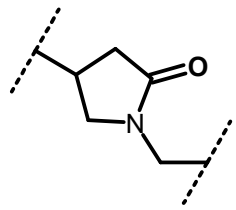
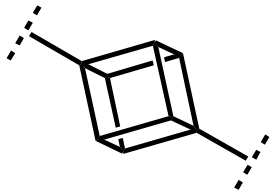
(f) phenylene substituted with one trifluoromethyl,

(g) cross-linked C_{5-8} cycloalkylene,

(h)



(i)



(j) spiro[3.3]heptanediyl,

(k) pyrrolidinediyl,

(l) pyrrolidinediyl substituted with one carboxy,

(m) pyrrolidinediyl substituted with one C_{1-3} alkylcarbonyl,

(n) pyrrolidinediyl substituted with one C_{1-3} alkylsulfonyl,

(o) pyridinediyl,

(p) isoxazolediyl or

(q) pyrazolediyl substituted with one C_{1-3} alkyl;

R^{50} is

(a) hydrogen or (b) C_{1-4} alkyl;

R^6 is

(1) hydrogen or (2) methyl;

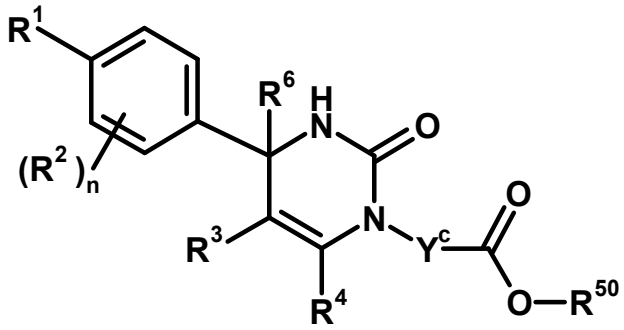
provided that

when R^5 is $-Y^c-COO-R^{50}$, Y^c is $(CH_2)_m-Y^{c1}-(CH_2)_w$, m and w are 0, and Y^{c1} is (b) phenylene, (c) phenylene substituted with one halogen, (d) phenylene substituted with one C_{1-3} alkyl, (e) phenylene substituted with one C_{1-3} alkoxy or (f) phenylene substituted with one trifluoromethyl, then R^6 is methyl; and

either R^3 or R^5 or both of them have "-COO-".

2. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein

the compound of Formula [I] is a compound of Formula [II]:



[II]

wherein

R^3 is

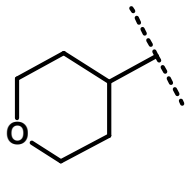
(1) C_{1-6} alkyl optionally substituted with one hydroxy,

(2) C_{1-6} alkyl substituted with one C_{1-4} alkoxy,

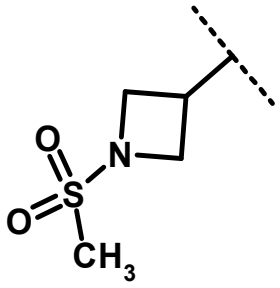
(3) C_{1-6} alkyl substituted with one C_{1-4} alkylsulfonyl,

(4) C_{3-6} cycloalkyl optionally substituted with the same or different one to three substituent(s) selected from Group X^b,

(5)

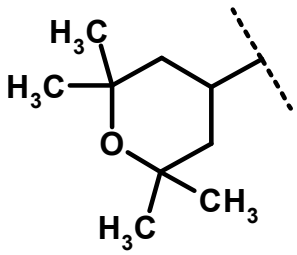


(6)



(7) phenyl,

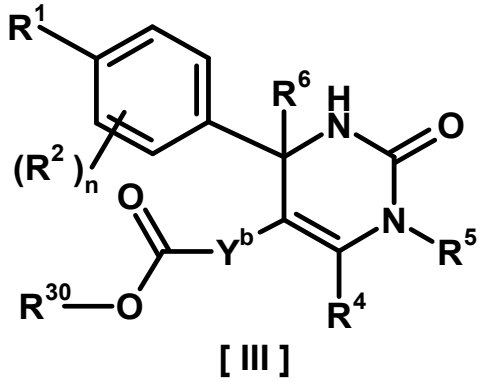
(8)



or

(9) C_{2-3} alkenyl; and the other symbols have the same meanings as defined in claim 1.

3. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound of Formula [I] is a compound of Formula [III]:



[III]

wherein

R^5 is

(1) hydrogen,

(2) C_{1-4} alkyl optionally substituted with one C_{1-3} alkoxy,

(3) C_{1-4} alkyl substituted with one amide,

(4) C_{1-3} alkyl substituted with one C_{3-6} cycloalkyl substituted with the same or different two halogen,

(5) C_{3-6} cycloalkyl optionally substituted with one hydroxy-C_{1-4} alkyl,

(6) C_{3-6} cycloalkyl substituted with one C_{1-3} alkoxy,

(7) C_{3-6} cycloalkyl substituted with one C_{1-3} alkoxy-C_{1-3} alkyl,

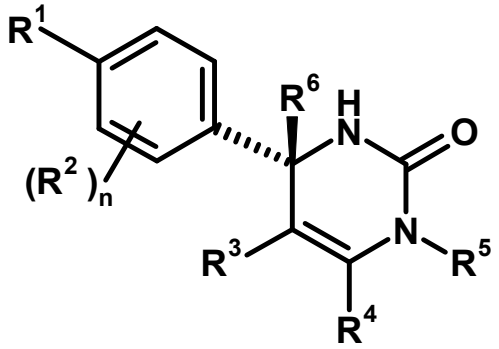
(8) C_{3-6} cycloalkyl substituted with the same or different one to two halogen,

(9) C_{3-6} cycloalkyl substituted with the same or different one to two C_{1-3} alkyl,

(10) tetrahydropyran-4-yl or

(11) pyridin-4-yl; and the other symbols have the same meanings as defined in claim 1.

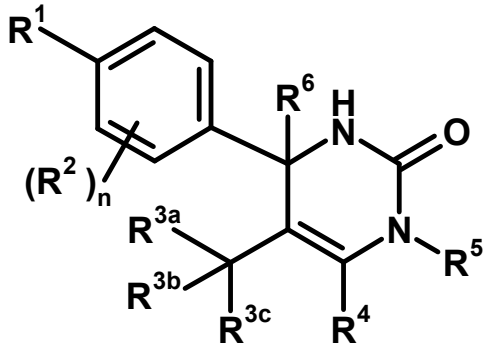
4. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound of Formula [I] is a compound of Formula [IV]:



[IV]

wherein each symbol has the same meaning as defined in claim 1.

5. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound of Formula [I] is a compound of Formula [V]:



[V]

wherein

R^{3a} is

(1) hydrogen or

(2) $C_{1\text{-}6}$ alkyl optionally substituted with the same or different one to three substituent(s) selected from the group consisting of hydroxy, halogen, hydroxycarbonyl, and $C_{1\text{-}3}$ alkoxycarbonyl;

R^{3b} is

(1) hydrogen or (2) $C_{1\text{-}6}$ alkyl;

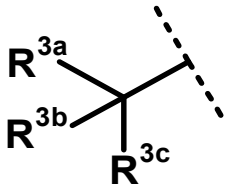
R^{3c} is

(1) hydrogen or (2) C_{1-6} alkyl; and the other symbols have the same meanings as defined in claim 1,

provided that

when R^5 is $-Y^c-COO-R^{50}$, Y^c is $(CH_2)_m-Y^{c1}-(CH_2)_w$, m and w are 0, and Y^{c1} is phenylene, then R^6 is methyl; and

either a structure of the formula:



or R^5 or both of them have "-COO-".

6. The compound of any one of claims 1 to 5 or a pharmaceutically acceptable salt thereof, wherein R^6 is methyl.

7. The compound of any one of claims 1 to 6 or a pharmaceutically acceptable salt thereof, wherein R^4 is hydrogen.

8. The compound of any one of claims 1 to 7 or a pharmaceutically acceptable salt thereof, wherein n is an integer of 1 or 2.

9. The compound of any one of claims 1 to 8 or a pharmaceutically acceptable salt thereof, wherein R^2 is halogen or trifluoromethyl.

10. The compound of any one of claims 1, 2, 4 to 8 or 9 or a pharmaceutically acceptable salt thereof, wherein Y^c is

(a) C_{1-6} alkylene or

(b) $(CH_2)_m-Y^{c1}-(CH_2)_w$;

m is an integer of 0 or 1;

w is an integer of 0 or 1;

Y^{c1} is

(a) C_{3-6} cycloalkylene optionally substituted with one C_{1-3}alkyl,

(b) phenylene,

(c) phenylene substituted with one halogen,

(d) phenylene substituted with one C_{1-3} alkyl,

(e) phenylene substituted with one C_{1-3} alkoxy,

(f) phenylene substituted with one trifluoromethyl,

(g) cross-linked C_{5-8} cycloalkylene,

(h) pyridinediyl or

(i) pyrazolediyl substituted with one C_{1-3} alkyl; and

R^3 is

(1) C_{1-6} alkyl optionally substituted with one hydroxy,

(2) C_{1-6} alkyl substituted with one C_{1-4} alkoxy or

(3) C_{3-6} cycloalkyl optionally substituted with the same or different one to three substituent(s) selected from Group X^b.

11. The compound of any one of claims 1, 2, 4 to 9, or 10 or a pharmaceutically acceptable salt thereof, wherein Y^c is

(a) C_{1-6} alkylene or

(b) $(CH_2)_m$-Y^{c1}-$(CH_2)_w$;

m is an integer of 0 or 1;

w is an integer of 0 or 1;

Y^{c1} is

(a) C_{3-6} cycloalkylene optionally substituted with one C_{1-3} alkyl,

(b) phenylene, or

(c) cross-linked C_{5-8} cycloalkylene.

12. The compound of any one of claims 1, 2, 4 to 10, or 11 or a pharmaceutically acceptable salt thereof, wherein Y^c is $(CH_2)_m$-Y^{c1}-$(CH_2)_w$;

m is 0;

w is 0;

Y^{c1} is

(a) C_{3-6} cycloalkylene optionally substituted with one C_{1-3} alkyl,

(b) phenylene, or

(c) cross-linked C_{5-8} cycloalkylene.

13. The compound of any one of claims 1, 2, 4 to 11, or 12 or a pharmaceutically acceptable salt thereof, wherein Y^c is $(CH_2)_m$-Y^{c1}-$(CH_2)_w$;
m is 0;
w is 0;
Y^{c1} is cross-linked C_{5-8} cycloalkylene.

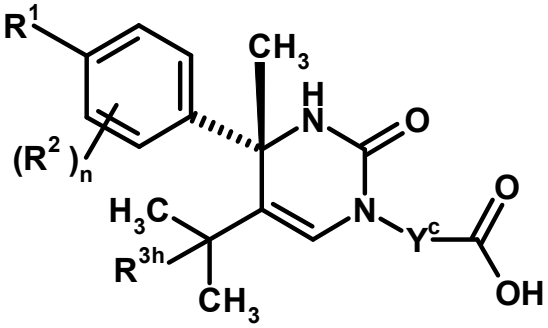
14. The compound of any one of claims 1, 2, 4 to 10, or 11 or a pharmaceutically acceptable salt thereof, wherein Y^c is C_{1-6} alkylene.

15. The compound of any one of claims 1 to 14 or a pharmaceutically acceptable salt thereof, wherein R^1 is
(1) C_{4-8} alkyl,
(2) C_{3-6} alkoxy,
(3) C_{1-3} alkoxy substituted with one substituent selected from Group X^{a2},
(4) C_{4-6} cycloalkyl,
(5) C_{3-6} cycloalkyl substituted with the same or different one to two C_{1-5} alkyl, or
(6) C_{3-6} cycloalkyl substituted with one to the same two halogen.

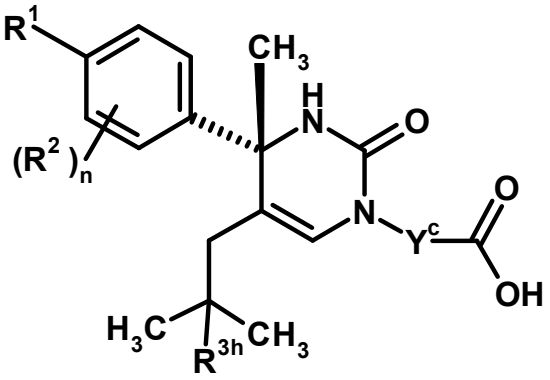
16. The compound of any one of claims 1 to 15 or a pharmaceutically acceptable salt thereof, wherein R^1 is C_{4-8} alkyl.

17. The compound of claim 2 or a pharmaceutically acceptable salt thereof, wherein R^{50} is hydrogen.

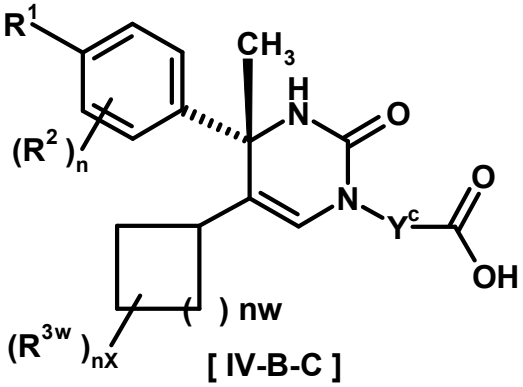
18. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound of Formula [I] is any one of the compounds of Formulae [IV-B-A] to [IV-B-N]:



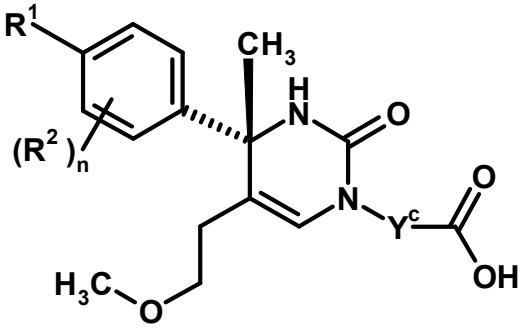
[IV-B-A]



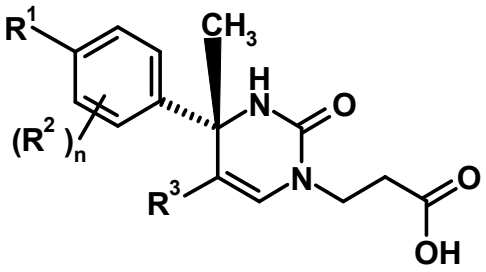
[IV-B-B]



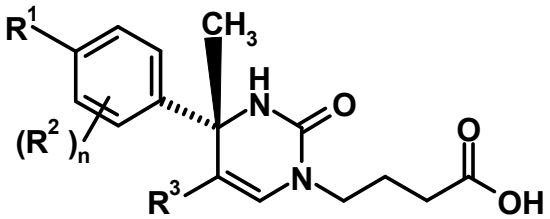
[IV-B-C]



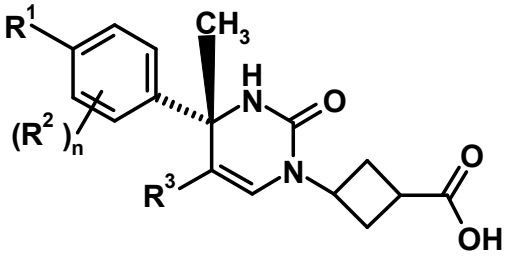
[IV-B-D]



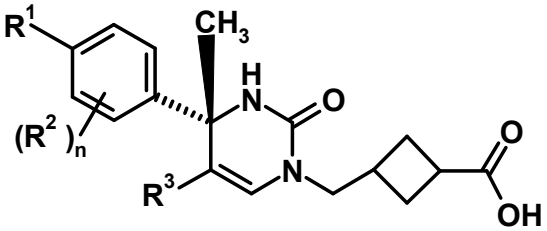
[IV-B-E]



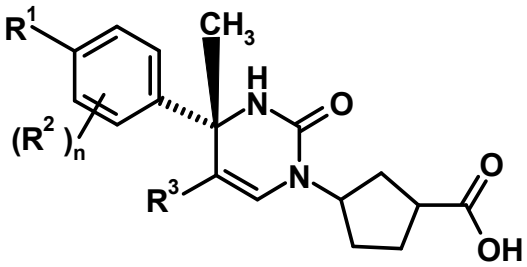
[IV-B-F]



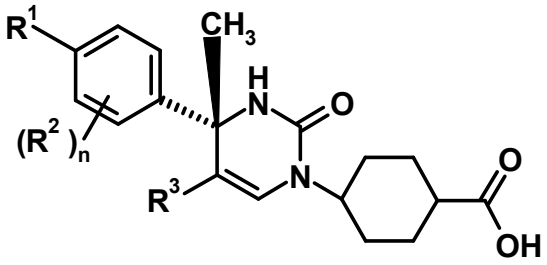
[IV-B-G]



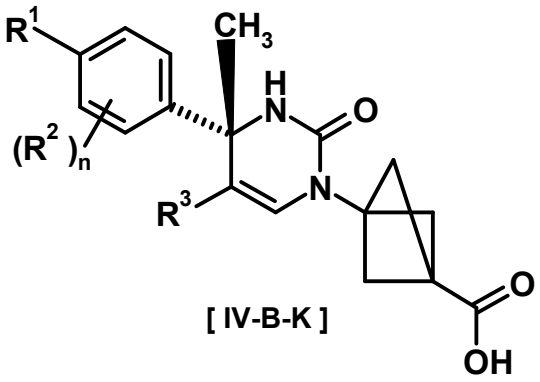
[IV-B-H]



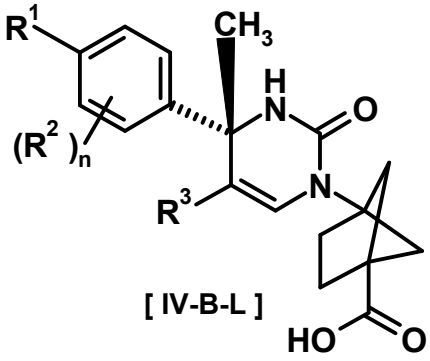
[IV-B-I]



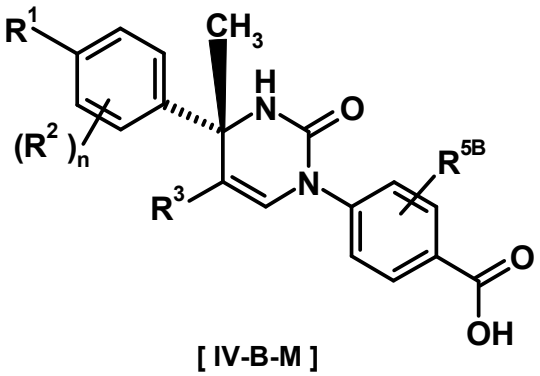
[IV-B-J]



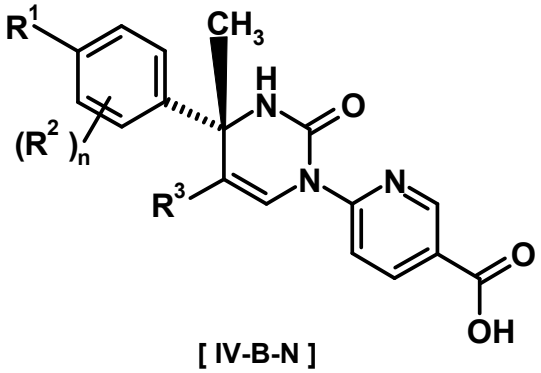
[IV-B-K]



[IV-B-L]



[IV-B-M]



[IV-B-N]

wherein

R^{3h} is hydrogen or methyl;

R^{3w} is methyl or fluoro;

n^x is an integer of 0 or 2;

n^w is an integer of 0, 1, 2 or 3;

R^3 is C_{1-6} alkyl optionally substituted with one hydroxy,

C_{1-6} alkyl substituted with one C_{1-4} alkoxy or

C_{3-6} cycloalkyl optionally substituted with the same or different one to three substituent(s) selected from Group X^b;

R^{5B} is hydrogen, halogen, C_{1-3} alkyl, C_{1-3} alkoxy or trifluoromethyl; and

the other symbols have the same meanings as defined in claim 1.

19. The compound of claim 18 or a pharmaceutically acceptable salt thereof, wherein R^1 is

C_{4-8} alkyl,

C_{3-7} alkyl substituted with one trifluoromethyl,

C_{1-5} alkyl substituted with one substituent selected from Group X^{a1},

C_{3-6} alkoxy,

C_{2-7} alkoxy substituted with one trifluoromethyl,

C_{1-3} alkoxy substituted with one substituent selected from Group X^{a2},

C_{4-6} cycloalkyl,

C_{3-6} cycloalkyl substituted with the same or different one to two C_{1-5} alkyl,

C_{5-6} cycloalkenyl optionally substituted with the same or different one to two C_{1-4} alkyl,

cyclohexylidenemethyl optionally substituted with the same or different one to two C_{1-3} alkyl, tetrahydropyran-4-ylidenemethyl,

C_{3-6} cycloalkyl substituted with one to the same two halogen or

C_{5-6} cycloalkenyl substituted with one to the same two halogen; and

R^2 is fluoro, chloro or trifluoromethyl.

20. The compound of claim 19 or a pharmaceutically acceptable salt thereof, wherein R^1 is

C_{4-8} alkyl,

C_{3-7} alkyl substituted with one trifluoromethyl,

C_{1-5} alkyl substituted with one substituent selected from Group X^{a1},

C_{3-6} alkoxy,

C_{4-6} cycloalkyl substituted with the same or different one to two C_{1-5} alkyl,

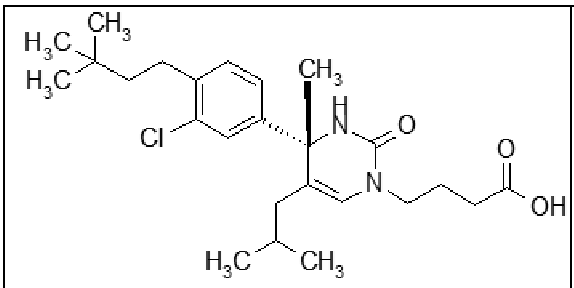
C_{5-6} cycloalkenyl optionally substituted with the same or different one to two C_{1-4} alkyl,

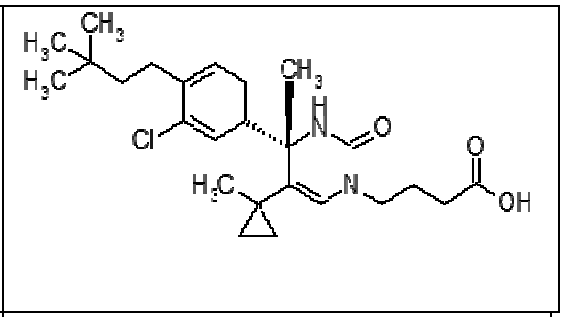
C_6 cycloalkyl substituted with one to the same two halogen or

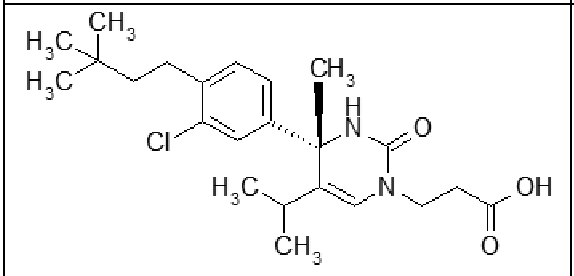
C_6 cycloalkenyl substituted with one to the same two halogen; and

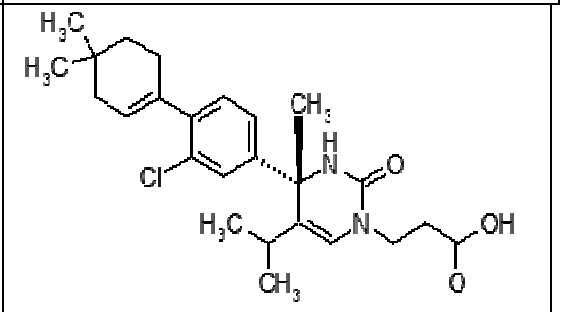
R^2 is chloro or trifluoromethyl.

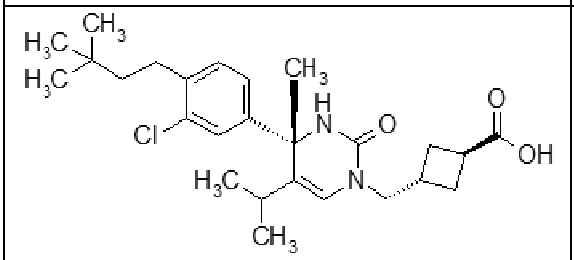
21. The compound of claim 1 or a pharmaceutically acceptable salt thereof, selected from the group consisting of the following formulae.

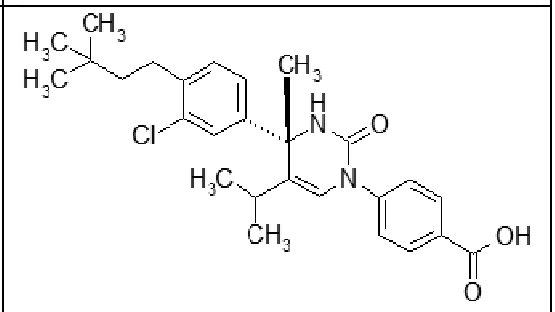


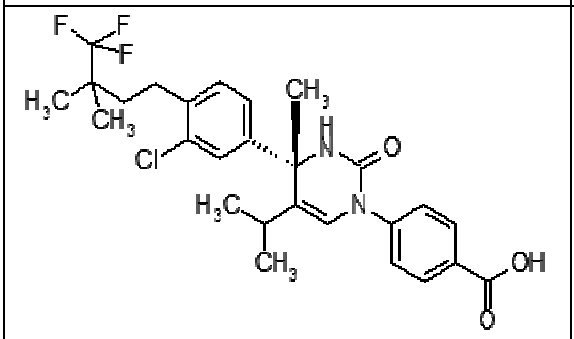


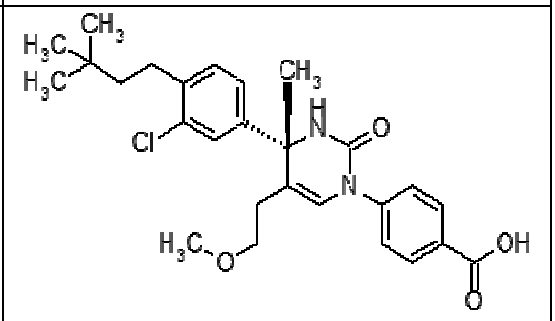


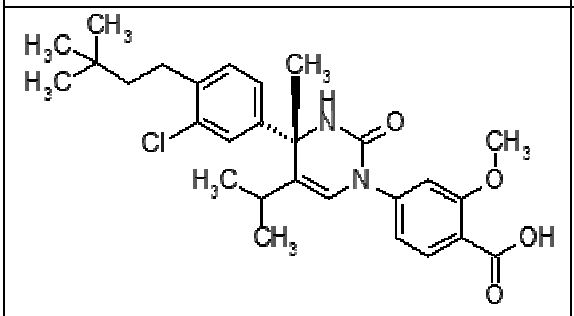


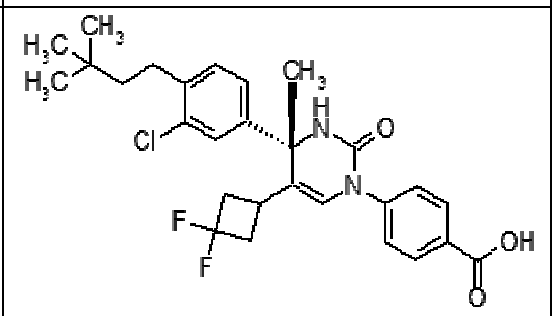


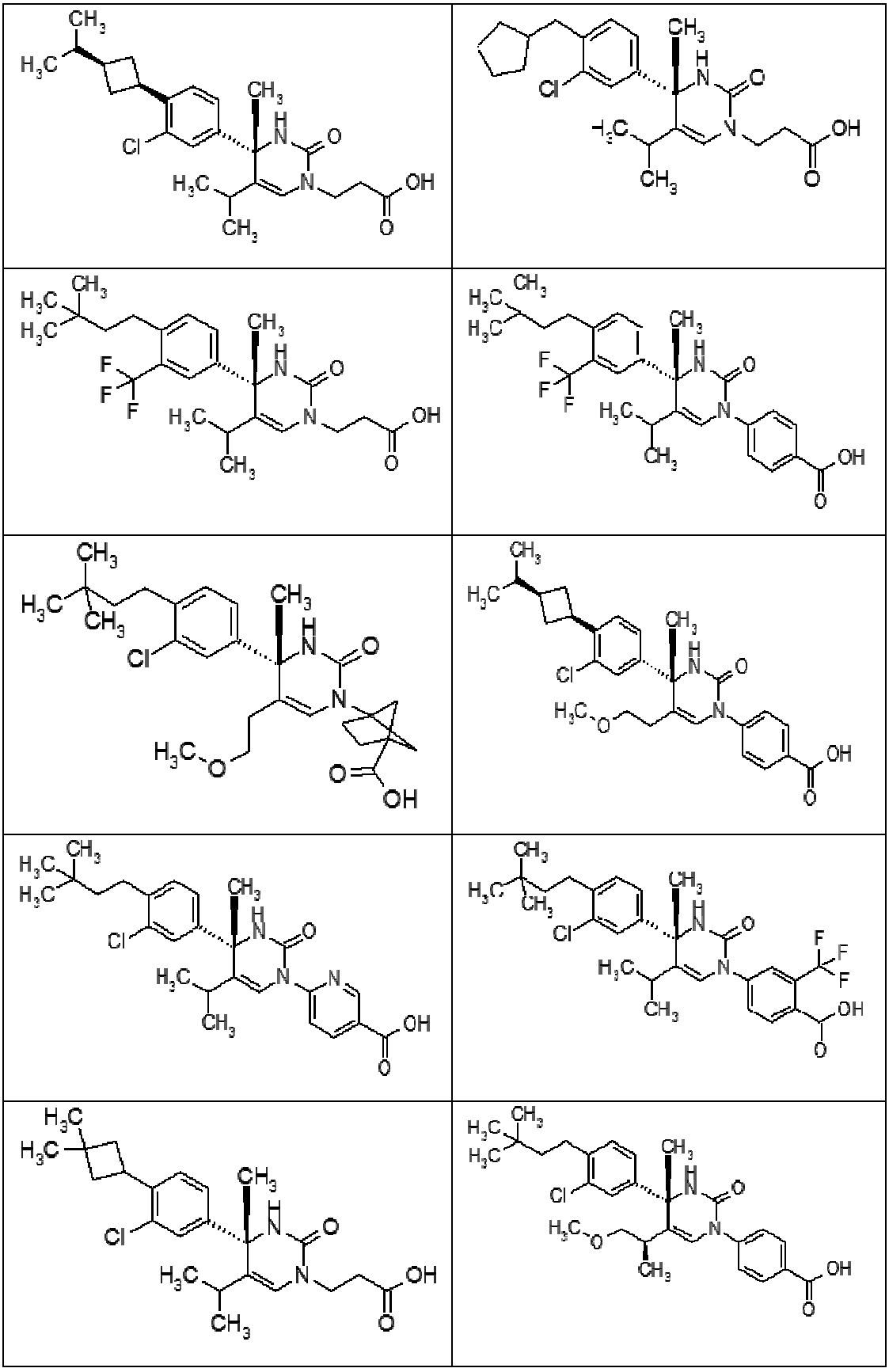


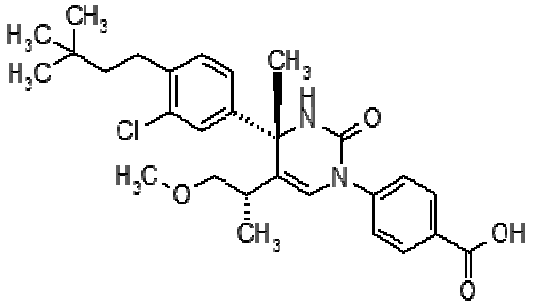


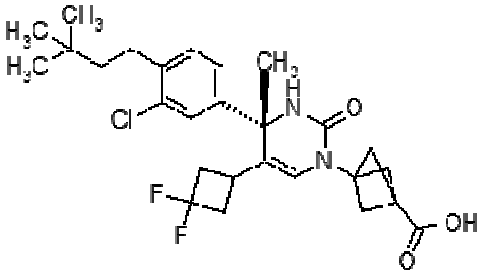


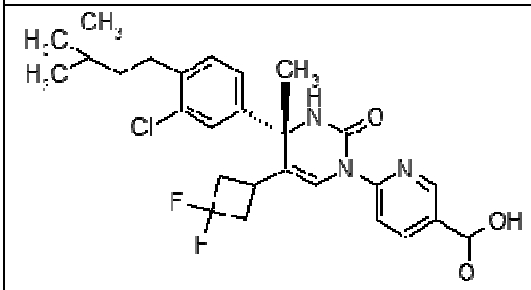


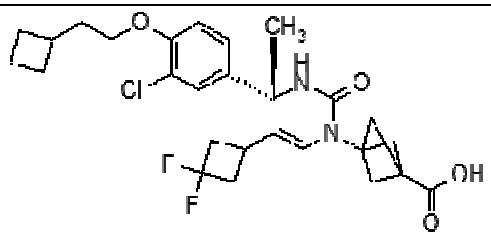


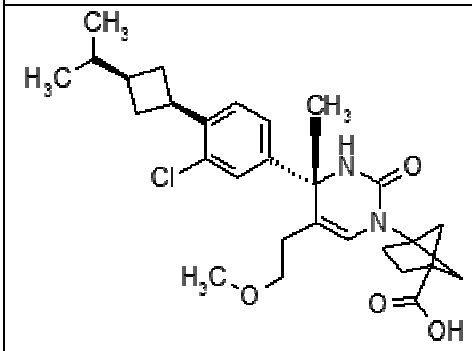


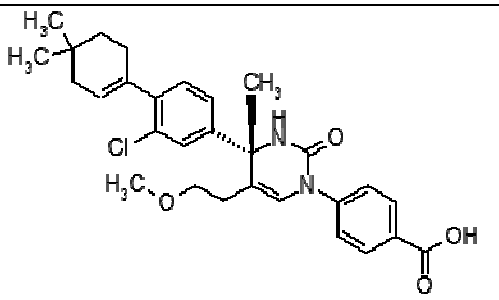


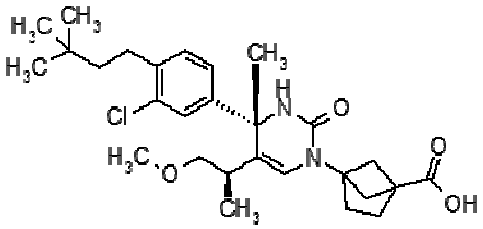


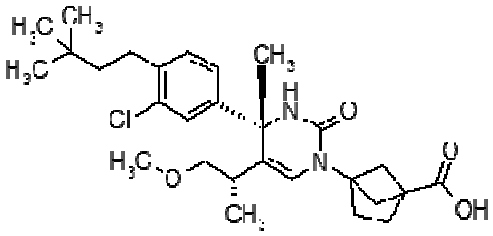


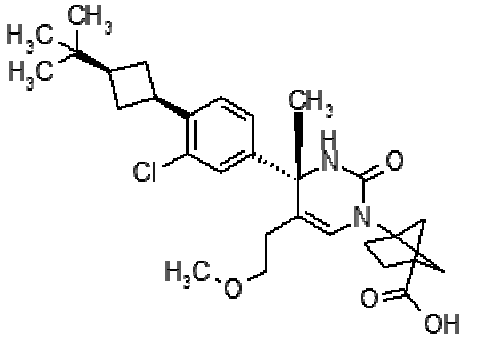




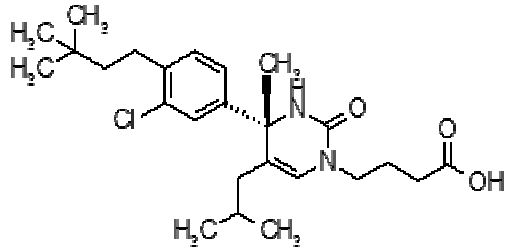




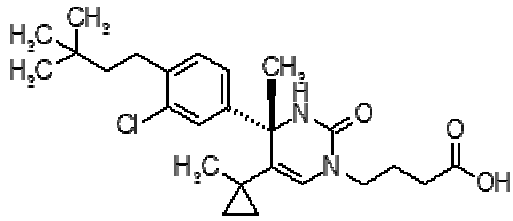




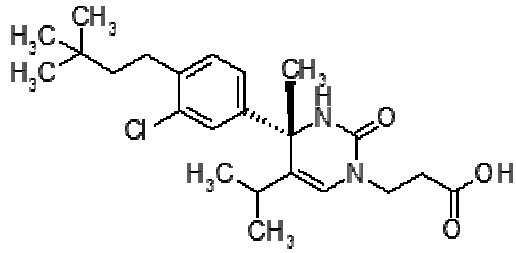
22. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



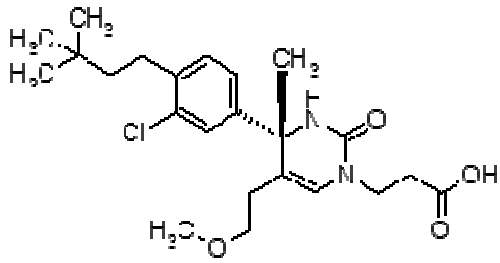
23. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



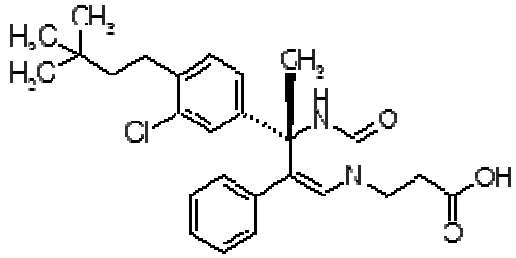
24. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



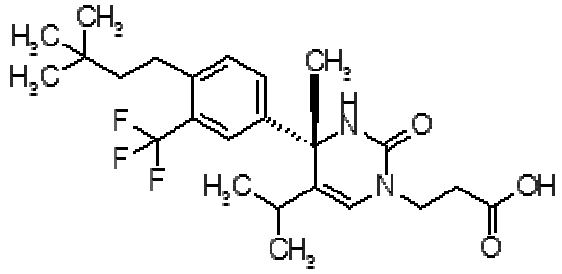
25. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



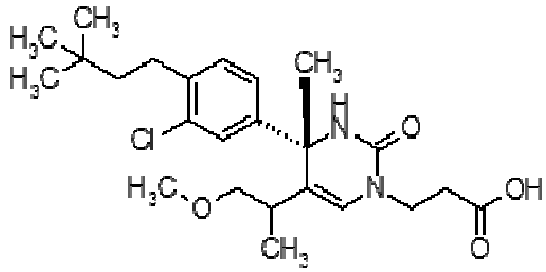
26. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



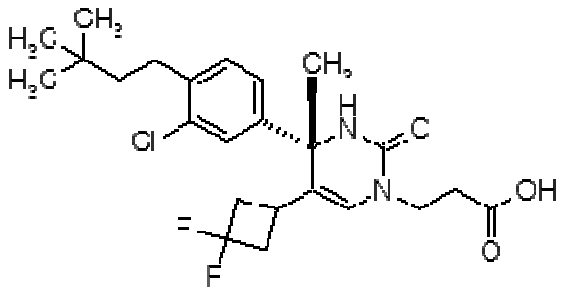
27. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



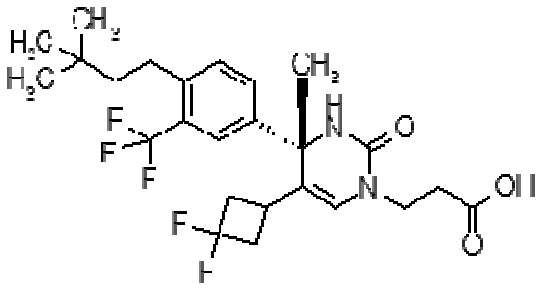
28. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



29. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



30. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is shown in the following formula:



31. A pharmaceutical composition comprising the compound of any one of claims 1 to 30 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.

32. An RORγ antagonist comprising the compound of any one of claims 1 to 30 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.

33. An agent 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 of any one of claims 1 to 30 or a pharmaceutically acceptable salt thereof.

34. The agent for use of claim 33, wherein the disease is autoimmune disease.

35. The agent for use of claim 34, wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease such as Crohn's disease and ulcerative colitis, multiple sclerosis, systemic lupus

erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, type I diabetes, and graft versus host disease.

36. The agent for use of claim 33, wherein the disease is metabolic disease.

37. The agent for use of claim 36, wherein the metabolic disease is diabetes.

38. Use of the compound of any one of claims 1 to 30 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for inhibiting RORγ.

39. Use of the compound of any one of claims 1 to 30 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.

40. The use according to claim 39, wherein the disease is autoimmune disease.

41. The use according to claim 40, wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease such as Crohn's disease and ulcerative colitis, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, type I diabetes, and graft versus host disease.

42. The use according to claim 39, wherein the disease is metabolic disease.

43. The use according to claim 42, wherein the metabolic disease is diabetes.

44. A compound of any one of claims 1 to 30 or a pharmaceutically acceptable salt thereof for use in inhibiting RORγ.

45. A compound of any one of claims 1 to 30 or a pharmaceutically acceptable salt thereof for use as an agent for treating or preventing a disease selected from the group

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

46. The compound or the pharmaceutically acceptable salt thereof for use according to claim 45, wherein the disease is autoimmune disease.

47. The compound or the pharmaceutically acceptable salt thereof for use according to claim 46, wherein the autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriasis, inflammatory bowel disease such as Crohn's disease and ulcerative colitis, multiple sclerosis, systemic lupus erythematosus, ankylosing spondylitis, uveitis, polymyalgia rheumatica, type I diabetes, and graft versus host disease.

48. The compound or the pharmaceutically acceptable salt thereof for use according to claim 45, wherein the disease is metabolic disease.

49. The compound or the pharmaceutically acceptable salt thereof for use according to claim 48, wherein the metabolic disease is diabetes.