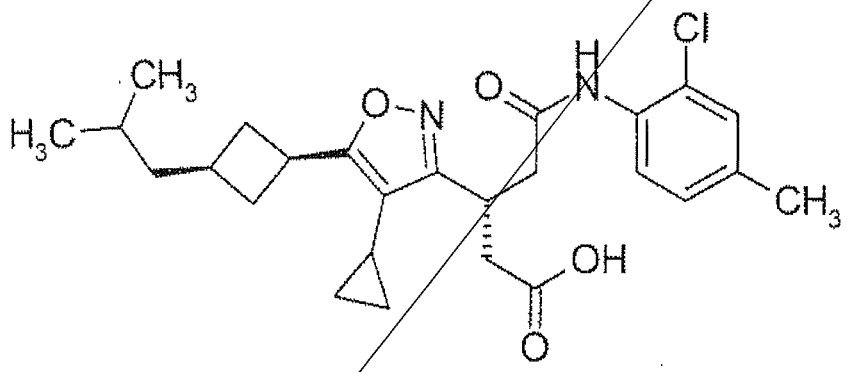


or a pharmaceutically acceptable salt thereof.

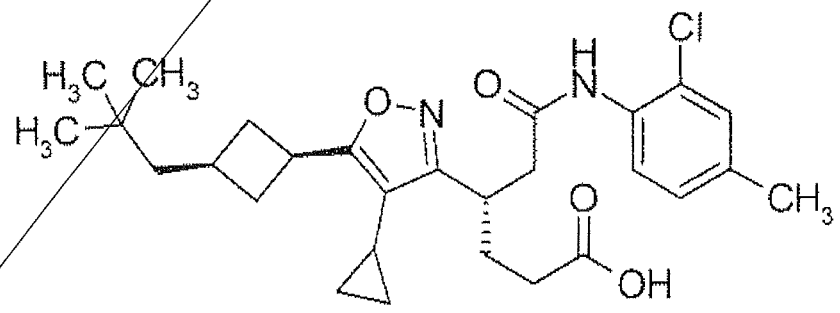
22. The compound according to claim 1 or 2, which is



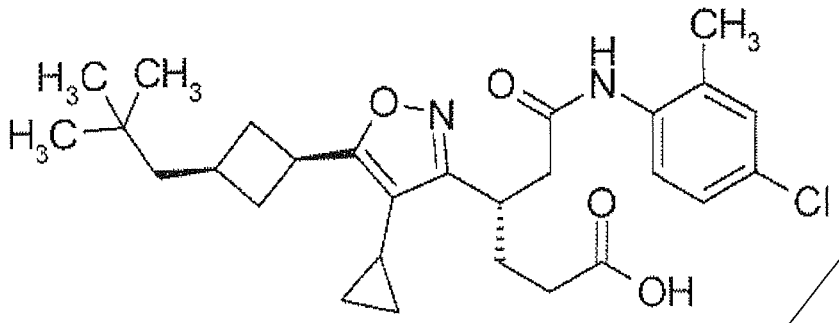
23. The compound according to claim 1 or 2, which is



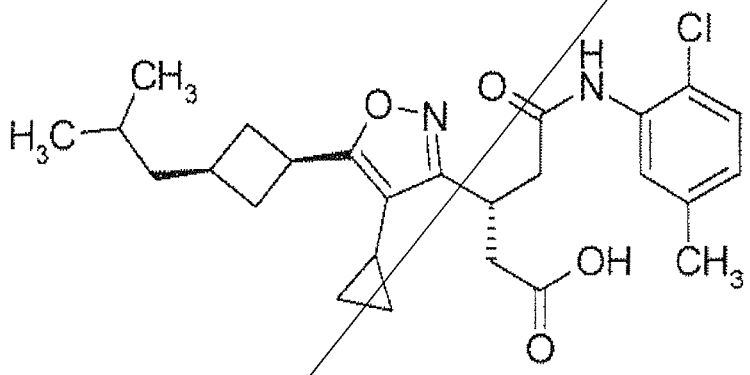
24. The compound according to claim 1 or 2, which is



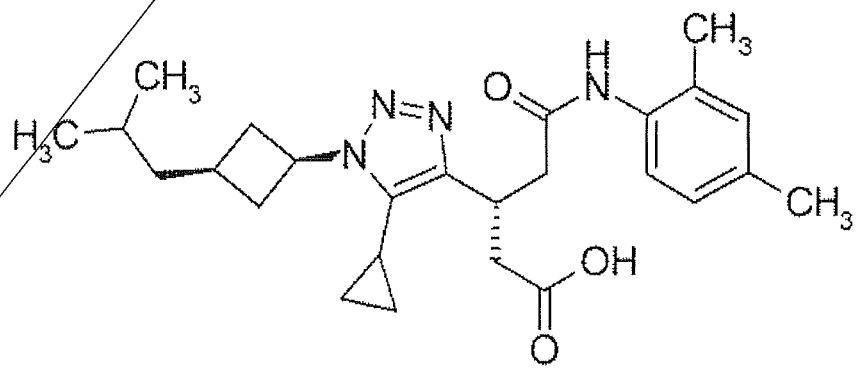
25. The compound according to claim 1 or 2, which is



26. The compound according to claim 1 or 2, which is



27. The compound according to claim 1 or 2, which is



28. A pharmaceutical composition comprising the

compound according to any one of claims 1 and 17 to 21 or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

29. A RORγ antagonist comprising the compound according to any one of claims 1 and 17 to 21 or a pharmaceutically acceptable salt thereof.

30. A medicament for treating or preventing a disease selected from the group consisting of autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease, comprising the compound according to any one of claims 1 and 17 to 21 or a pharmaceutically acceptable salt thereof.

31. The medicament according to claim 30 wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

32. The medicament according to claim 31 wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

33. The medicament according to claim 30 wherein the allergic disease is asthma.

34. The medicament according to claim 30 wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

35. The medicament according to claim 30 wherein the metabolic disease is diabetes.

36. The medicament according to claim 35 wherein the diabetes is type I diabetes or type II diabetes.

37. A method of inhibiting RORγ in a mammal, comprising administering to said mammal a therapeutically effective amount of the compound according to any one of claims 1 and 17 to 21 or a pharmaceutically acceptable salt thereof.

38. A method of treating or preventing a disease in a mammal selected from the group consisting of autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease, comprising administering to said mammal a therapeutically effective amount of the compound according to any one of claims 1 and 17 to 21 or a pharmaceutically acceptable salt thereof.

39. The method according to claim 38 wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

40. The method according to claim 39 wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

41. The method according to claim 38 wherein the allergic disease is asthma.

42. The method according to claim 38 wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

43. The method according to claim 38 wherein the metabolic disease is diabetes.

44. The method according to claim 43 wherein the diabetes is type I diabetes or type II diabetes.

45. A pharmaceutical composition comprising the

compound according to any one of claims 22 to 27, and a pharmaceutically acceptable carrier.

46. A RORγ antagonist comprising the compound according to any one of claims 22 to 27.

47. A medicament for treating or preventing a disease selected from the group consisting of autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease, comprising the compound according to any one of claims 22 to 27.

48. The medicament according to claim 47 wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

49. The medicament according to claim 48 wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

50. The medicament according to claim 47 wherein the allergic disease is asthma.

51. The medicament according to claim 47 wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

52. The medicament according to claim 47 wherein the metabolic disease is diabetes.

53. The medicament according to claim 52 wherein the diabetes is type I diabetes or type II diabetes.

54. A method of inhibiting RORγ in a mammal, comprising administering to said mammal a therapeutically effective amount of the compound according to any one of claims 22 to 27.

55. A method of treating or preventing a disease in a mammal selected from the group consisting of autoimmune disease, allergic disease, dry eye, fibrosis, and metabolic disease, comprising administering to said mammal a therapeutically effective amount of the compound according to any one of claims 22 to 27.

56. The method according to claim 55 wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease,

multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, and type I diabetes.

57. The method according to claim 56 wherein the inflammatory bowel disease is Crohn's disease or ulcerative colitis.

58. The method according to claim 55 wherein the allergic disease is asthma.

59. The method according to claim 55 wherein the fibrosis is pulmonary fibrosis or primary biliary cirrhosis.

60. The method according to claim 55 wherein the metabolic disease is diabetes.

61. The method according to claim 60 wherein the diabetes is type I diabetes or type II diabetes.