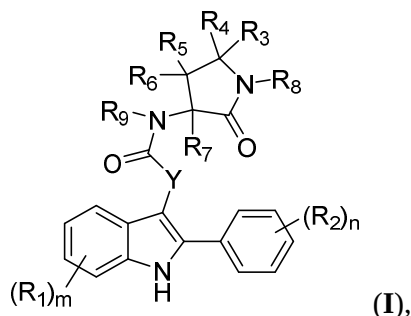


CLAIMS

1. A compound chosen from a compound of Formula (I):



a deuterated derivative thereof, a pharmaceutically acceptable salt thereof, and a solvate of any of the compound, the deuterated derivative thereof, or the pharmaceutically acceptable salt thereof, wherein:

- (i) each **R₁** is independently chosen from
- halogen groups,
 - hydroxy,
 - cyano,
 - C₁-C₄ linear, branched, and cyclic alkyl groups,
 - C₂-C₄ linear, branched, and cyclic alkenyl groups,
 - C₁-C₄ linear, branched, and cyclic hydroxyalkyl groups,
 - C₁-C₄ linear, branched, and cyclic alkoxy groups,
 - C₁-C₄ linear, branched, and cyclic haloalkyl groups,
 - C₁-C₄ linear, branched, and cyclic haloalkoxy groups,
 - benzyloxy groups,
 - 3 to 6-membered heterocycloalkenyl groups,
 - 3 to 6-membered heterocycloalkyl groups, and
 - 5 and 6-membered heteroaryl groups;
- (ii) each **R₂** is independently chosen from
- halogen groups,
 - cyano,
 - C₁-C₄ linear, branched, and cyclic alkoxy groups,
 - C₁-C₄ linear, branched, and cyclic haloalkoxy groups,
 - C₁-C₄ linear, branched, and cyclic alkyl groups, and

C₁-C₄ linear, branched, and cyclic haloalkyl groups;

- (iii) **m** is chosen from 0, 1, 2, 3, and 4;
- (iv) **n** is chosen from 0, 1, 2, 3, 4, and 5;
- (v) **Y** is chosen from divalent C₁-C₈ linear and branched alkyl groups and divalent C₁-C₈ linear and branched thioalkyl groups, wherein the divalent alkyl groups and divalent thioalkyl groups are optionally substituted with at least one group chosen from
 - C₁-C₄ alkyl groups,
 - halogen groups, and
 - hydroxy;
- (vi) each of **R₃** and **R₄** is independently chosen from
 - hydrogen,
 - C₁-C₃ linear, branched, and cyclic alkyl groups,
 - C₁-C₃ linear, branched, and cyclic hydroxyalkyl groups, and
 - C₁-C₃ linear, branched, and cyclic haloalkyl groups, or

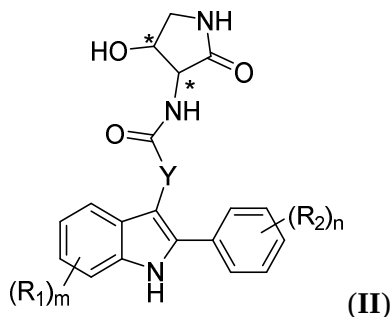
R₃ and **R₄**, together with the carbon atom to which they are attached, form a C₃-C₆ cycloalkyl group or carbonyl group;
- (vii) each of **R₅** and **R₆** is independently chosen from
 - hydrogen,
 - hydroxy,
 - C₁-C₄ linear, branched, and cyclic alkyl groups,
 - C₁-C₄ linear, branched, and cyclic haloalkyl groups, and
 - OC(O)C₁-C₄ linear, branched, and cyclic alkyl groups; and
- (viii) each of **R₇**, **R₈**, and **R₉** is independently chosen from
 - hydrogen,
 - C₁-C₄ linear, branched, and cyclic alkyl groups, and
 - C₁-C₄ linear, branched, and cyclic haloalkyl groups.

2. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **R₃** is hydrogen and **R₄** is hydrogen.

3. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein each **R₅** and **R₆** is independently chosen from hydrogen and hydroxy.

4. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein each **R₁** is independently chosen from halogen.
5. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein each **R₁** is fluoro.
6. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein each **R₂** is independently chosen from fluoro and methyl.
7. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to of claim 1, wherein **m** is 1 or 2.
8. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **n** is 1 or 2.
9. The at least one compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent ethyl optionally substituted with at least one group chosen from C₁-C₄ alkyl, halogen, and hydroxy.
10. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent ethyl.
11. The at least one compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is -CH₂CH(CH₃)-.
12. The at least one compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent ethyl substituted with one or two groups chosen from halogen groups and hydroxy.
13. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent ethyl substituted with one halogen.

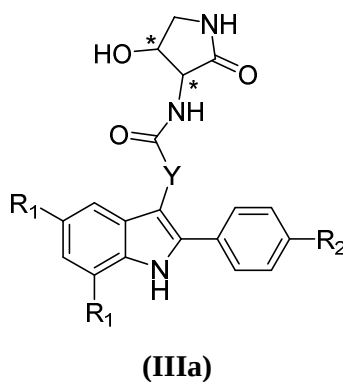
14. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 13, wherein the halogen is fluoro.
15. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 13, wherein the halogen is chloro.
16. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent ethyl substituted with two halogen groups.
17. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 16, wherein the halogen groups are fluoro.
18. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 16, wherein the halogen groups are chloro.
19. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 16, wherein the halogen groups are fluoro and chloro.
20. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent ethyl substituted with one hydroxy.
21. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent thiomethyl optionally substituted with at least one group chosen from C₁-C₄ alkyl groups, halogen groups, and hydroxy.
22. The compound, deuterated derivative, pharmaceutically acceptable salt, or solvate according to claim 1, wherein **Y** is divalent thiomethyl.
23. A compound chosen from a compound of Formula **II**:



a deuterated derivative thereof, a pharmaceutically acceptable salt thereof, and a solvate of any of the compound, the deuterated derivative thereof, or the pharmaceutically acceptable salt thereof, wherein:

- (i) each **R₁** is independently chosen from
 - halogen groups,
 - cyano,
 - methyl,
 - cyclopropyl,
 - isopropyl,
 - C₂-C₃ linear and branched alkenyl groups,
 - hydroxypropyl groups,
 - methoxy,
 - dihydrofuran groups, and
 - furan groups;
- (ii) each **R₂** is independently chosen from
 - fluoro,
 - bromo,
 - cyano, and
 - methyl;
- (iii) **m** is chosen from 0, 1, 2, and 3;
- (iv) **n** is chosen from 0, 1, and 2; and
- (v) **Y** is divalent ethyl or divalent thiomethyl optionally substituted with at least one group chosen from
 - fluoro,
 - methyl, and
 - hydroxy.

24. The compound of claim 1 or 23 chosen from compounds of Formula **IIIa**:



a deuterated derivative thereof, a pharmaceutically acceptable salt thereof, and a solvate of any of the compound, the deuterated derivative thereof, or the pharmaceutically acceptable salt thereof, wherein:

(i) each **R₁** is independently chosen from

fluoro,
chloro,
bromo,
cyano,
methyl,
cyclopropyl,
ethyl,
hydroxypropyl,
isopropyl,
propen-2-yl,
dihydrofuran,
furan, and
methoxy;

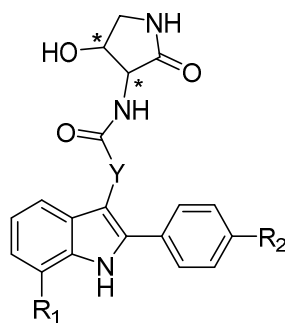
(ii) each **R₂** is independently chosen from

fluoro,
bromo,
cyano, and
methyl; and

(iii) **Y** is divalent ethyl or divalent thiomethyl optionally substituted with at least one group chosen from

fluoro,
methyl, and
hydroxy.

25. The compound of claim 1 or 23 chosen from compounds of Formula **IIIb**:



(IIIb)

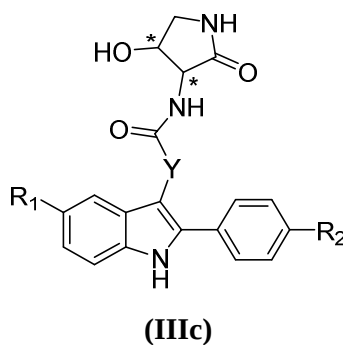
a deuterated derivative thereof, a pharmaceutically acceptable salt thereof, and a solvate of the compound, the deuterated derivative thereof, or the pharmaceutically acceptable salt thereof, wherein:

(i) each **R₁** is independently chosen from

fluoro,
chloro,
bromo,
cyano,
methyl,
cyclopropyl,
ethyl,
hydroxypropyl,
isopropyl,
propen-2-yl,
dihydrofuran,
furan, and
methoxy;

- (ii) each **R₂** is independently chosen from
- fluoro,
 - bromo,
 - cyano, and
 - methyl; and
- (iii) **Y** is divalent ethyl or divalent thiomethyl optionally substituted with at least one group chosen from
- fluoro,
 - methyl, and
 - hydroxy.

26. The compound of claim 1 or 23 chosen from compounds of Formula **IIIc**:



a deuterated derivative thereof, a pharmaceutically acceptable salt thereof, and a solvate of any of the compound, the deuterated derivative thereof, or the pharmaceutically acceptable salt thereof, wherein:

- (i) each **R₁** is independently chosen from
- fluoro,
 - chloro,
 - bromo,
 - cyano,
 - methyl,
 - cyclopropyl,
 - ethyl,
 - hydroxypropyl,
 - isopropyl,

propen-2-yl,
dihydrofuran,
furan, and
methoxy;

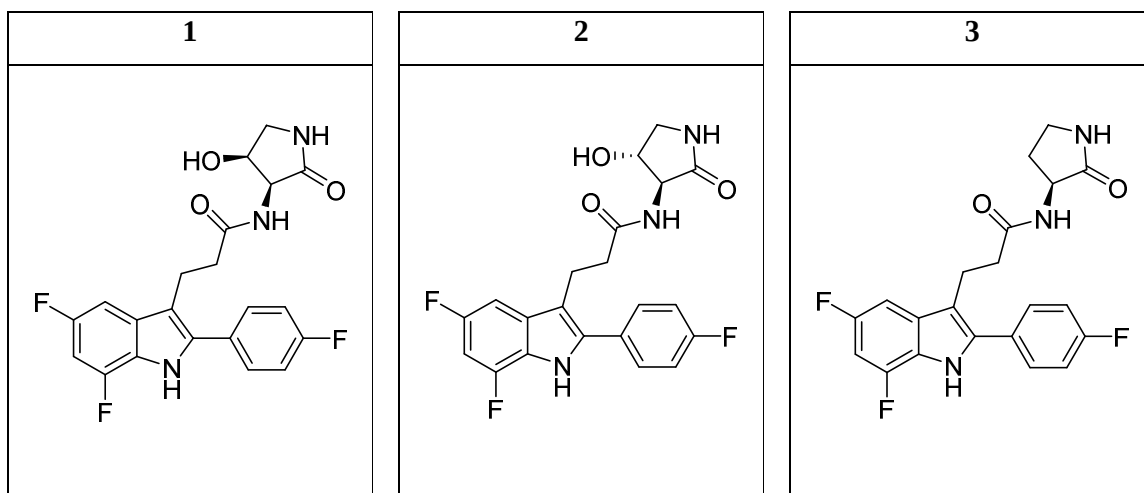
(ii) each **R**₂ is independently chosen from

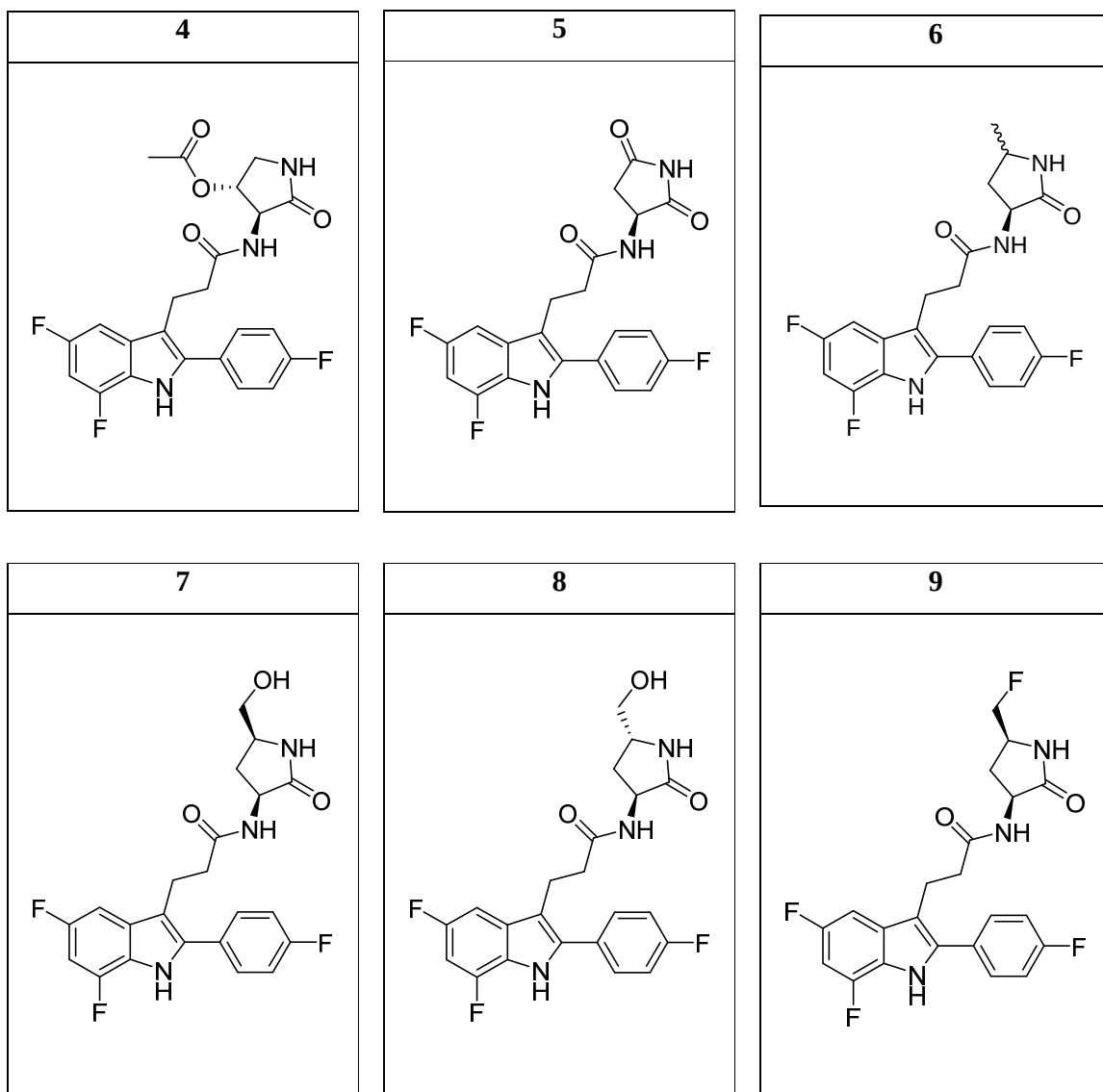
fluoro,
bromo,
cyano, and
methyl; and

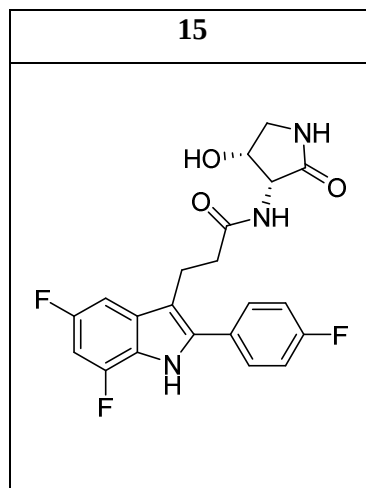
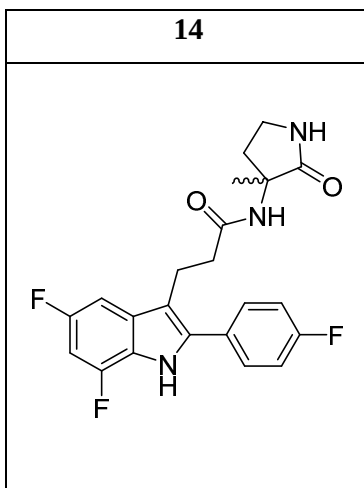
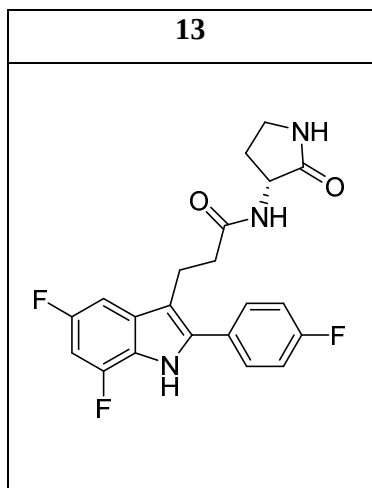
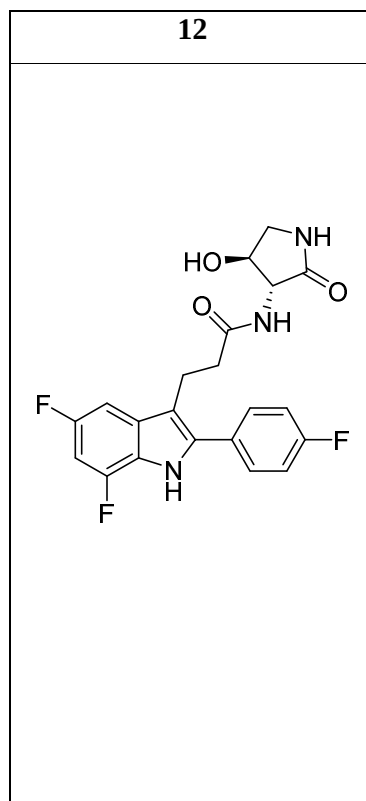
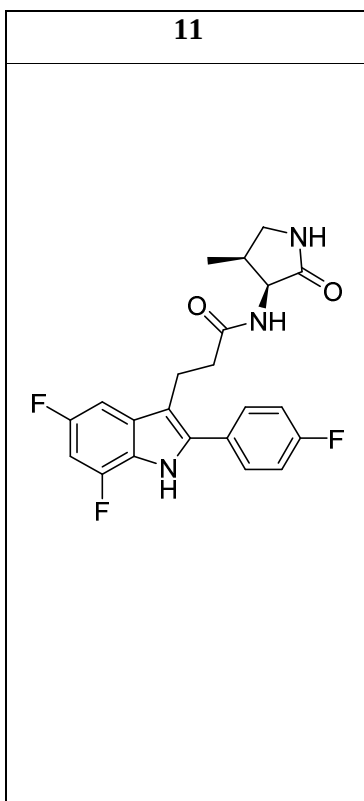
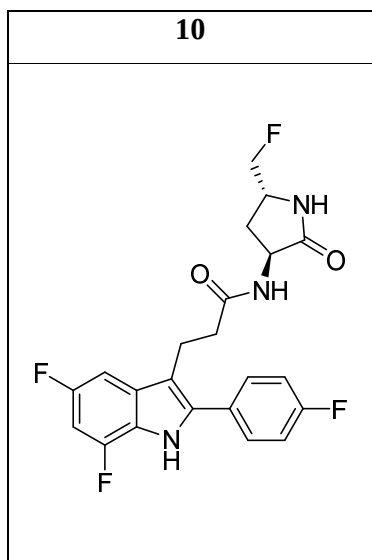
(iii) **Y** is divalent ethyl or divalent thiomethyl optionally substituted with at least one group chosen from

fluoro,
methyl, and
hydroxy.

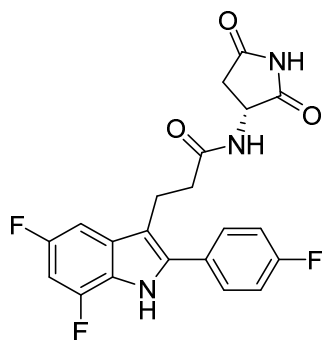
27. A compound chosen from



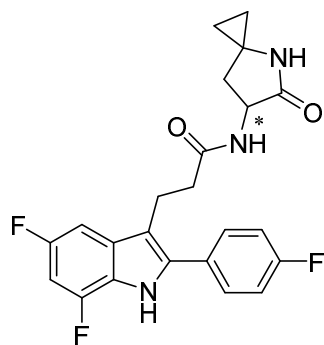




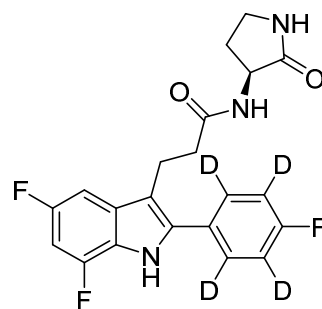
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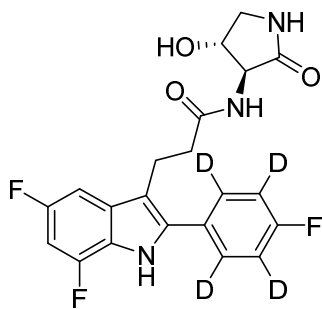
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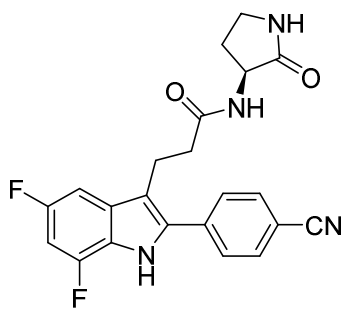
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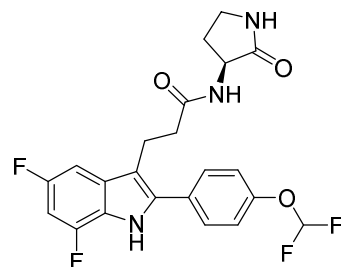
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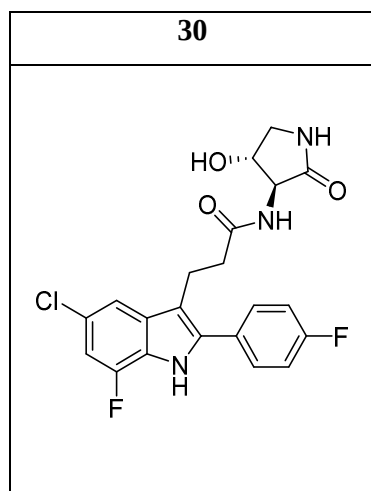
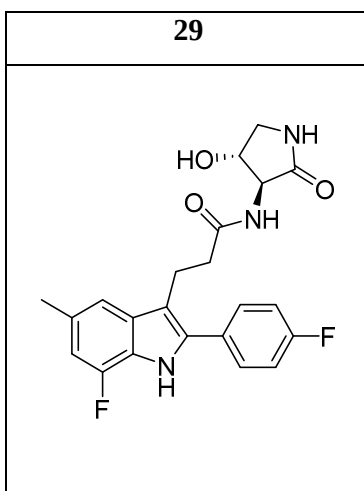
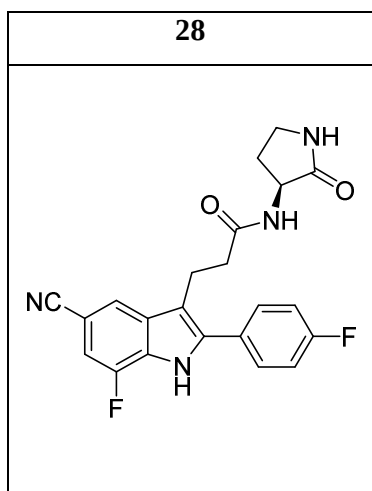
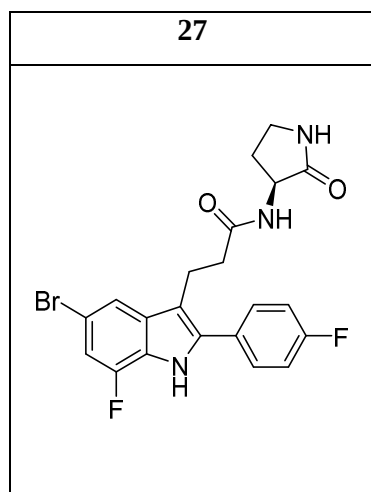
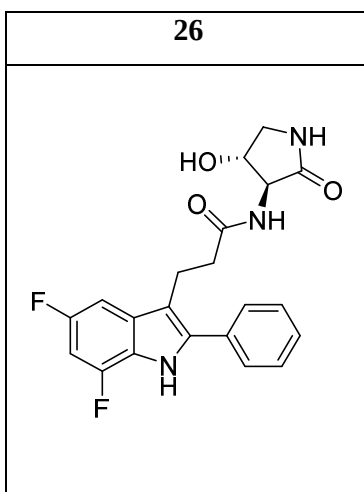
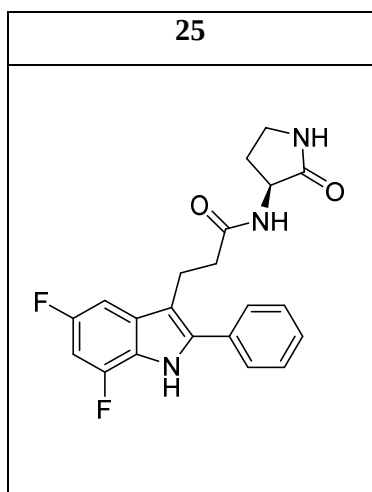
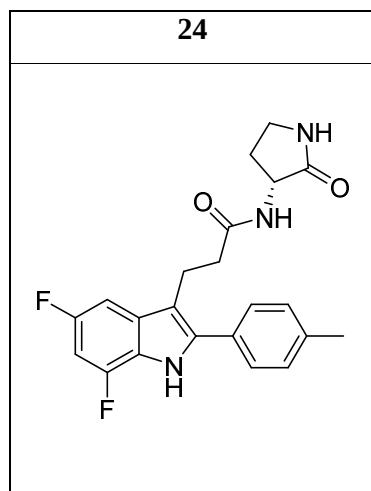
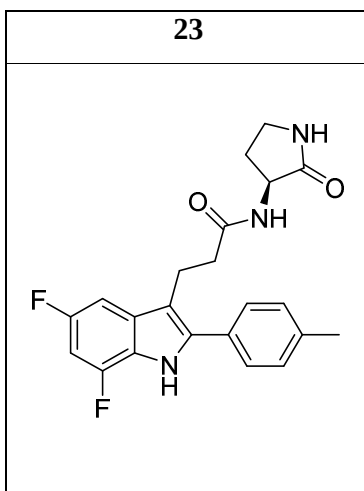
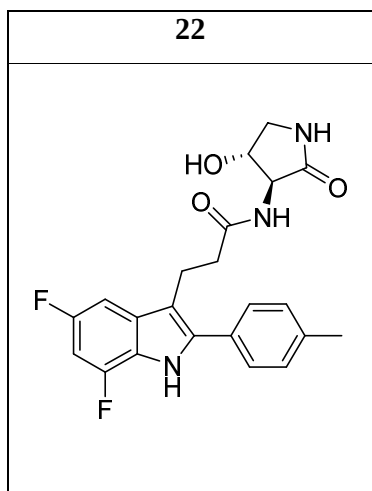


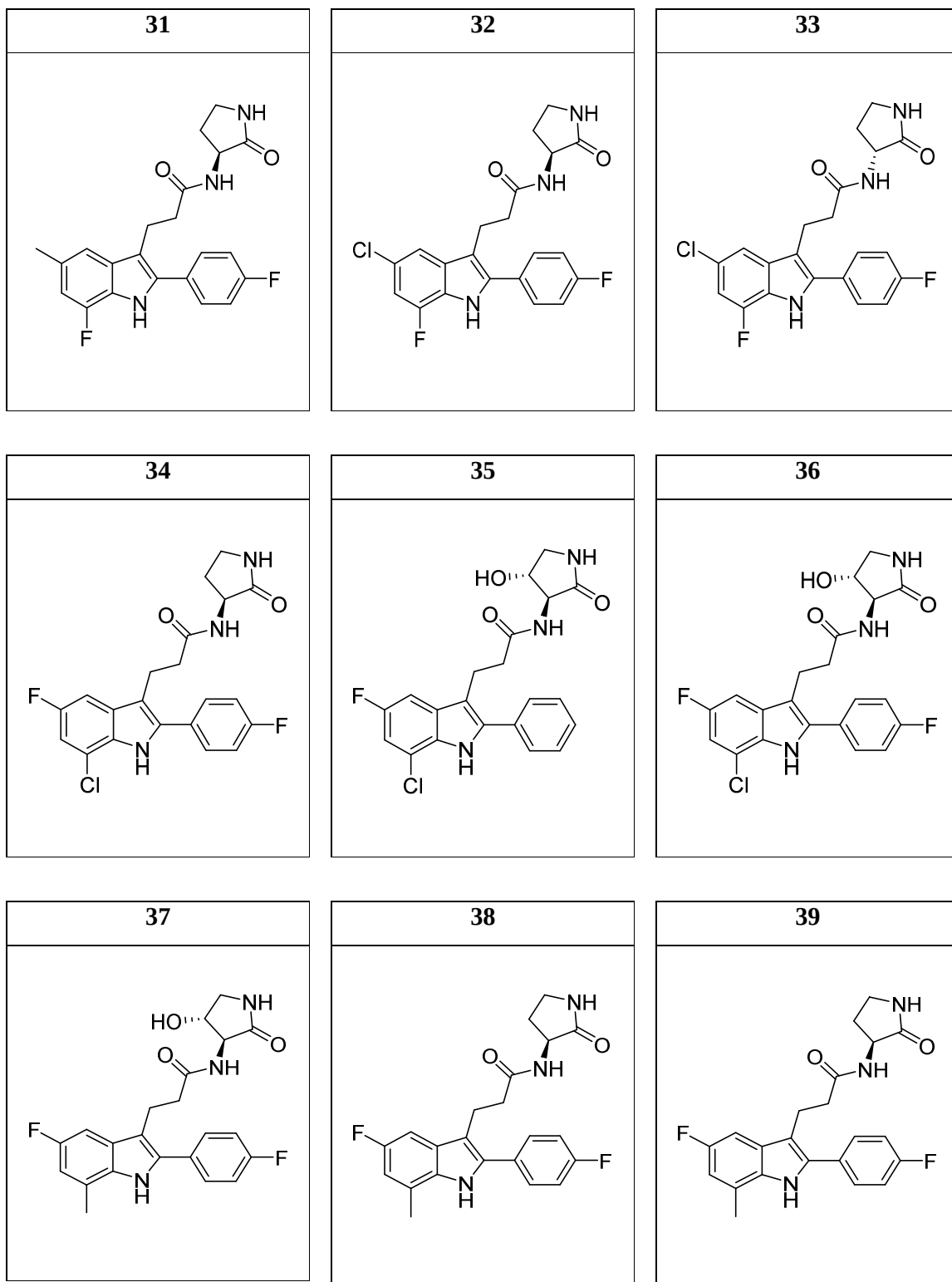
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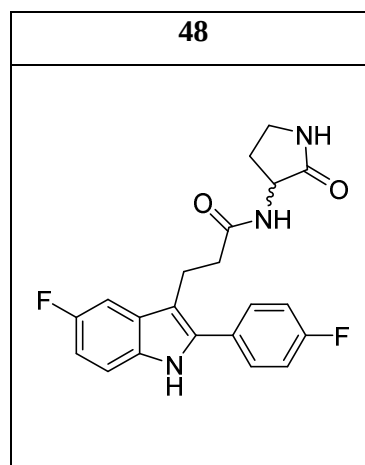
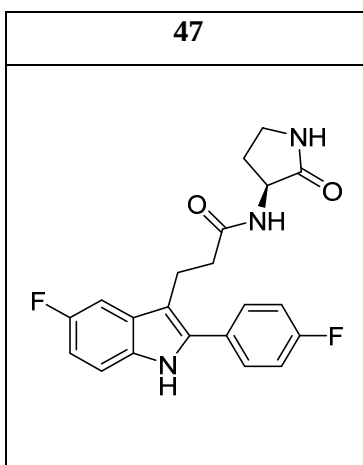
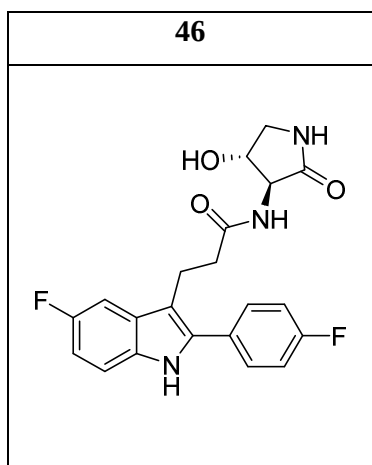
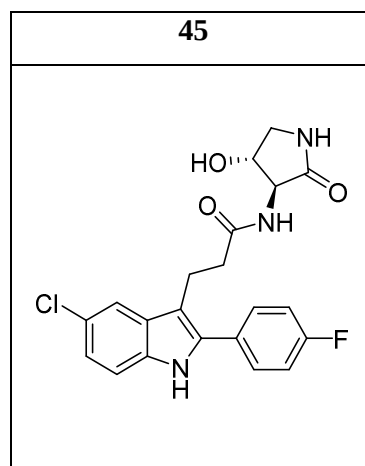
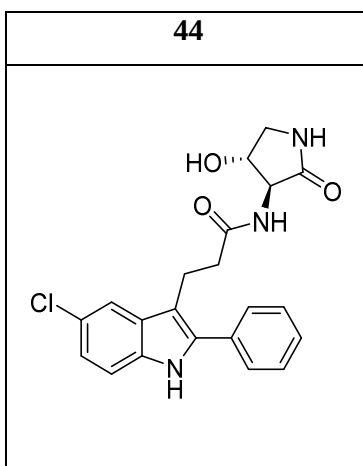
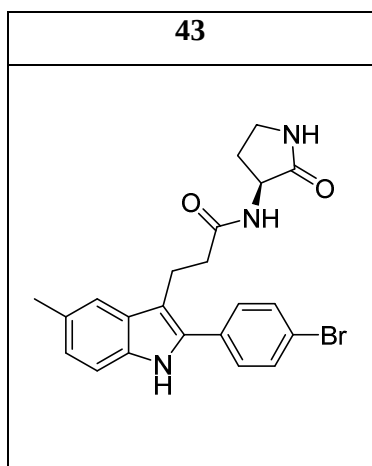
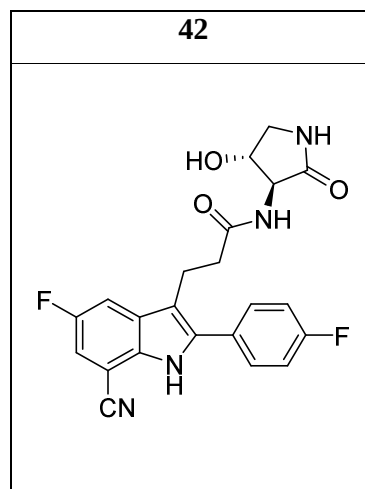
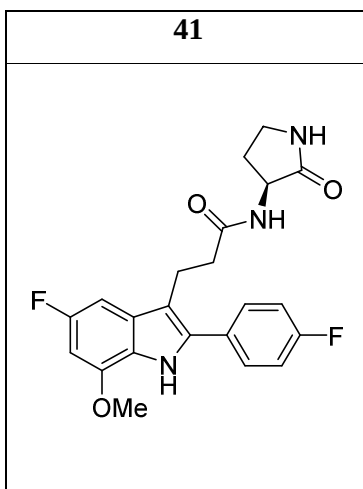
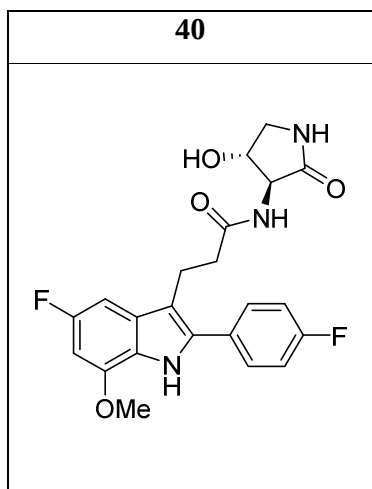


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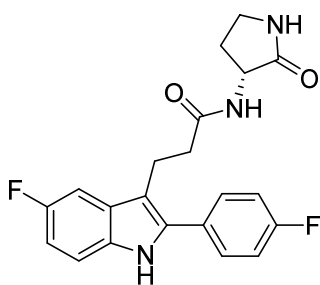




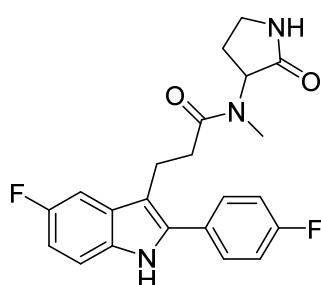




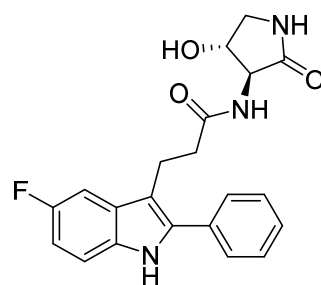
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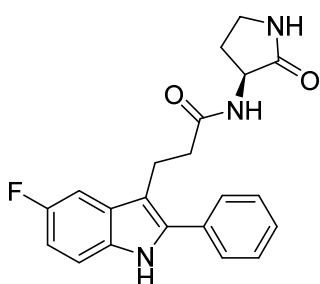
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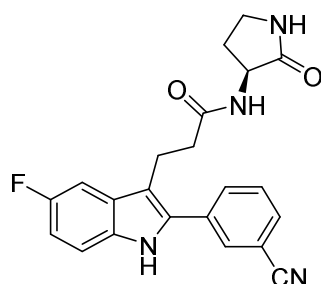
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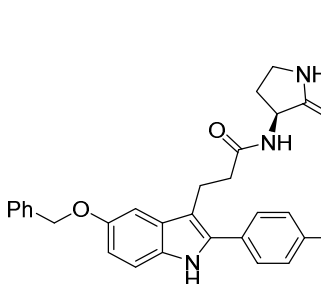
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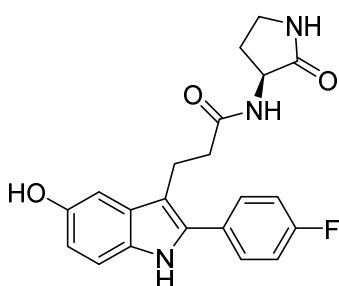
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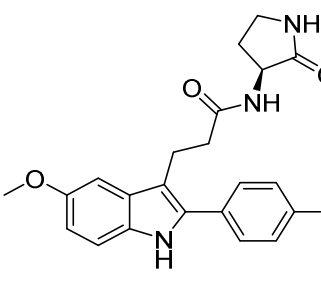
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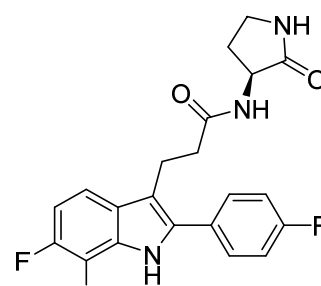
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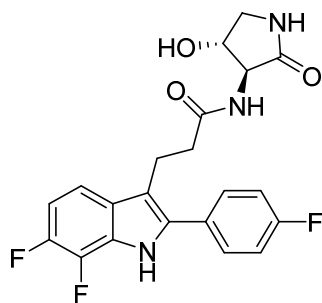
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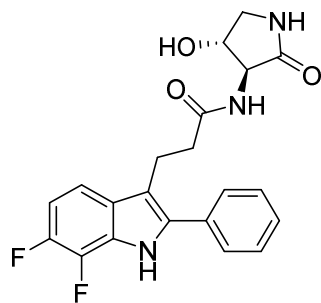
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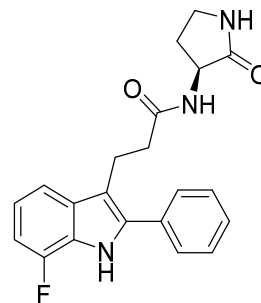
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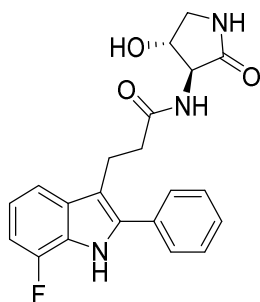
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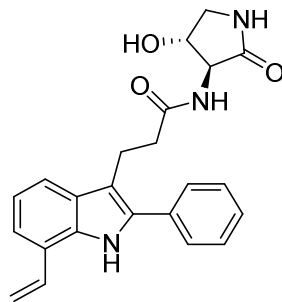
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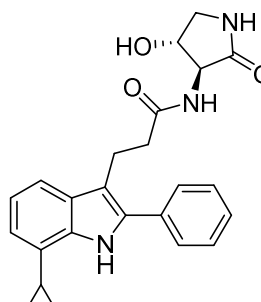
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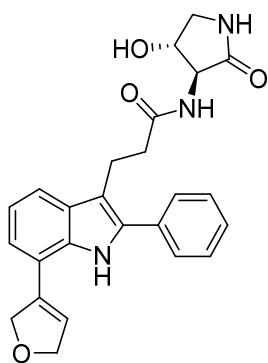
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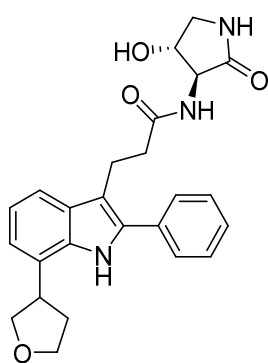
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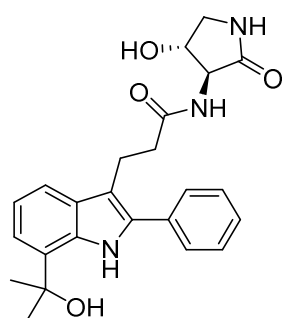
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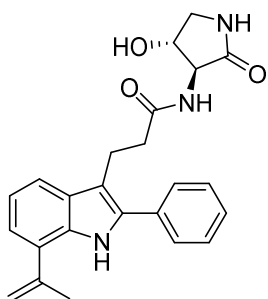
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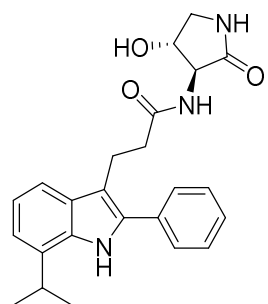
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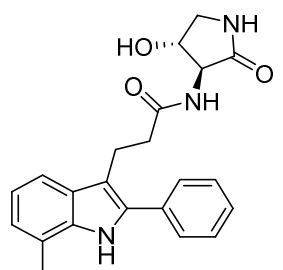
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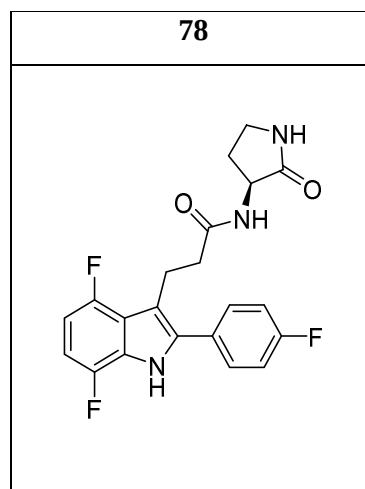
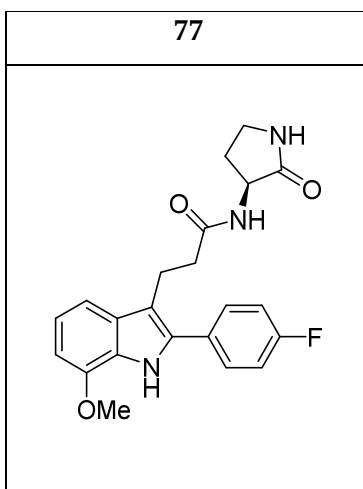
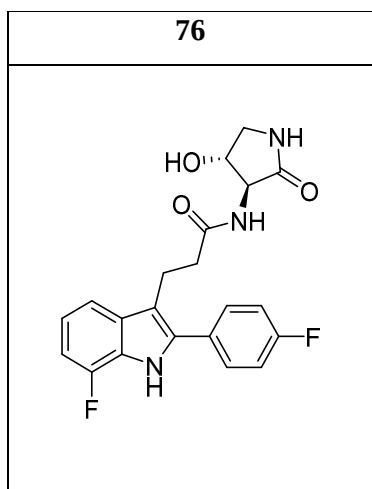
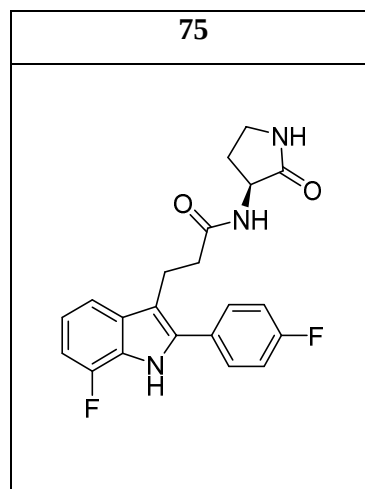
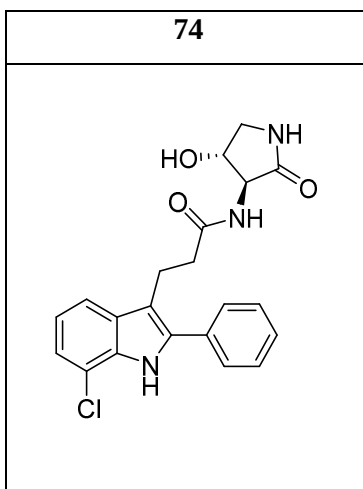
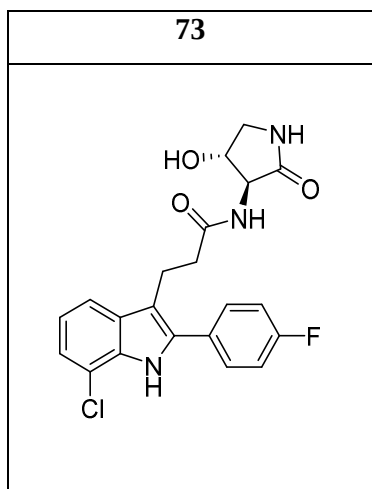
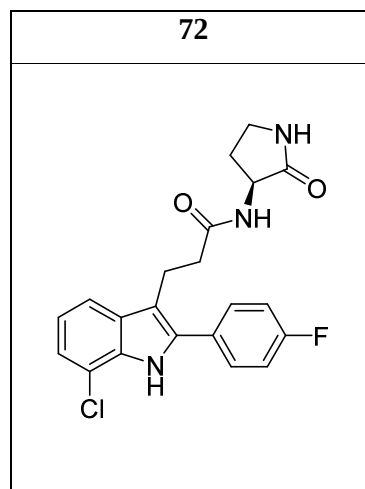
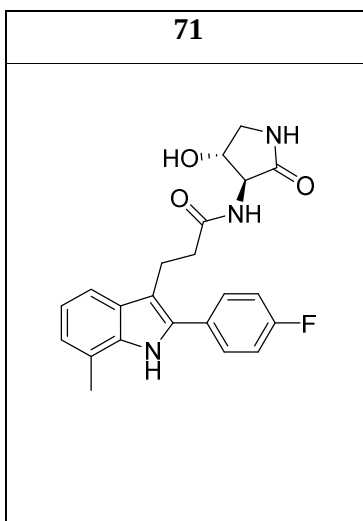
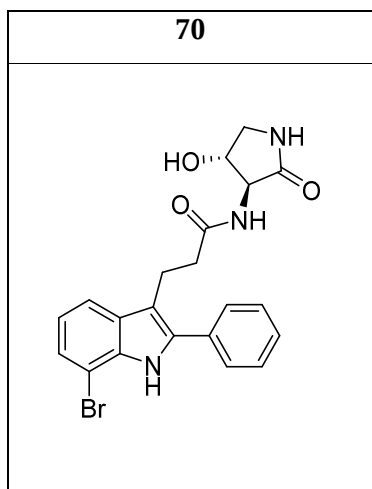


68

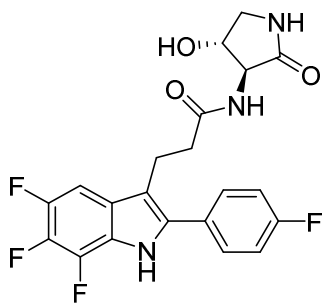


69

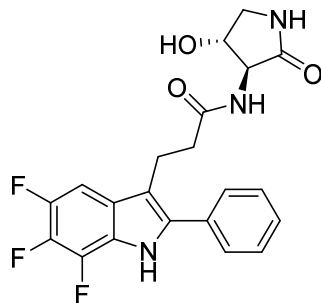




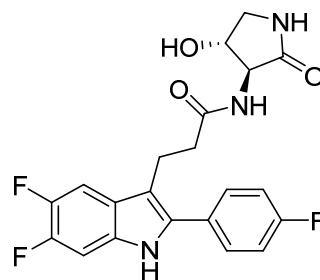
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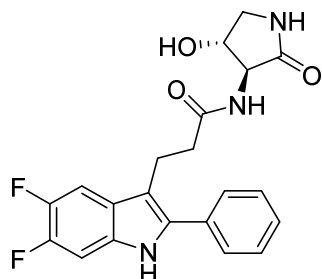
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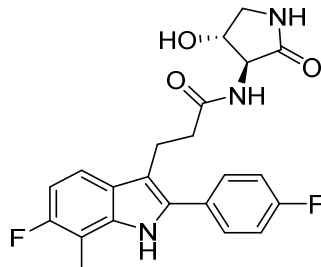
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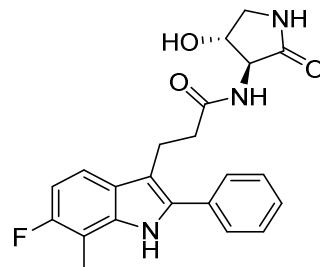
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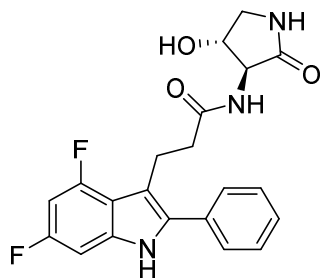
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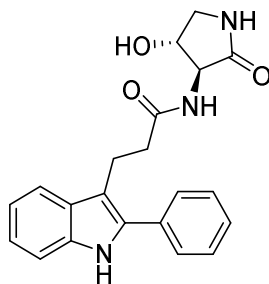
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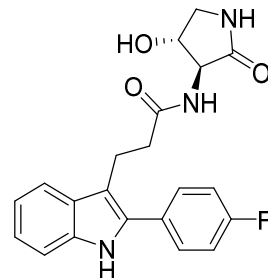
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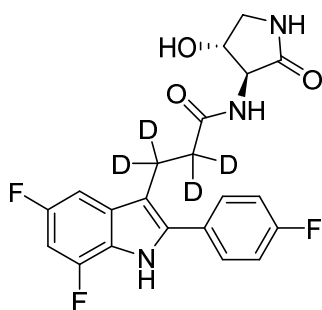
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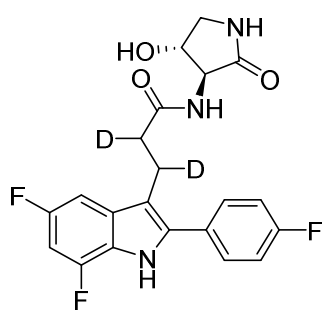
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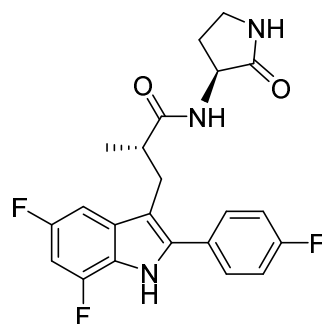
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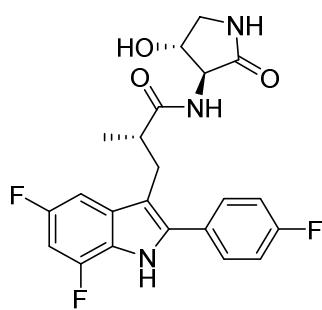
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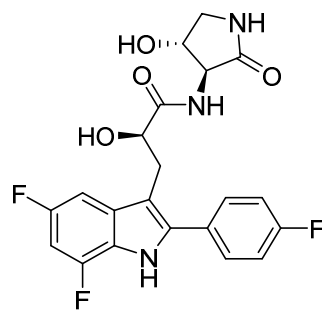
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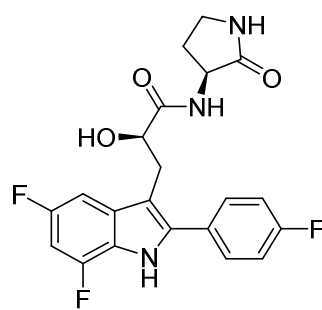
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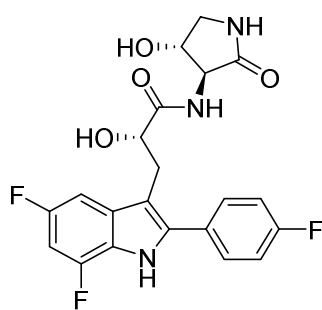
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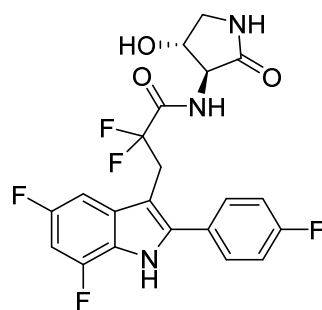
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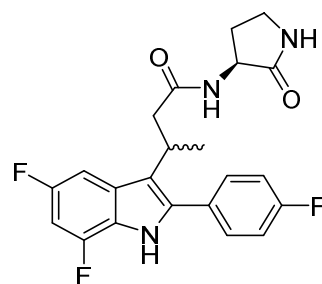
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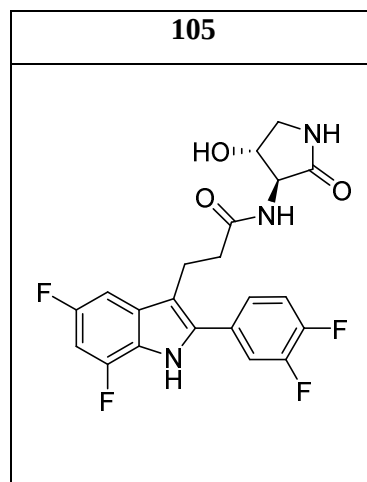
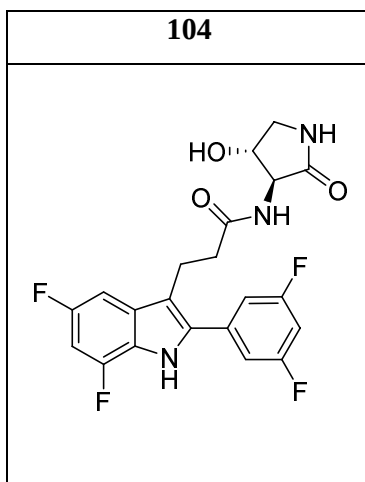
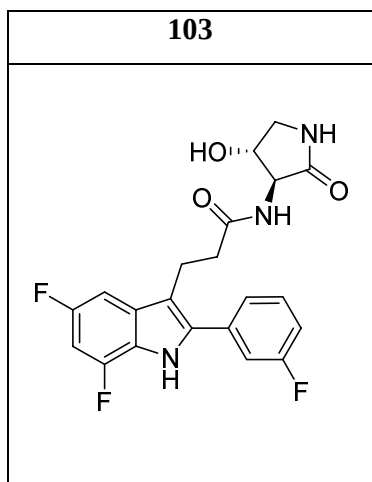
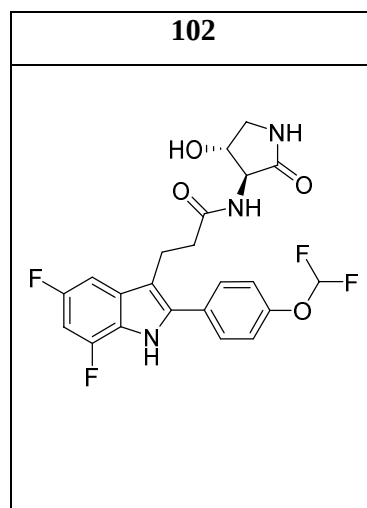
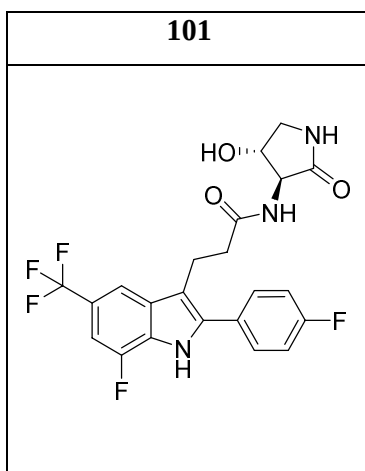
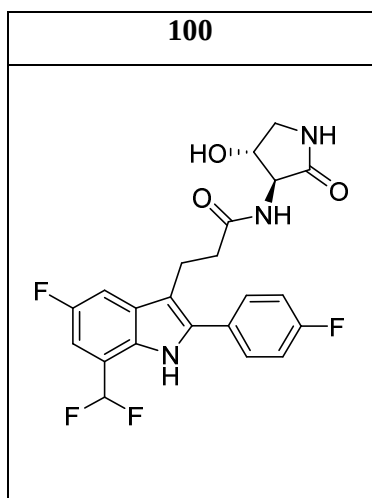
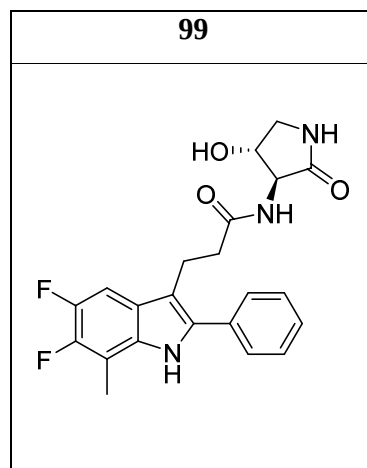
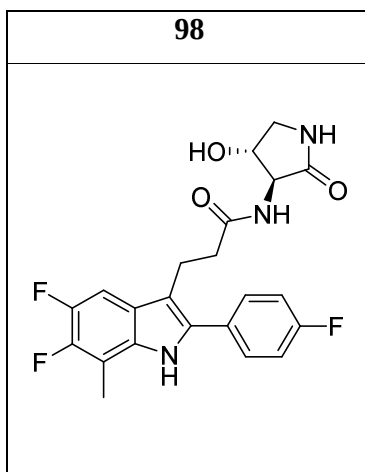
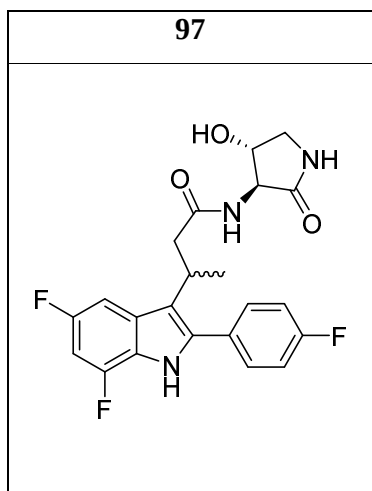


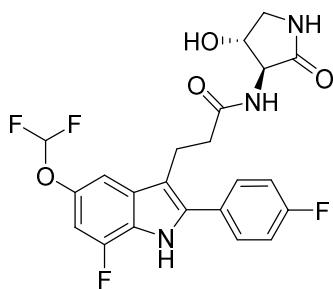
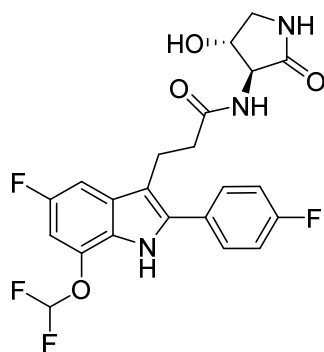
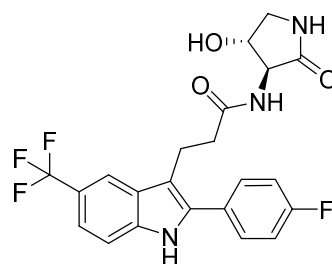
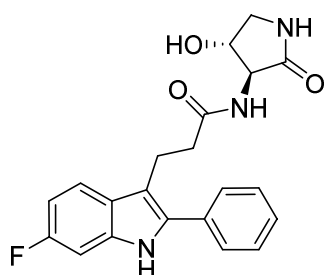
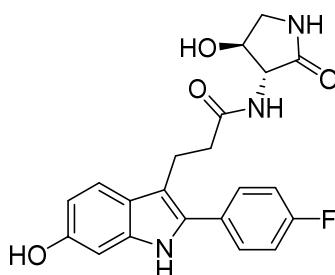
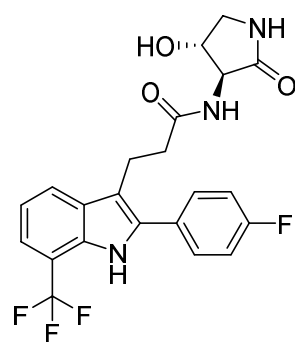
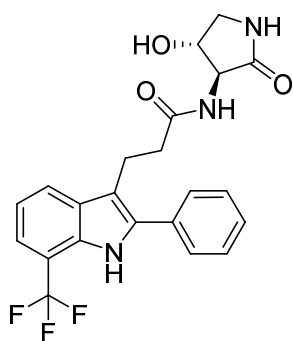
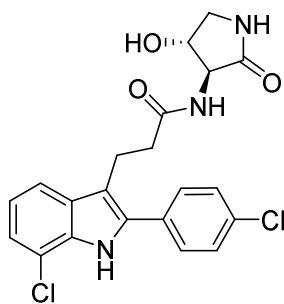
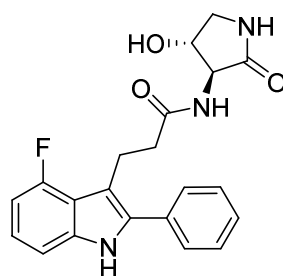
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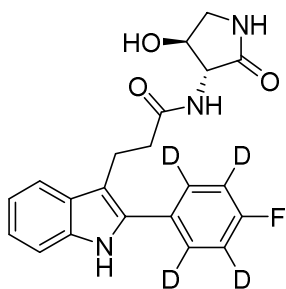
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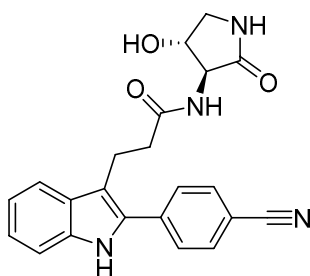


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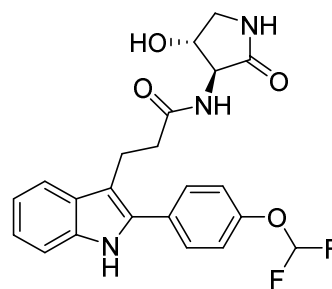
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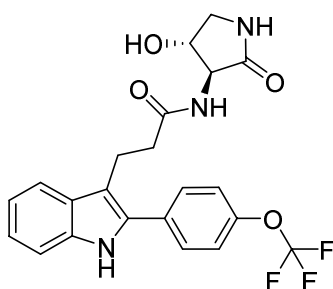
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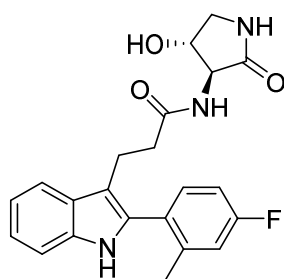
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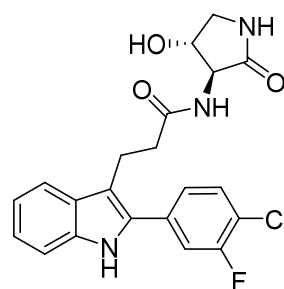
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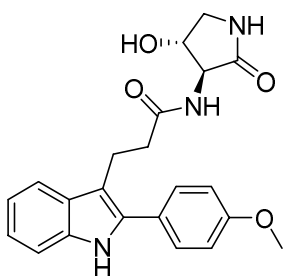
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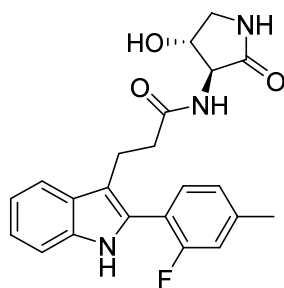
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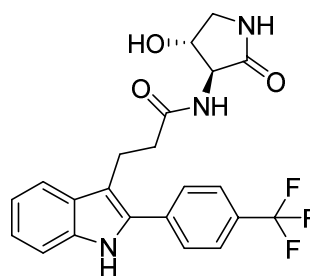
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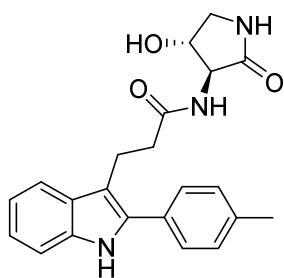
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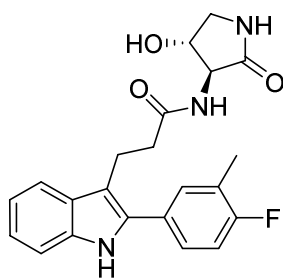
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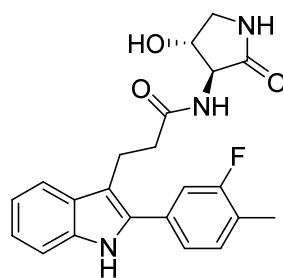
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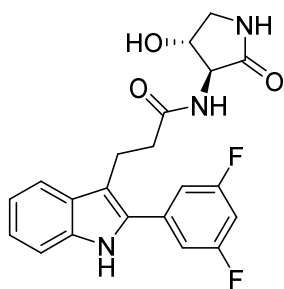
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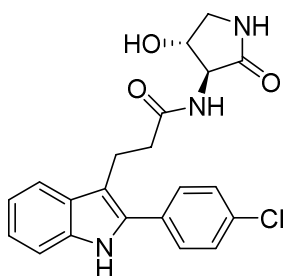
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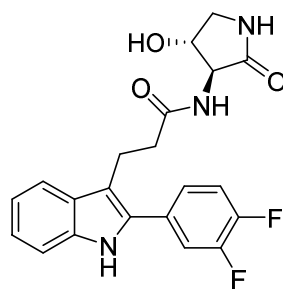
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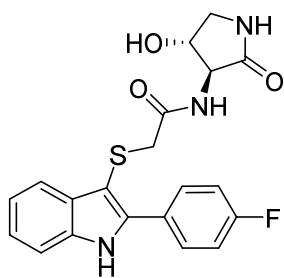
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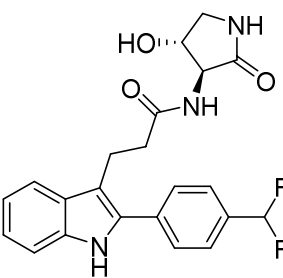
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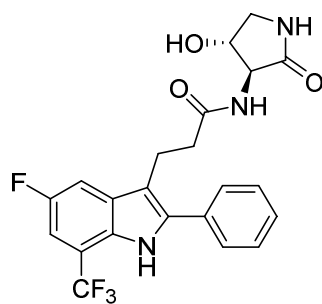
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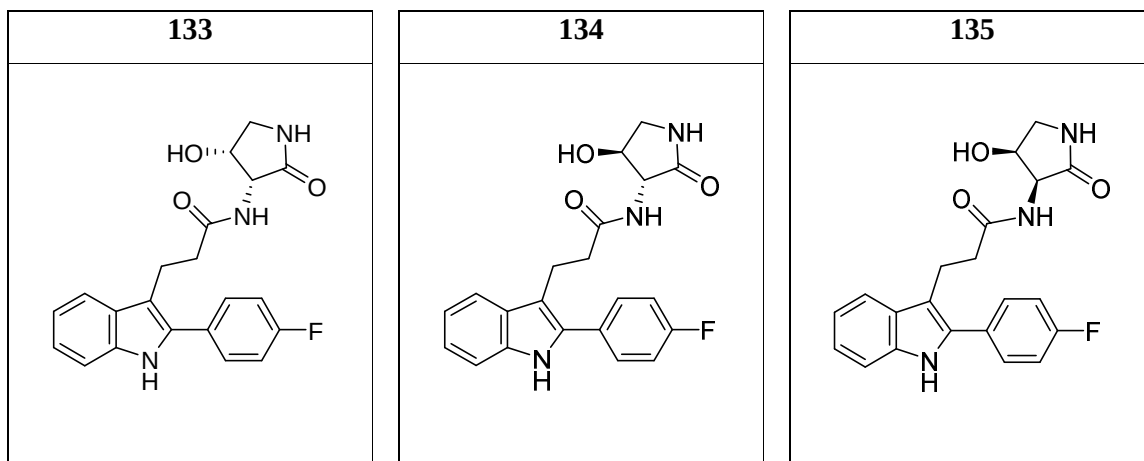


131



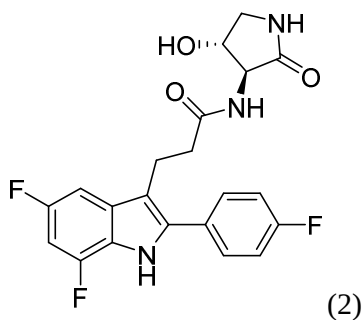
132





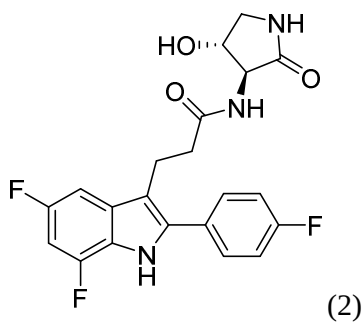
and deuterated derivatives thereof, pharmaceutically acceptable salts thereof, and solvates of any of the compound, the deuterated derivatives thereof, or the pharmaceutically acceptable salts thereof.

28. A crystal of Compound 2, Form A

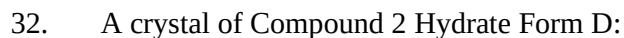


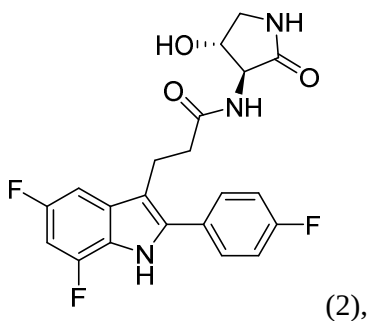
characterized by an X-ray powder diffractogram having a signal at at least two two-theta values chosen from 9.5 ± 0.2 , 13.2 ± 0.2 , 14.4 ± 0.2 , 19.2 ± 0.2 , 19.5 ± 0.2 , 19.8 ± 0.2 , 26.3 ± 0.2 , 26.7 ± 0.2 , and 28.6 ± 0.2 .

29. A crystal of Compound 2 Hydrate Form A:



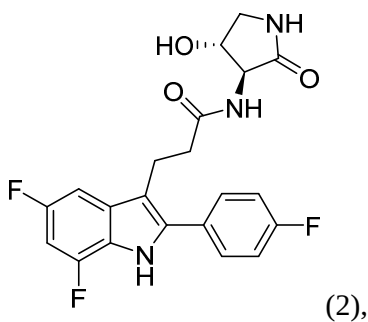
30. A crystal of Compound 2 Hydrate Form B:





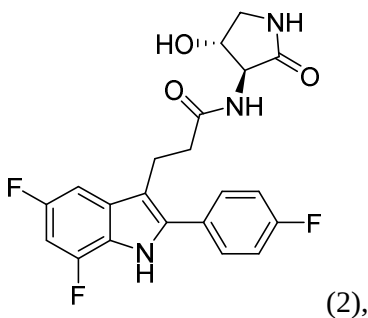
characterized by an X-ray powder diffractogram having signals at 5.0 ± 0.2 and 8.2 ± 0.2 and at least one additional two-theta value chosen from 4.1 ± 0.2 , 7.7 ± 0.2 , and 15.2 ± 0.2 .

33. A crystal of Compound 2 Hydrate Form E:



characterized by an X-ray powder diffractogram having signals at 6.5 ± 0.2 and 14.3 ± 0.2 and at least one additional two-theta value chosen from 7.7 ± 0.2 , 11.4 ± 0.2 , and 18.9 ± 0.2 .

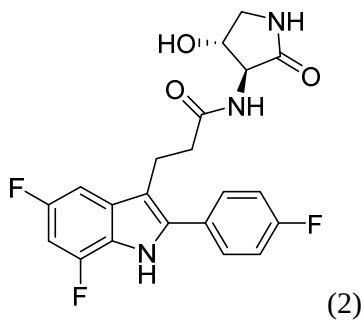
34. A crystal of Compound 2 Hydrate Form F:



characterized by an X-ray powder diffractogram having signals at two two-theta values 3.8 ± 0.2 , 7.6 ± 0.2 , and 11.4 ± 0.2 ; and

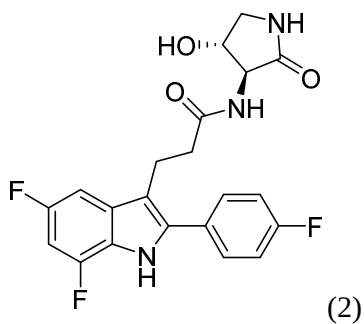
a DSC curve having a peak at at least one temperature chosen from 174 °C, 177 °C, and 197 °C.

35. A crystal of Compound 2 MTBE Solvate:



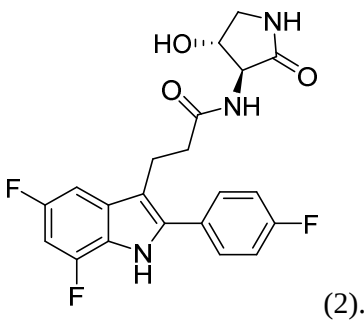
characterized by an X-ray powder diffractogram having a signal at at least two two-theta values chosen from 6.0 ± 0.2 , 6.8 ± 0.2 , 8.4 ± 0.2 , 18.0 ± 0.2 , 19.4 ± 0.2 , and 20.2 ± 0.2 .

36. A crystal of Compound 2 DMF Solvate:

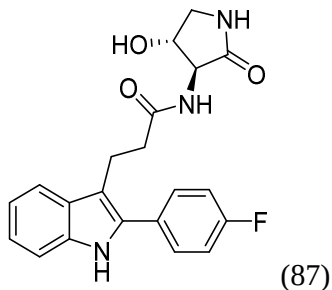


characterized by an X-ray powder diffractogram having a signal at at least two two-theta values chosen from 5.6 ± 0.2 , 9.3 ± 0.2 , 15.3 ± 0.2 , 18.0 ± 0.2 , and 20.1 ± 0.2 .

37. Amorphous Compound 2:

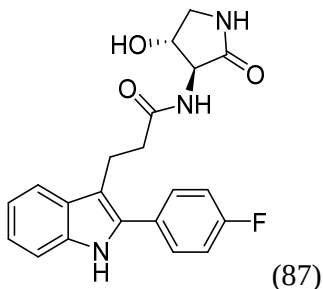


38. A crystal of Compound 87 Form A:



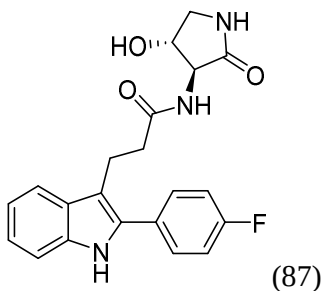
characterized by an X-ray powder diffractogram having a signal at at least two two-theta values chosen from 4.7 ± 0.2 , 9.0 ± 0.2 , 14.2 ± 0.2 , 16.7 ± 0.2 , 21.0 ± 0.2 , 21.2 ± 0.2 , 22.1 ± 0.2 , 22.9 ± 0.2 , 23.1 ± 0.2 , and 24.5 ± 0.2 .

39. A crystal of Compound 87 Hydrate:



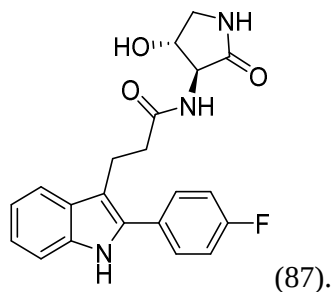
characterized by an X-ray powder diffractogram having a signal at at least two two-theta values chosen from 9.3 ± 0.2 , 10.0 ± 0.2 , 10.9 ± 0.2 , 12.1 ± 0.2 , 15.0 ± 0.2 , 20.0 ± 0.2 , 20.5 ± 0.2 , 20.8 ± 0.2 , 21.3 ± 0.2 , and 24.8 ± 0.2 .

40. A crystal of Compound 87 IPAc Solvate:



characterized by an X-ray powder diffractogram having a signal at at least two two-theta values chosen from 5.0 ± 0.2 , 9.9 ± 0.2 , 11.5 ± 0.2 , 11.7 ± 0.2 , 12.0 ± 0.2 , 16.0 ± 0.2 , 18.8 ± 0.2 , 22.0 ± 0.2 , and 23.1 ± 0.2 .

41. Amorphous Compound 87:

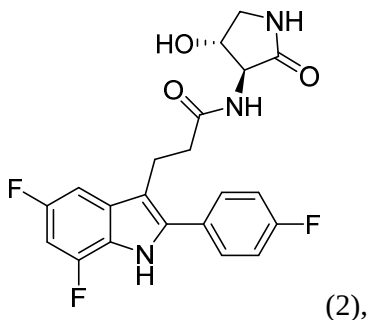


42. A pharmaceutical composition comprising the compound, deuterated derivative, pharmaceutically acceptable salt according to any one of claims 1 to 27, the crystal according to any one of claims 28 to 36 and 38 to 40, or the amorphous compound according to claim 37 or 41, and a pharmaceutically acceptable carrier.

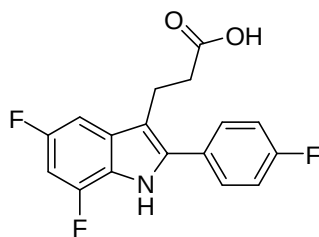
43. A composition according to claim 42 for use in treating focal segmental glomerulosclerosis and/or non-diabetic kidney disease.

44. A composition according to claim 42 for use in treating APOL1-mediated disease.

45. A method of preparing Compound 2

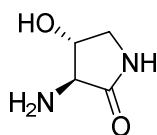


a deuterated derivative thereof, or a salt thereof, comprising heating a solution comprising a compound of formula **S12** or a deuterated derivative thereof:



S12

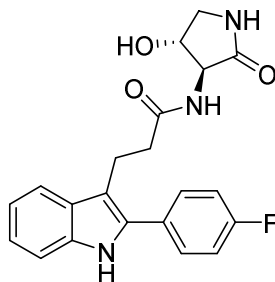
with at least one compound of formula S2 or a deuterated derivative thereof:



S2

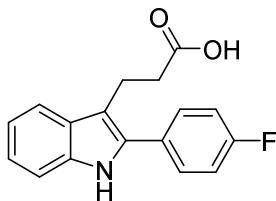
and at least one peptide bond forming reagent.

46. A method of preparing Compound **87**



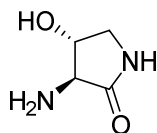
87

a deuterated derivative thereof or a salt thereof, comprising heating a solution comprising a compound of formula **C101** or a deuterated derivative thereof



C101

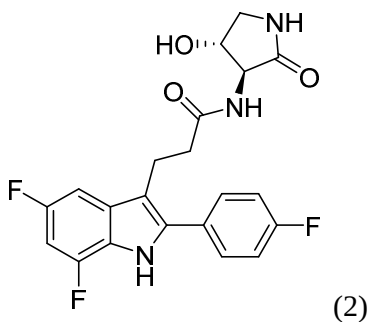
with at least one compound of formula S2 or a deuterated derivative thereof,



S2

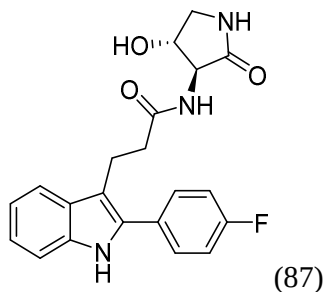
and at least one peptide bond forming reagent.

47. A compound selected from Compound 2



and pharmaceutically acceptable salts thereof.

48. A compound selected from Compound 87



and pharmaceutically acceptable salts thereof.

49. A pharmaceutical composition comprising the compound, deuterated derivative, pharmaceutically acceptable salt, or solvate of claim 47 or 48 and a pharmaceutically acceptable carrier.

50. A composition comprising the compound, deuterated derivative, pharmaceutically acceptable salt, or solvate of claim 47 or 48 for use in the treatment of APOL1-mediated disease.

51. A composition comprising the compound, deuterated derivative, pharmaceutically acceptable salt, or solvate for use of claim 50, wherein the APOL1-mediated disease is focal segmental glomerulosclerosis and/or non-diabetic kidney disease.
52. Use of the compound, deuterated derivative, pharmaceutically acceptable salt, or solvate of claim 47 or 48 in the manufacture of a medicament for treating APOL1-mediated disease.
53. A composition comprising the crystal of Compound 2 according to any one of claims 28 to 36, wherein the composition comprises less than 15% amorphous Compound 2.
54. A composition comprising the crystal of Compound 87 according to any one of claims 38 to 40, wherein the composition comprises less than 15% amorphous Compound 87.