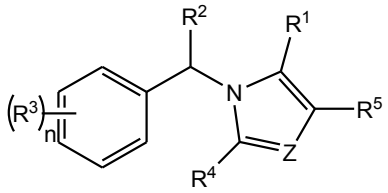
CLAIMS

1. A compound according to formula (I)



(I)

in which,

R^1 is $L^1C(O)OL^2$-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT;

R^2 is R^1, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, or optionally substituted linear or branched C_2-C_{10} alkynyl, in which the backbone of C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl optionally comprises one or more heteroatoms;

each R_3 is independently halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

Z is N;

R^4 and R^5 are independently hydrogen, halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

L^1 and L^2 are independently a bond, optionally substituted linear or branched C_1-C_{10} alkylene, optionally substituted linear or branched C_2-C_{10} alkenylene, or optionally substituted linear or branched C_2-C_{10} alkynylene, in which the backbone of C_1-C_{10} alkylene, C_2-C_{10} alkenylene, or C_2-C_{10} alkynylene optionally comprises one or more heteroatoms;

T is H, a linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkenyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkynyl, optionally substituted cyclyl, optionally substituted heterocylcyl, optionally substituted aryl, optionally substituted heteroaryl, or PEG, in which the backbone of C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl optionally comprises one or more heteroatoms;

n is an integer from 0-5;

p is 0 or 1, provided that at least one of R^7, R^8, R^9 and R^{10} is not hydrogen; and

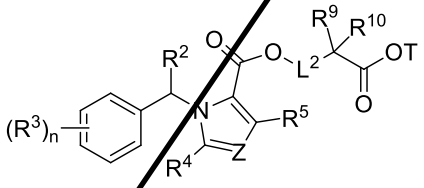
(i) R^7 and R^8 are independently hydrogen, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, optionally substituted linear or branched C_2-C_{10} alkynyl, in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms; and R^9 and R^{10} together with the carbon they are attached to form an optionally substituted 3-8 membered cyclyl or heterocyclyl; or

(ii) R^7 and R^8 together with the carbon they are attached to form an optionally substituted 3-8 membered cyclyl or heterocyclyl; and R^9 and R^{10} are independently hydrogen, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, optionally substituted linear or branched C_2-C_{10} alkynyl, optionally substituted C_4-C_8 cyclyl, optionally substituted C_3-C_8 heterocyclyl, in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms; or

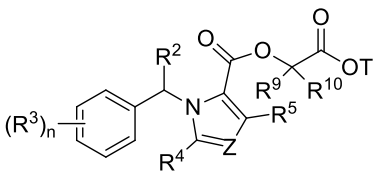
(iii) R^7 and R^9 together with the carbons they are attached to form an optionally substituted 3-8 membered cyclyl, heterocyclyl, aryl or heteroaryl; and R^8 and R^{10} are independently hydrogen, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, optionally substituted linear or branched C_2-C_{10} alkynyl, optionally substituted C_4-C_8 cyclyl, optionally substituted C_3-C_8 heterocyclyl, in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms;

or a salt, solvate, or ester thereof.

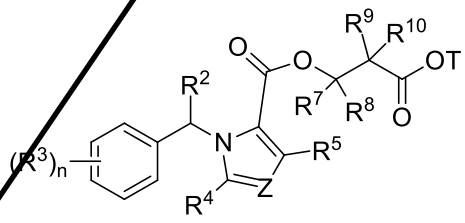
2. A compound according to Claim 1, having a structure of formula (IA), (IB) or (IC):



(IA),



(IB), or



(IC).

3. A compound according to Claim 1 or 2, in which n is 0 or 1.

4. A compound according to any of Claims 1 to 3, in which p is 0 or 1.

5. A compound according to any of Claims 1 to 4, in which L^1 is a bond, optionally substituted linear or branched C_1-C_{10} alkylene, optionally substituted linear or branched C_2-C_{10} alkenylene, or optionally substituted linear or branched C_2-C_{10} alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms.

6. A compound according to any of Claims 1 to 5, in which L^2 is a bond, optionally substituted linear or branched C_1-C_{10} alkylene, optionally substituted linear or branched C_2-C_{10} alkenylene, or optionally substituted linear or branched C_2-C_{10} alkynylene; in which the backbone of C_1-C_{10} alkylene, C_2-C_{10} alkenylene, or C_2-C_{10} alkynylene optionally comprises one or more heteroatoms.

7. A compound according to any of Claims 1 to 6, in which T is hydrogen, optionally substituted C_1-C_{10}alkyl, or optionally substituted cyclyl or heterocyclyl.

8. A compound according to Claim 7, in which T is selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl, 2-hydroxylpropyl, cyclopropyl, cyclobutyl, oxetanyl, morpholinyl, and oxazolindinyl.

9. A compound according to any of Claims 1 to 8, in which R^4 is hydrogen.

10. A compound according to any of Claims 1 to 9, in which R^5 is hydrogen.

11. A compound according to any of Claims 1 to 10, in which R^2 is optionally substituted C_1-C_{10} alkyl.

12. A compound according to Claim 11, in which R^2 is selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, and 2,2-dimethylbutyl.

13. A compound according to any of Claims 1 to 12, in which the carbon to which R^2 is attached to has the R configuration.

14. A compound according to any of Claims 1 to 13, in which R^9 and R^{10} are independently hydrogen, optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl; or R^9 and R^{10} together with the carbon they are attached to form a 3-, 4-, 5, or 6- membered cyclyl.

15. A compound according to any of Claims 1 to 14, in which R^9 and R^{10} are independently optionally substituted C_1-C_{10} alkyl.

16. A compound according to any of Claims 1 to 15, in which R^9 and R^{10} are the same.

17. A compound according to any of Claims 1 to 14, in which one of R^9 and R^{10} is optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl, and the other is hydrogen.

18. A compound according to any of Claims 1 to 17, in which R^9 and R^{10} are independently selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl, phenyl, pyridyl, thiophene, furanyl, pyrazolyl, cyclohexyl, cyclohexenyl, cyclopentyl, cyclopentenyl, and piperdinyl.

19. A compound according to any of Claims 1 to 15, 17 or 18, in which the carbon to which R^9 and R^{10} are attached has the R configuration.

20. A compound according to any of Claims 1 to 15, 17 or 18, in which the carbon to which R^9 and R^{10} are attached has the S configuration.

21. A compound according to any of Claims 1 to 20, in which R^7 and R^8 are independently hydrogen, optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl; or R^7 and R^8 together with the carbon they are attached to form a 3-, 4-, 5, or 6- membered cyclyl.

22. A compound according to any of Claims 1 to 21, in which R^7 and R^8 are independently optionally substituted C_1-C_{10}alkyl.

23. A compound according to any of Claims 1 to 22, in which R^7 and R^8 are the same.

24. A compound according to any of Claims 1 to 21, in which one of R^7 and R^8 is optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl, and the other is hydrogen.

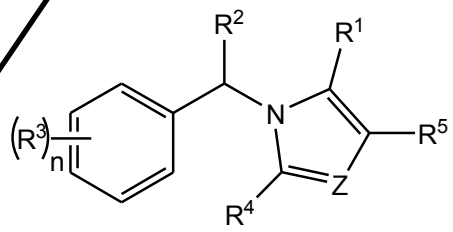
25. A compound according to any of Claims 1 to 24, in which R^7 and R^8 are independently selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl, phenyl, pyridyl, thiophene, furanyl, pyrazolyl, cyclohexyl, cyclohexenyl, cyclopentyl, cyclopentenyl, and piperdinyl.

26. A compound according to any of Claims 1 to 23, 24 or 25, in which the carbon to which R^7 and R^8 are attached has the R configuration.

27. A compound according to any of Claims 1 to 23, 24 or 25, in which the carbon to which R^7 and R^8 are attached has the S configuration.

28. A compound according to any of Claims 1 to 27, in which R^7 and R^9 together with the carbons they are attached to form an optionally substituted 3-8 membered cyclyl or heterocyclyl.

29. A compound according to formula (I)



FORMULA (I)

in which,

R^1 is $L^1C(O)OL^2$-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT;

R^2 is R^1 or a linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl, in which backbone of C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms;

each R_3 is independently halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

Z is N;

R^4 and R^5 are independently hydrogen, halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

L^1 and L^2 are independently a bond, a substituted or unsubstituted C_1-C_{10} alkylene, C_2-C_{10} alkenylene, or C_2-C_{10} alkynylene, in which backbone of alkylene can contain one or more heteroatoms;

T is H, a linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkenyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkynyl, optionally substituted cyclyl, optionally substituted heterocylcyl, optionally substituted aryl, optionally substituted heteroaryl, or PEG, in which the backbone of C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl can contain one or more heteroatoms;.

n is an integer from 0-5; and

p is 0 or 1; and

(i) R^7, R^9 and R^{10} are independently hydrogen, linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkenyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkynyl; R^8 is linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkenyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkynyl; and in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms; or

(ii) R^7, R^8 and R^9 are independently hydrogen, linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkenyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkynyl; R^{10} is linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkenyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkynyl; and in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms.

30. A compound according to Claim 29, in which said compound is present in the form of a pure enantiomer.

31. A compound according to any of Claims 29 to 30, in which the carbon to which R^2 is attached has the R configuration.

32. A compound according to any of Claims 29 to 31, in which R^2 is selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, and 2,2-dimethylbutyl.

33. A compound according to any of Claims 29 to 32, in which T is selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl, and 2-hydroxylpropyl.

34. A compound according to any of Claims 29 to 33, in which n is 0 or 1.

35. A compound according to any of Claims 29 to 34, in which L^1 is a bond.

36. A compound according to any of Claims 29 to 35, in which L^2 is a bond.

37. A compound according to any of Claims 29 to 36, in which one of R^9 or R^{10} is C_1-C_{10} alkyl and the other is hydrogen.

38. A compound according to any of Claims 33 to 40, in which both of R^9 and R^{10} are independently C_1-C_{10} alkyl.

39. A compound according to Claim 37 or Claim 38, in which the carbon to which R^9 and R^{10} are attached has the R configuration.

40. A compound according to Claim 37 or Claim 38, in which the carbon to which R^9 and R^{10} are attached has the S configuration.

41. A compound according to any of Claims 37 to 40, in which R^9 and R^{10} are selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl and any combinations thereof.

42. A compound according to any of Claims 38 to 41, in which R^9 and R^{10} are both same or together with the carbon they are attached to form a 3 membered ring.

43. A compound according to any of Claims 29 to 42, in which p is 0.

44. A compound according to any of Claims 29 to 42, in which one of R^7 and R^8 is C_1-C_{10} alkyl and the other is hydrogen.

45. A compound according to any of Claims 29 to 42, in which both of R^7 and R^8 are independently C_1-C_{10} alkyl.

46. A compound according to Claim 44 or Claim 45, in which the carbon to which R^7 and R^8 are attached has the R configuration.

47. A compound according to Claim 44 or Claim 45, in which the carbon to which R^7 and R^8 are attached has the S configuration.

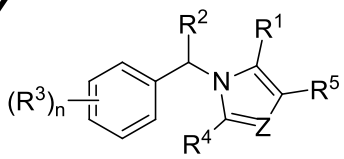
48. A compound according to any of Claims 44 to 47, in which R^7 and R^8 are selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl and any combinations thereof.

49. A compound according to any of Claims 44 to 48, in which R^7 and R^8 are both the same or together with the carbon they are attached to form a 3 membered ring.

50. A compound according to any of Claims 29 to 49, in which R^5 is hydrogen.

51. A compound according to any of Claims 29 to 49, in which R^4 is Br or CN.

52. A compound having a structure of formula (I):



(I)

in which

R^1 is $L^1C(O)OL^2$-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-$C(O)OT$;

R^2 is R^1 or a linear or branched, substituted or unsubstituted C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl, in which the backbone of C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl optionally comprises one or more heteroatoms;

each R^3 is independently halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

Z is N;

R^4 and R^5 are independently hydrogen, halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

R^7 and R^8 are independently hydrogen, linear or branched, substituted or unsubstituted C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl, or R^7 and R^8 taken together form an optionally substituted 3-8 membered carbocyclyl or heterocyclyl;

R^9 and R^{10} are independently hydrogen, optionally substituted C_4-C_8 cyclyl or optionally substituted C_3-C_8heterocyclyl, with the proviso that at least one of R^9, and R^{10} is not hydrogen;

L^1 and L^2 are independently a bond, a linear or branched, substituted or unsubstituted C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms;

T is hydrogen, linear or branched, substituted or unsubstituted C_1-C_{10}alkyl, C_2-C_{10}alkenyl, C_2-C_{10}alkynyl, optionally substituted cyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, or PEG, in which the backbone of C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl optionally comprises one or more heteroatoms;

each n is an integer of 0-5; and

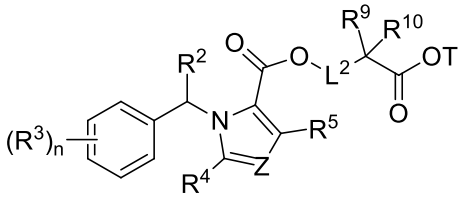
each p is 0 or 1,

or a salt, solvate, or ester thereof.

53. A compound according to Claim 52, in which L^1 is a linear or branched, substituted or unsubstituted C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms.

54. A compound according to Claim 52 or Claim 53, in which L^2 is a linear or branched, substituted or unsubstituted C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms.

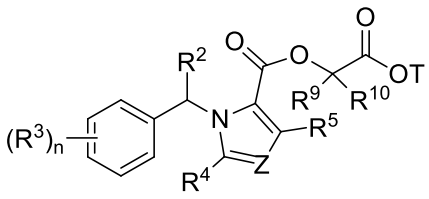
55. A compound according to Claim 52 or Claim 54 having a structure of formula (IA):



(IA)

.

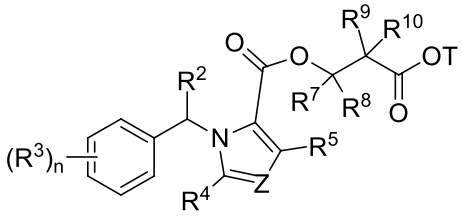
56. A compound according to Claim 52 having a structure of formula (IB):



(IB)

.

57. A compound according to Claim 52 having a structure of formula (IC):



(IC)

.

58. A compound according to any of Claims 52 to 57, in which R^9 is optionally substituted C_4-C_6cyclyl and R^{10} is hydrogen.

59. A compound according to any of Claims 52 to 57, in which R^9 is optionally substituted C_4-C_6heterocyclyl and R^{10} is hydrogen.

60. A compound according to any of Claims 52 to 59, in which R^4 is hydrogen.

61. A compound according to any of Claims 52 to 60, in which R^5 is hydrogen.

62. A compound according to any of Claims 52 to 61, in which n is 0.

63. A compound according to any of Claims 52 to 62, in which n is 1.

64. A compound according to any of Claims 52 to 63, in which R^2 is optionally substituted C_1-C_{10} alkyl.

65. A compound according to Claim 64, in which R^2 is methyl, ethyl, n-propyl, isopropyl, butyl, sec-butyl, iso-butyl, tert-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, or 2,2-dimethylbutyl.

66. A compound according to any of Claims 52 to 65, in which the carbon to which R^2 is attached is in the R configuration.

67. A compound according to any of Claims 52 to 66, in which T is optionally substituted C_1-C_{10}alkyl.

68. A compound according to Claim 67, in which T is methyl or ethyl.

69. A compound according to any of Claims 52 to 66, in which T is optionally substituted cyclyl or heterocyclyl.

70. A compound according to Claim 69, in which T is cyclopropyl, cyclobutyl, oxetanyl, morpholinyl, or oxazolindinyl.

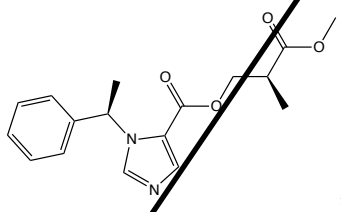
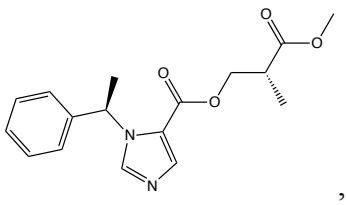
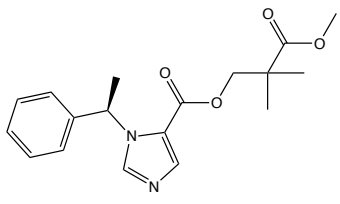
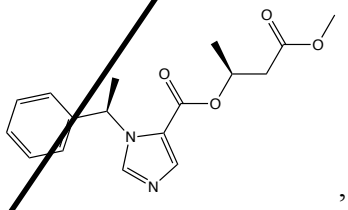
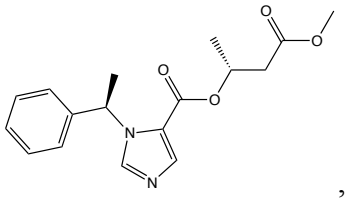
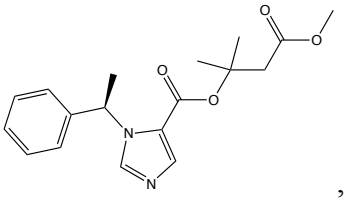
71. A compound according to any of Claims 1 to 28, in which the compound is in the form of a single diastereomer.

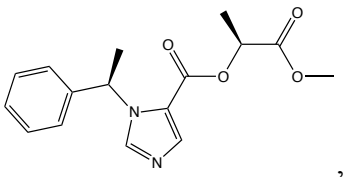
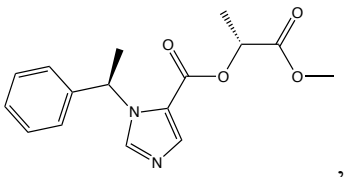
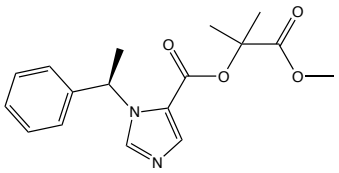
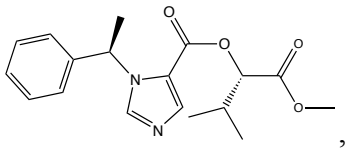
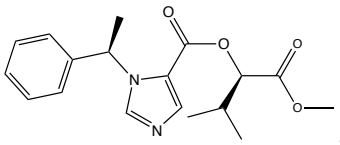
72. A compound according to any of Claims 1 to 29, in which the compound is in the form of a single enantiomer.

73. A compound according to any of Claims 1 to 30, in which the compound is in the form of a salt.

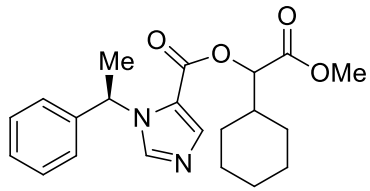
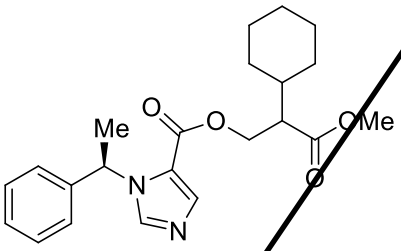
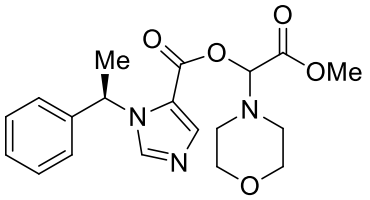
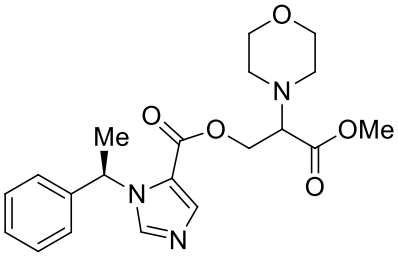
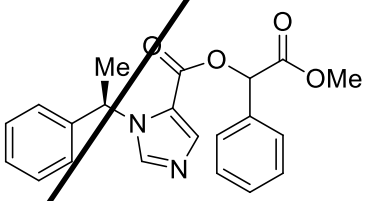
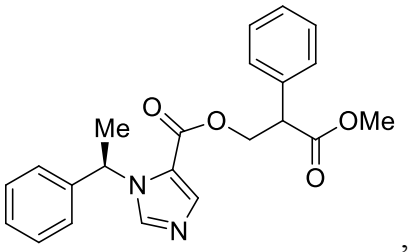
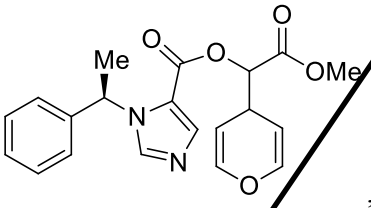
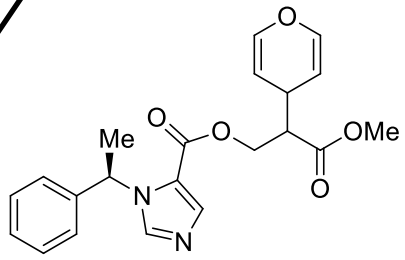
74. A compound according to any of Claims 1 to 30, in which the compound is in the form of a solvate.

75. A compound according to Claim 29, in which the compound of formula (I) is selected from the group consisting of

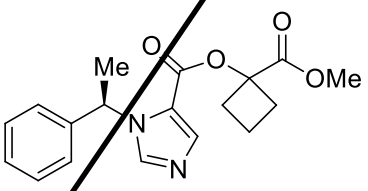
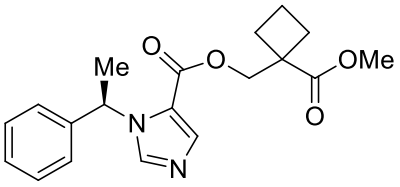
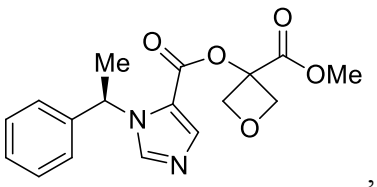

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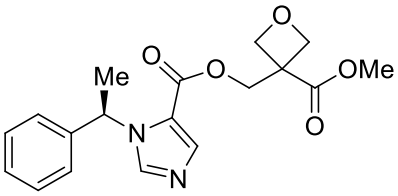
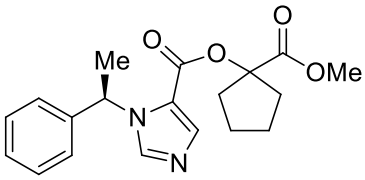
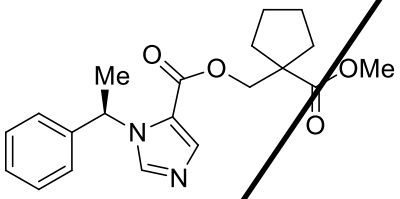
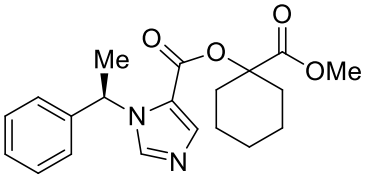
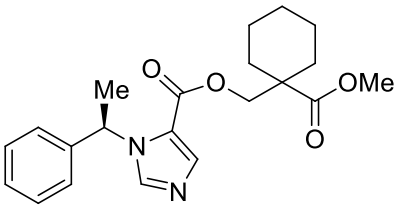
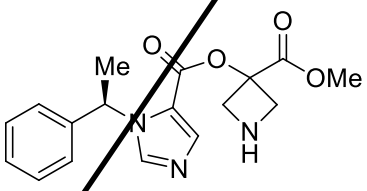
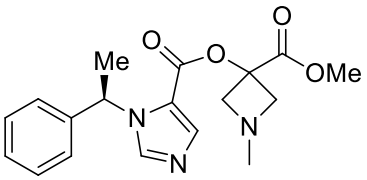
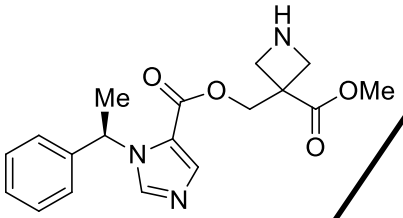
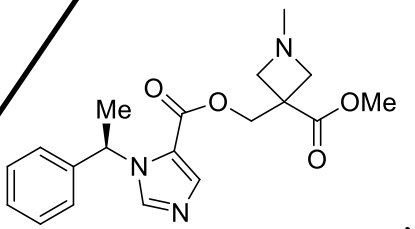
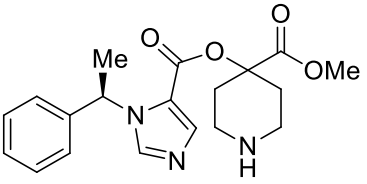

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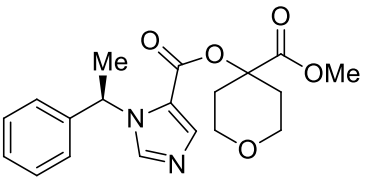
76. A compound according to Claim 52, in which the compound of formula (I) is selected from the group consisting of


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77. A compound having a structure selected from the group consisting of


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, or a salt, solvate, or ester thereof.

78. A pharmaceutical composition comprising a compound according to any of Claims 1 to 77 and a pharmaceutically acceptable carrier.

79. A compound according to any of Claims 1 to 77, for use as an anesthetic or sedative.

80. Use of a compound according to any of Claims 1 to 77 in the preparation of a medicament for use as an anesthetic or sedative.

81. A compound or use according to any of Claims 79 to 80, in which the subject is a mammal.

82. A compound or use according to any of Claims 79 to 81, in which the subject is a human.

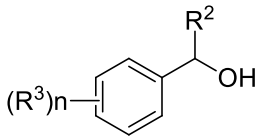
83. A method of preparing a compound according to any of Claims 1, 29, or 52, comprising:

(i) hydrolyzing ethyl-1-(1-phenylethyl)-1*H*-imidazole-5-carboxylate to obtain 1-(1-phenylethyl)-1*H*-imidazole-5-carboxylic acid; and

(ii) reacting the carboxylic acid with an alcohol of structure HO-L^2-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT, in which L^2, R^7, R^8, R^9, R^{10}, T and p are as defined for formula (I).

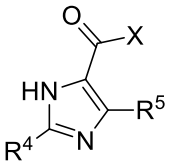
84. A method of preparing a compound according to Claim 1, 29, or 52, comprising:

(i) coupling a compound of formula (II), and a compound of formula (III):



(II)

and



(III)

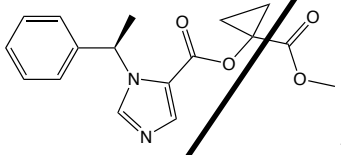
;

in which R^2, R^3, R^4, R^5, R^6, and n are as defined for formula (I) and X is carboxylic acid protecting group;

(ii) removing the protecting group X to form a carboxylic acid; and

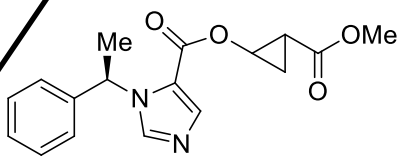
(iii) coupling the carboxylic acid with an alcohol of structure HO-L^2-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT, in which L^2, R^7, R^8, R^9, R^{10}, T and p are as defined for formula (I).

85. A compound according to Claim 1, in which the compound is:

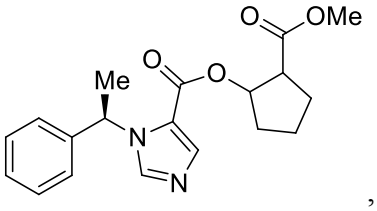


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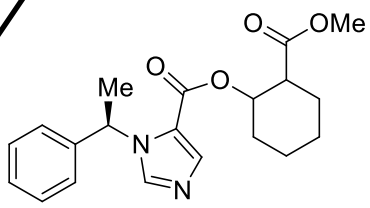
86. A compound according to Claim 1, in which the compound is selected from the group consisting of:



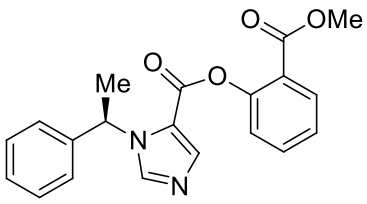
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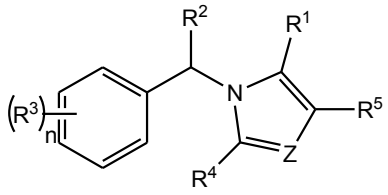
, and



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CLAIMS

1. A compound according to formula (I)



(I)

in which,

R^1 is $L^1C(O)OL^2$-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT;

R^2 is R^1, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, or optionally substituted linear or branched C_2-C_{10} alkynyl, in which the backbone of C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl optionally comprises one or more heteroatoms;

each R_3 is independently halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

Z is N;

R^4 and R^5 are independently hydrogen, halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

L^1 and L^2 are independently a bond, optionally substituted linear or branched C_1-C_{10} alkylene, optionally substituted linear or branched C_2-C_{10} alkenylene, or optionally substituted linear or branched C_2-C_{10} alkynylene, in which the backbone of C_1-C_{10} alkylene, C_2-C_{10} alkenylene, or C_2-C_{10} alkynylene optionally comprises one or more heteroatoms;

T is H, a linear or branched, substituted or unsubstituted C_1-C_{10} alkyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkenyl, linear or branched, substituted or unsubstituted C_2-C_{10} alkynyl, optionally substituted cyclyl, optionally substituted heterocylcyl, optionally substituted aryl, optionally substituted heteroaryl, or PEG, in which the backbone of C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl optionally comprises one or more heteroatoms;

n is an integer from 0-5;

p is 0 or 1, provided that at least one of R^7, R^8, R^9 and R^{10} is not hydrogen; and

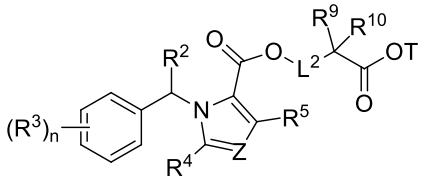
(i) R^7 and R^8 are independently hydrogen, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, optionally substituted linear or branched C_2-C_{10} alkynyl, in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms; and R^9 and R^{10} together with the carbon they are attached to form an optionally substituted 3-8 membered cyclyl or heterocyclyl; or

(ii) R^7 and R^8 together with the carbon they are attached to form an optionally substituted 3-8 membered cyclyl or heterocyclyl; and R^9 and R^{10} are independently hydrogen, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, optionally substituted linear or branched C_2-C_{10} alkynyl, optionally substituted C_4-C_8 cyclyl, optionally substituted C_3-C_8 heterocyclyl, in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms; or

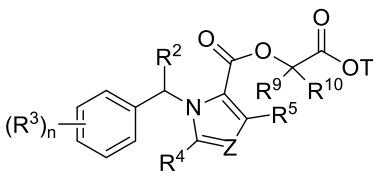
(iii) R^7 and R^9 together with the carbons they are attached to form an optionally substituted 3-8 membered cyclyl, heterocyclyl, aryl or heteroaryl; and R^8 and R^{10} are independently hydrogen, optionally substituted linear or branched C_1-C_{10} alkyl, optionally substituted linear or branched C_2-C_{10} alkenyl, optionally substituted linear or branched C_2-C_{10} alkynyl, optionally substituted C_4-C_8 cyclyl, optionally substituted C_3-C_8 heterocyclyl, in which the backbone of the C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl can contain one or more heteroatoms;

or a salt, solvate, or ester thereof.

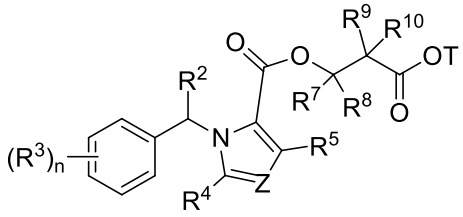
2. A compound according to Claim 1, having a structure of formula (IA), (IB) or (IC):



(IA),



(IB), or



(IC).

3. A compound according to Claim 1 or 2, in which n is 0 or 1.

4. A compound according to any of Claims 1 to 3, in which p is 0 or 1.

5. A compound according to any of Claims 1 to 4, in which L^1 is a bond, optionally substituted linear or branched C_1-C_{10} alkylene, optionally substituted linear or branched C_2-C_{10} alkenylene, or optionally substituted linear or branched C_2-C_{10} alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms.

6. A compound according to any of Claims 1 to 5, in which L^2 is a bond, optionally substituted linear or branched C_1-C_{10} alkylene, optionally substituted linear or branched C_2-C_{10} alkenylene, or optionally substituted linear or branched C_2-C_{10} alkynylene; in which the backbone of C_1-C_{10} alkylene, C_2-C_{10} alkenylene, or C_2-C_{10} alkynylene optionally comprises one or more heteroatoms.

7. A compound according to any of Claims 1 to 6, in which T is hydrogen, optionally substituted C_1-C_{10}alkyl, or optionally substituted cyclyl or heterocyclyl.

8. A compound according to Claim 7, in which T is selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl, 2-hydroxylpropyl, cyclopropyl, cyclobutyl, oxetanyl, morpholinyl, and oxazolindinyl.

9. A compound according to any of Claims 1 to 8, in which R^4 is hydrogen.

10. A compound according to any of Claims 1 to 9, in which R^5 is hydrogen.

11. A compound according to any of Claims 1 to 10, in which R^2 is optionally substituted C_1-C_{10} alkyl.

12. A compound according to Claim 11, in which R^2 is selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, and 2,2-dimethylbutyl.

13. A compound according to any of Claims 1 to 12, in which the carbon to which R^2 is attached to has the R configuration.

14. A compound according to any of Claims 1 to 13, in which R^9 and R^{10} are independently hydrogen, optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl; or R^9 and R^{10} together with the carbon they are attached to form a 3-, 4-, 5, or 6- membered cyclyl.

15. A compound according to any of Claims 1 to 14, in which R^9 and R^{10} are independently optionally substituted C_1-C_{10} alkyl.

16. A compound according to any of Claims 1 to 15, in which R^9 and R^{10} are the same.

17. A compound according to any of Claims 1 to 14, in which one of R^9 and R^{10} is optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl, and the other is hydrogen.

18. A compound according to any of Claims 1 to 17, in which R^9 and R^{10} are independently selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl, phenyl, pyridyl, thiophene, furanyl, pyrazolyl, cyclohexyl, cyclohexenyl, cyclopentyl, cyclopentenyl, and piperdinyl.

19. A compound according to any of Claims 1 to 15, 17 or 18, in which the carbon to which R^9 and R^{10} are attached has the R configuration.

20. A compound according to any of Claims 1 to 15, 17 or 18, in which the carbon to which R^9 and R^{10} are attached has the S configuration.

21. A compound according to any of Claims 1 to 20, in which R^7 and R^8 are independently hydrogen, optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl; or R^7 and R^8 together with the carbon they are attached to form a 3-, 4-, 5, or 6- membered cyclyl.

22. A compound according to any of Claims 1 to 21, in which R^7 and R^8 are independently optionally substituted C_1-C_{10}alkyl.

23. A compound according to any of Claims 1 to 22, in which R^7 and R^8 are the same.

24. A compound according to any of Claims 1 to 21, in which one of R^7 and R^8 is optionally substituted C_1-C_{10}alkyl, optionally substituted C_4-C_6cyclyl or optionally substituted C_4-C_6heterocyclyl, and the other is hydrogen.

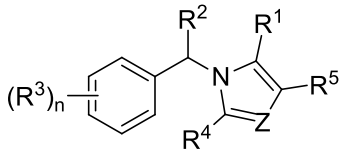
25. A compound according to any of Claims 1 to 24, in which R^7 and R^8 are independently selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, butyl, t-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, 2,2-dimethylbutyl, phenyl, pyridyl, thiophene, furanyl, pyrazolyl, cyclohexyl, cyclohexenyl, cyclopentyl, cyclopentenyl, and piperdinyl.

26. A compound according to any of Claims 1 to 23, 24 or 25, in which the carbon to which R^7 and R^8 are attached has the R configuration.

27. A compound according to any of Claims 1 to 23, 24 or 25, in which the carbon to which R^7 and R^8 are attached has the S configuration.

28. A compound according to any of Claims 1 to 27, in which R^7 and R^9 together with the carbons they are attached to form an optionally substituted 3-8 membered cyclyl or heterocyclyl.

29. A compound having a structure of formula (I):



(I)

in which

R^1 is $L^1C(O)OL^2$-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT;

R^2 is R^1 or a linear or branched, substituted or unsubstituted C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl, in which the backbone of C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl optionally comprises one or more heteroatoms;

each R^3 is independently halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

Z is N;

R^4 and R^5 are independently hydrogen, halogen, CN, CF_3, SR^2, SOR^2, SO_2R^2, OR^2, CO_2H, CO_2R^2, $N(R^2)_2$, NHR^2, NO_2, or R^2;

R^7 and R^8 are independently hydrogen, linear or branched, substituted or unsubstituted C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl, or R^7 and R^8 taken together form an optionally substituted 3-8 membered carbocyclyl or heterocyclyl;

R^9 and R^{10} are independently hydrogen, optionally substituted C_4-C_8 cyclyl or optionally substituted C_3-C_8heterocyclyl, with the proviso that at least one of R^9, and R^{10} is not hydrogen;

L^1 and L^2 are independently a bond, a linear or branched, substituted or unsubstituted C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms;

T is hydrogen, linear or branched, substituted or unsubstituted C_1-C_{10}alkyl, C_2-C_{10}alkenyl, C_2-C_{10}alkynyl, optionally substituted cyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, or PEG, in which the backbone of C_1-C_{10}alkyl, C_2-C_{10}alkenyl, or C_2-C_{10}alkynyl optionally comprises one or more heteroatoms;

each n is an integer of 0-5; and

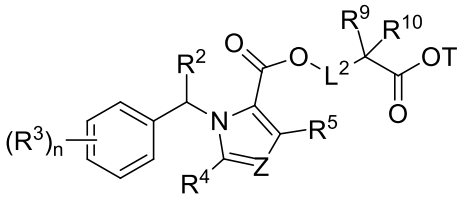
each p is 0 or 1,

or a salt, solvate, or ester thereof.

30. A compound according to Claim 29, in which L^1 is a linear or branched, substituted or unsubstituted C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms.

31. A compound according to Claim 29 or 30, in which L^2 is a linear or branched, substituted or unsubstituted C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene; in which the backbone of C_1-C_{10}alkylene, C_2-C_{10}alkenylene, or C_2-C_{10}alkynylene optionally comprises one or more heteroatoms.

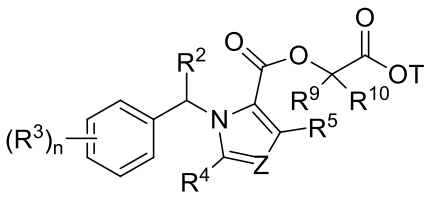
32. A compound according to Claim 29 or 31 having a structure of formula (IA):



(IA)

.

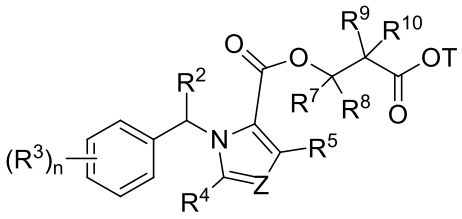
33. A compound according to Claim 29 having a structure of formula (IB):



(IB)

.

34. A compound according to Claim 29 having a structure of formula (IC):



(IC)

.

35. A compound according to any of Claims 29 to 34, in which R^9 is optionally substituted C_4-C_6cyclyl and R^{10} is hydrogen.

36. A compound according to any of Claims 29 to 34, in which R^9 is optionally substituted C_4-C_6heterocyclyl and R^{10} is hydrogen.

37. A compound according to any of Claims 29 to 36, in which R^4 is hydrogen.

38. A compound according to any of Claims 29 to 37, in which R^5 is hydrogen.

39. A compound according to any of Claims 29 to 38, in which n is 0.

40. A compound according to any of Claims 29 to 39, in which n is 1.

41. A compound according to any of Claims 29 to 40, in which R^2 is optionally substituted C_1-C_{10} alkyl.

42. A compound according to Claim 41, in which R^2 is methyl, ethyl, n-propyl, isopropyl, butyl, sec-butyl, iso-butyl, tert-butyl, pentyl, neopentyl, hexyl, 2-methylpentyl, 3-methylpentyl, 2,3-dimethylbutyl, or 2,2-dimethylbutyl.

43. A compound according to any of Claims 29 to 42, in which the carbon to which R^2 is attached is in the R configuration.

44. A compound according to any of Claims 29 to 43, in which T is optionally substituted C_1-C_{10}alkyl.

45. A compound according to Claim 44, in which T is methyl or ethyl.

46. A compound according to any of Claims 29 to 43, in which T is optionally substituted cyclyl or heterocyclyl.

47. A compound according to Claim 46, in which T is cyclopropyl, cyclobutyl, oxetanyl, morpholinyl, or oxazolindinyl.

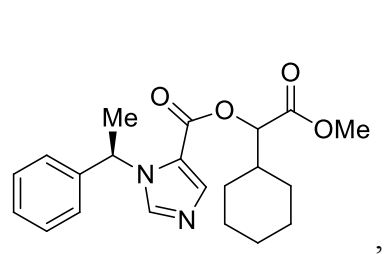
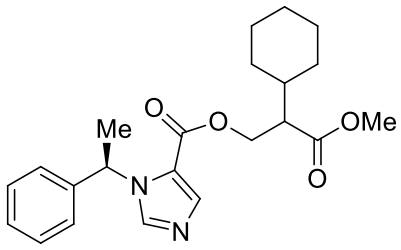
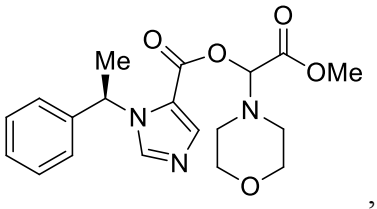
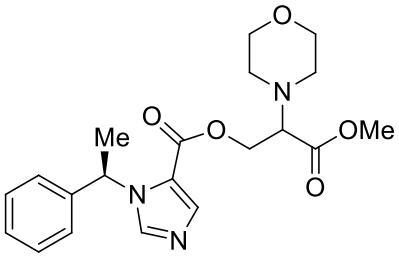
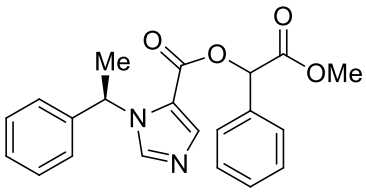
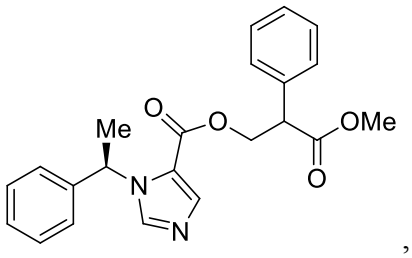
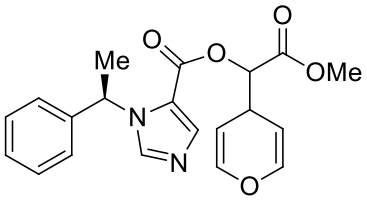
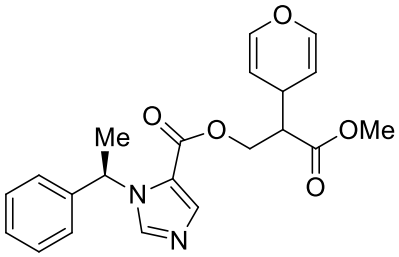
48. A compound according to any preceding claim, in which the compound is in the form of a single diastereomer.

49. A compound according to any preceding claim, in which the compound is in the form of a single enantiomer.

50. A compound according to any preceding claim, in which the compound is in the form of a salt.

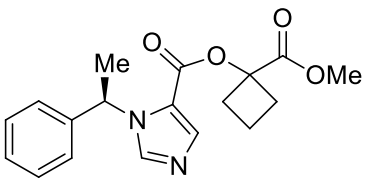
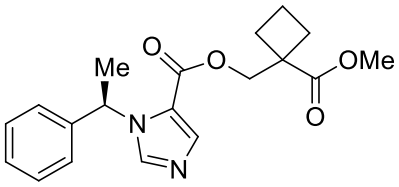
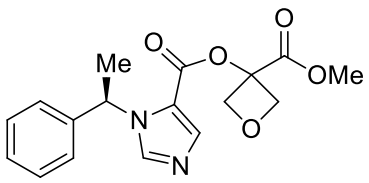
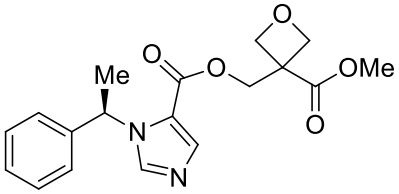
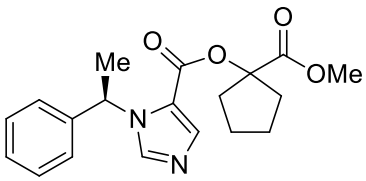
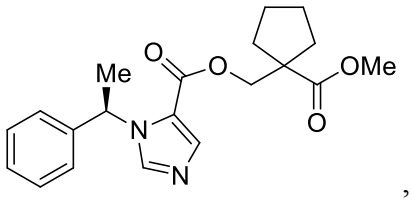
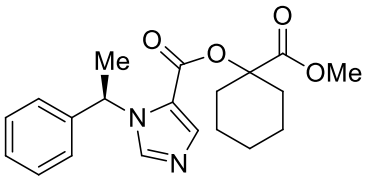
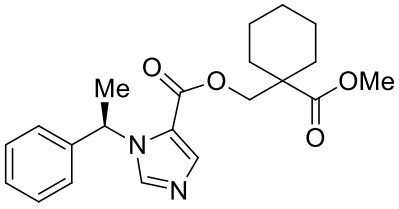
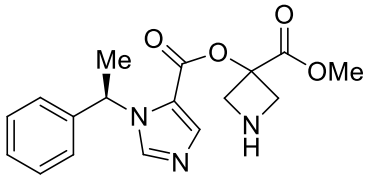
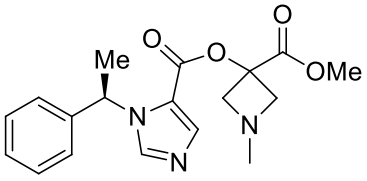
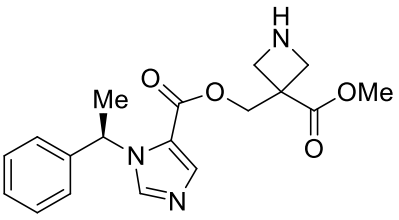
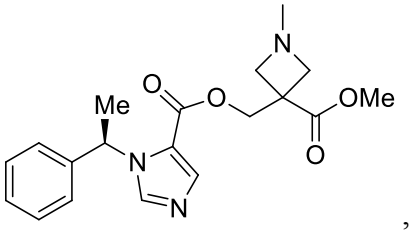
51. A compound according to any of Claims 1 to 49, in which the compound is in the form of a solvate.

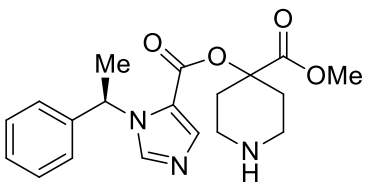
52. A compound according to Claim 29, in which the compound of formula (I) is selected from the group consisting of

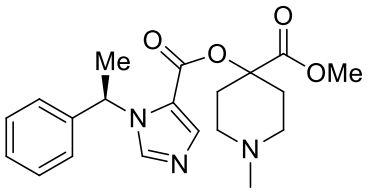









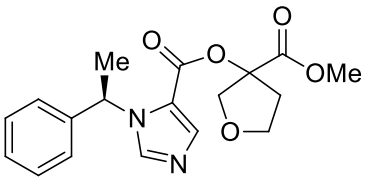
, and .

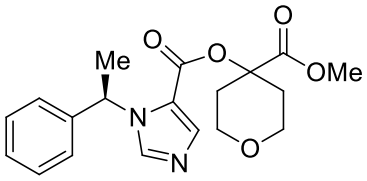
53. A compound having a structure selected from the group consisting of



,


,


, and


, or a salt, solvate, or ester thereof.

54. A pharmaceutical composition comprising a compound according to any preceding claim and a pharmaceutically acceptable carrier.

55. A compound according to any of Claims 1 to 53, for use as an anesthetic or sedative.

56. Use of a compound according to any of Claims 1 to 53 in the preparation of a medicament for use as an anesthetic or sedative.

57. A compound or use according to claim 55 or 56, in which the subject is a mammal.

58. A compound or use according to Claim 55, 56 or 57, in which the subject is a human.

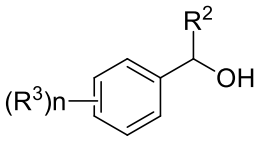
59. A method of preparing a compound according to Claim 1 or 29, comprising:

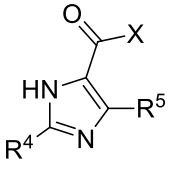
(i) hydrolyzing ethyl-1-(1-phenylethyl)-1*H*-imidazole-5-carboxylate to obtain 1-(1-phenylethyl)-1*H*-imidazole-5-carboxylic acid; and

(ii) reacting the carboxylic acid with an alcohol of structure HO-L^2-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT, in which L^2, R^7, R^8, R^9, R^{10}, T and p are as defined for formula (I).

60. A method of preparing a compound according to Claim 1 or 29, comprising:

(i) coupling a compound of formula (II), and a compound of formula (III):



(II)
and


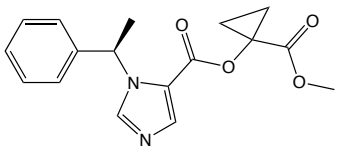
(III)
;

in which R^2, R^3, R^4, R^5, R^6, and n are as defined for formula (I) and X is carboxylic acid protecting group;

(ii) removing the protecting group X to form a carboxylic acid; and

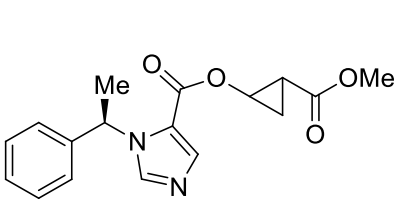
(iii) coupling the carboxylic acid with an alcohol of structure HO-L^2-$[C(R^7R^8)]_p$-$C(R^9R^{10})$-C(O)OT, in which L^2, R^7, R^8,R^9, R^{10}, T and p are as defined for formula (I).

61. A compound according to Claim 1, in which the compound is:

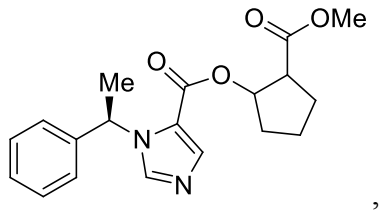


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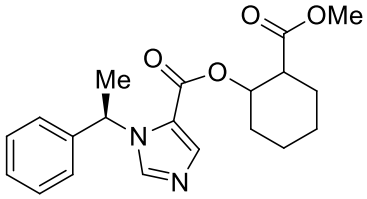
62. A compound according to Claim 1, in which the compound is selected from the group consisting of:



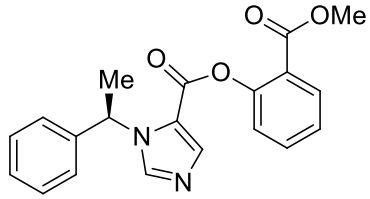
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, and



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