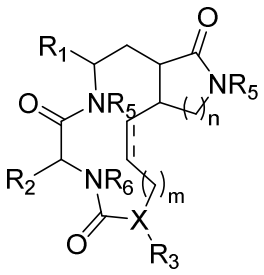
Claims

1. A compound of Formula (I) or a salt, solvate, stereoisomer or prodrug thereof:



(I)

wherein R_1 is selected from optionally substituted acyl and cyano;
R_2 is selected from optionally substituted alkyl, and optionally substituted alkenyl;
X is selected from N or C-R_4;
R_3 is selected from H, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted amino, optionally substituted aryl, optionally substituted alkyoxy, optionally substituted cycloalkyoxy, optionally substituted oxyacylamino, optionally substituted aminoacyloxy, optionally substituted acylamino, optionally substituted aminoacyl, and optionally substituted sulfonylamino;
R_4 is selected from H, and optionally substituted alkyl;
R_5 is independently selected from H, and optionally substituted alkyl;
R_6 is selected from H and optionally substituted alkyl;
or R_2 and R_6 are linked to form an optionally substituted heterocyclyl;
m is an integer selected from 1 to 4; and
n is an integer selected from 1 to 4.

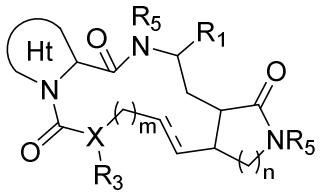
2. The compound according to claim 1, wherein R_1 is selected from HC(O)- and cyano and/or R_2 is C_1-C_5 alkyl.

3. The compound according to claims 1 or 2, wherein R_2 is selected from butyl, iso-butyl, pentyl, iso-pentyl, neo-pentyl, halopentyl, haloiso-pentyl, haloneo-pentyl, cyclopentylmethyl, and cyclopentyl; and/or
wherein R_3 is selected from H, optionally substituted phenylmethyl, optionally substituted halophenylmethyl, optionally substituted trihalomethylphenylmethyl, optionally substituted cyclopentyl, optionally substituted cyclopentylmethyl, optionally substituted tert-butyloxy, optionally substituted cyclohexyloxy, optionally substituted tetrahydropyranylacylamino, optionally substituted tert-butylacylamino, optionally substituted trihalotert-butylacylamino, optionally substituted trihalomethylacylamino,

optionally substituted neo-pentylacylamino, optionally substituted dihalocyclobutylmethylacylamino, optionally substituted cyclopentylmethylacylamino, optionally substituted pyrimidinylacylamino, optionally substituted phenylacylamino, optionally substituted halophenylacylamino, optionally substituted dihalophenylacylamino, optionally substituted isoxazolylacylamino, optionally substituted methylisoxazolylacylamino, optionally substituted trihalomethylisoxazolylacylamino, optionally substituted thiazolylacylamino, optionally substituted methylthiazolylacylamino, optionally substituted oxazolylacylamino, optionally substituted methyloxazolylacylamino, optionally substituted phenylacylamino, optionally substituted halophenylacylamino, optionally substituted dihalophenylacylamino, optionally substituted trihalomethylphenylacylamino, optionally substituted halotrihalomethylphenylacylamino, optionally substituted halophenylpropylacylamino, optionally substituted cyclopropylacylamino, optionally substituted trihalomethylcyclopropylacylamino, optionally substituted cyclobutylacylamino, optionally substituted methylcyclobutylacylamino, optionally substituted dihalocyclobutylacylamino, optionally substituted bicyclo[1.1.1]pentylacylamino, optionally substituted trihalomethylbicyclo[1.1.1]pentylacylamino, optionally substituted oxetanylacylamino, optionally substituted methyloxetanylacylamino, optionally substituted bicycl[2.1.1]hexylacylamino, optionally substituted cyclohexylacylamino, optionally substituted dihalocyclohexylacylamino, optionally substituted cyclohexylacylamino, optionally substituted spiro[3.3]heptylacylamino, optionally substituted tert-butyloxyacylamino (or Boc-NH or Boc-N(methyl)), optionally substituted cyclopentyloxyacyamino, optionally substituted neo-pentyloxyacylamino, optionally substituted cyclobutyloxyacylamino, optionally substituted trihalomethylcyclobutyloxyacylamino, optionally substituted phenylsulfonylamino, optionally substituted dihalophenylsulfonylamino, optionally substituted cyclopropylsulfonylamino, optionally substituted methylsulfonylamino, optionally substituted trihalomethylsulfonylamino, optionally substituted cyclobutylsulfonylamino, optionally substituted amino, optionally substituted pyrimidinylamino, optionally substituted trihalomethylpyrimidinylamino, and optionally substituted tert-butylaminoacyl.

4. The compound according to any one of claims 1 to 3, wherein R_4 and R_5 are independently H or methyl.

5. The compound according to any one of claims 1 to 4, wherein the compound is a compound of Formula (Ia):



(Ia)

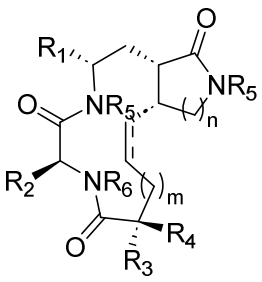
wherein R_1 is selected from optionally substituted acyl and cyano;
Ht is an optionally substituted heterocyclyl;
X is selected from N or C-R_4;
R_3 is selected from H, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted amino, optionally substituted aryl, optionally substituted alkyoxy, optionally substituted cycloalkyoxy, optionally substituted oxyacylamino, optionally substituted aminoacyloxy, optionally substituted acylamino, optionally substituted aminoacyl, and optionally substituted sulfonylamino;
R_4 is selected from H, and optionally substituted alkyl;
R_5 is independently selected from H, and optionally substituted alkyl;
m is an integer selected from 1 to 4; and
n is an integer selected from 1 to 4.

6. The compound according to any one of claims 1 to 5, wherein when R_2 and R_6 are linked to form an optionally substituted heterocyclyl or is Ht, the heterocyclyl is an optionally substituted 5-7 membered heterocyclyl.

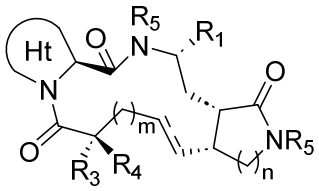
7. The compound according to any one of claims 1 to 6, wherein the optional substituent on the heterocyclyl is selected from halo, methyl, methoxy, ethoxy, cyclopropyl, fused dimethylcyclopropyl, fused cyclopentyl, bridged methylene, and bridged ethylene.

8. The compound according to any one of claims 1 to 7, wherein m is an integer selected from 1 to 3 and/or wherein n is an integer selected from 1 to 2.

9. The compound according to any one of claims 1 to 8, wherein the compound of Formula (I) or a salt, solvate, stereoisomer or prodrug thereof is represented by Formula ($I^{iix}b$) or Formula ($Ia^{iix}b$):

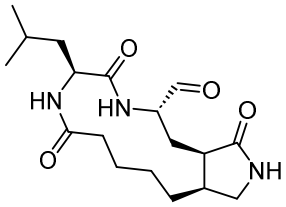
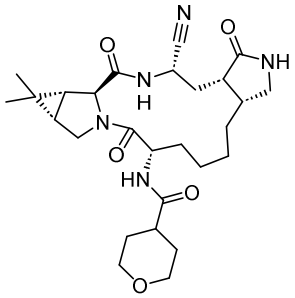
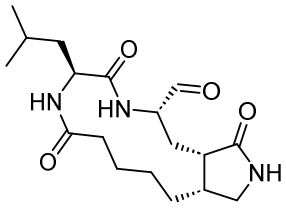
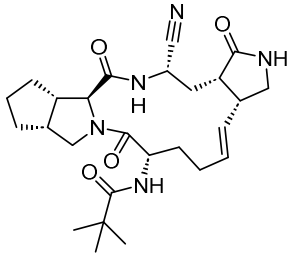
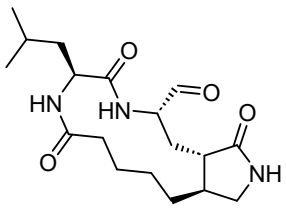
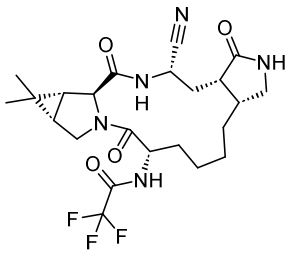


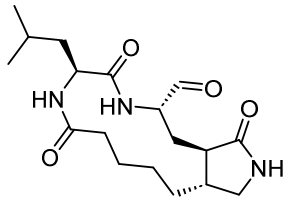
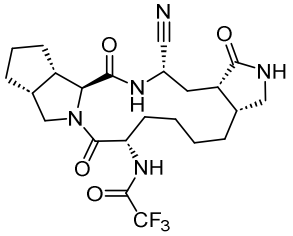
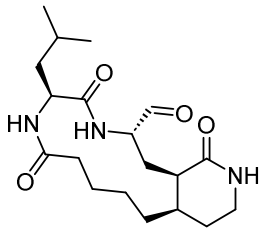
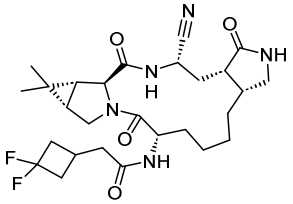
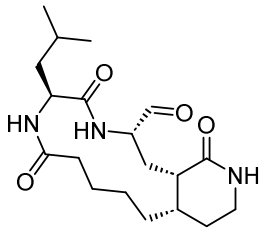
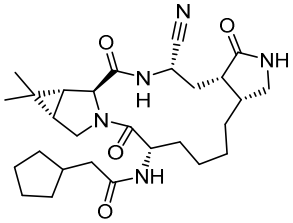
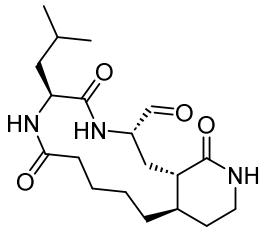
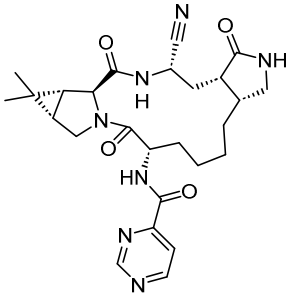
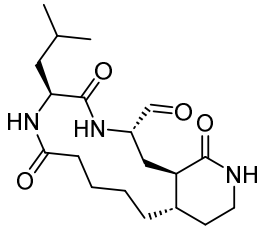
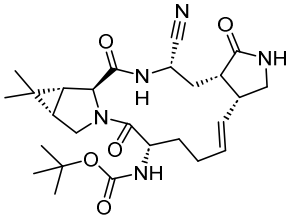
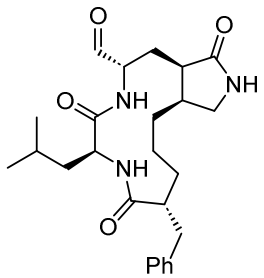
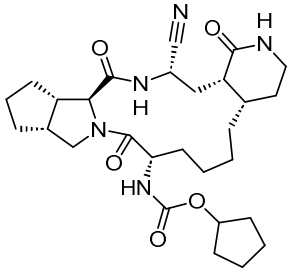
($I^{iix}b$)

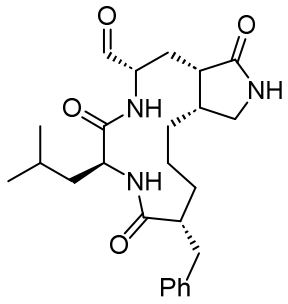
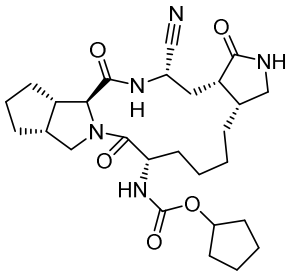
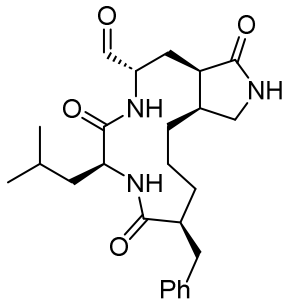
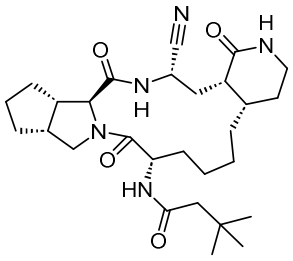
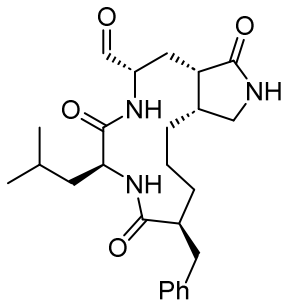
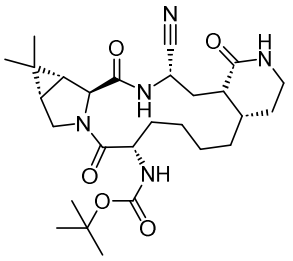
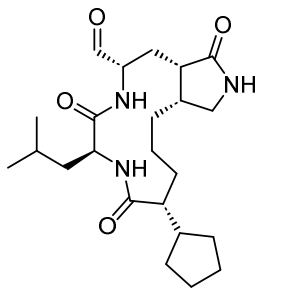
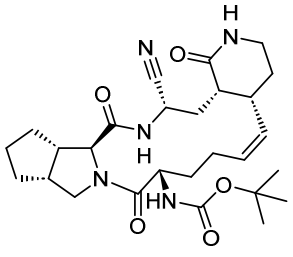
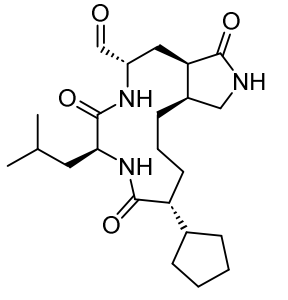
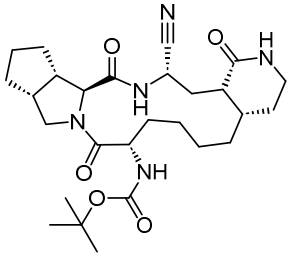


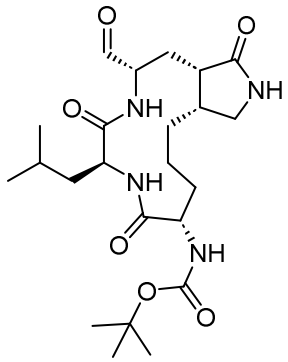
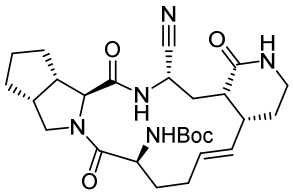
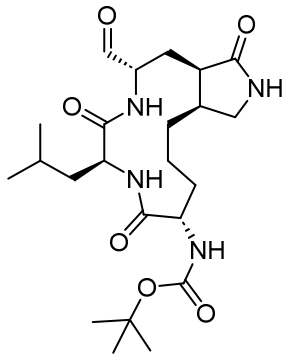
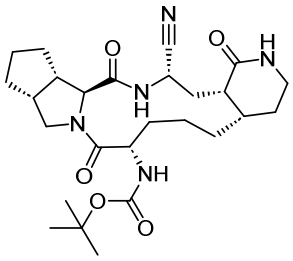
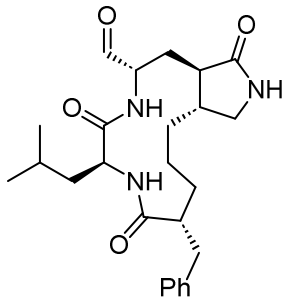
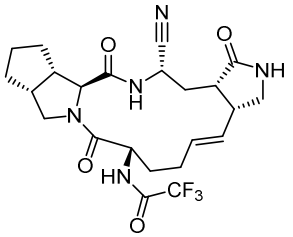
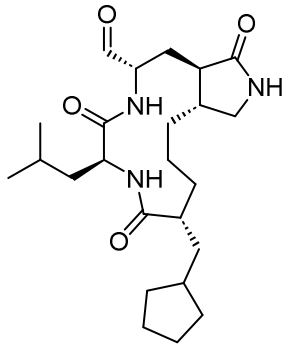
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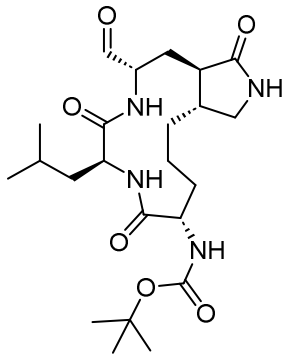
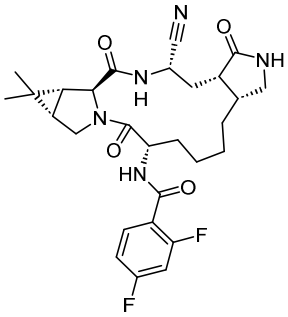
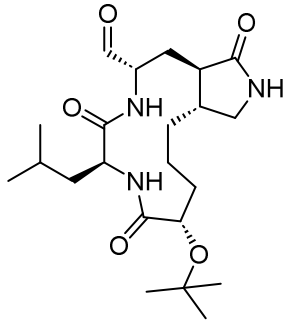
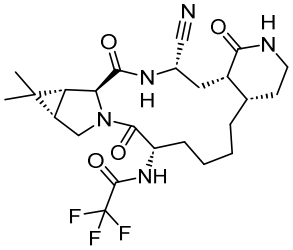
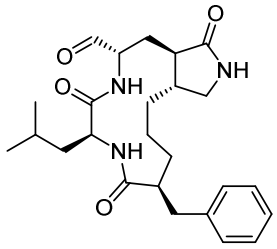
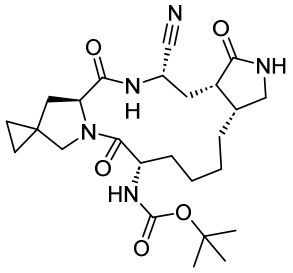
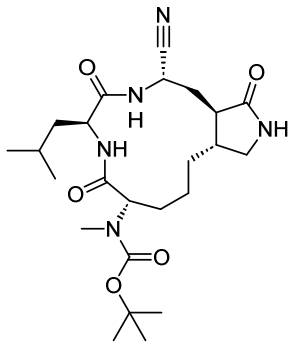
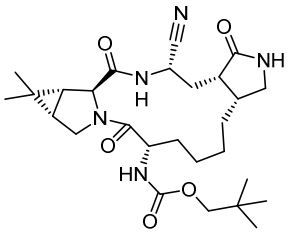
10. The compound according to any one of claims 1 to 9 selected from one of the following:

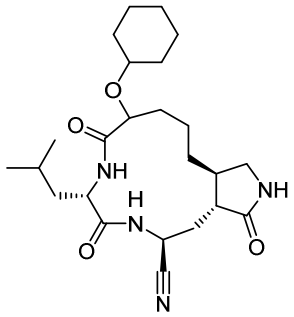
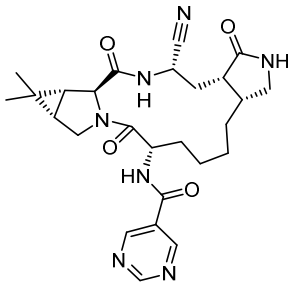
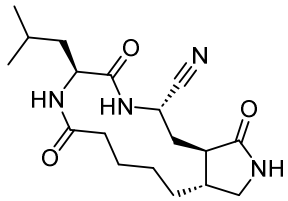
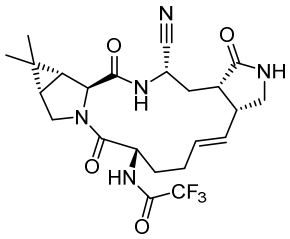
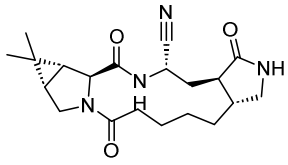
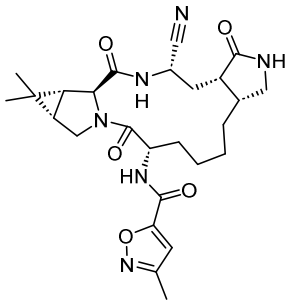
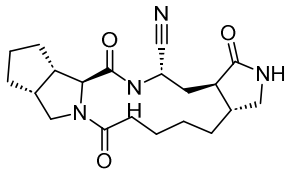
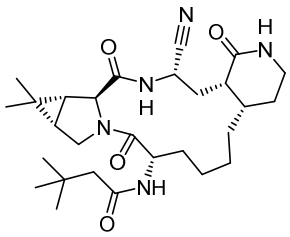
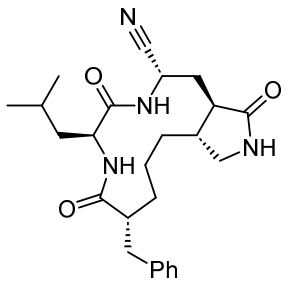
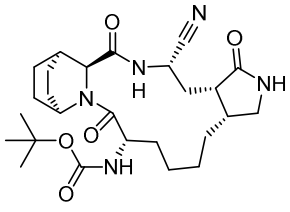
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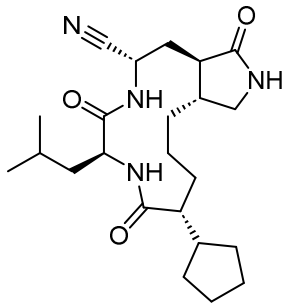
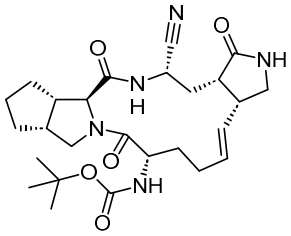
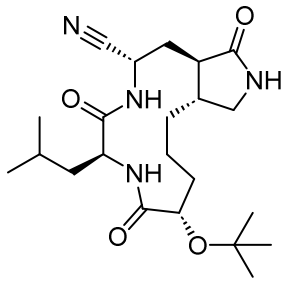
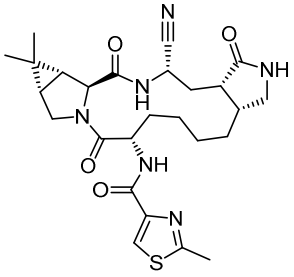
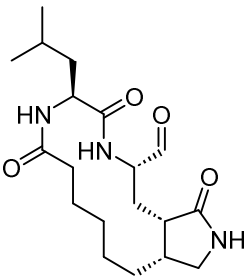
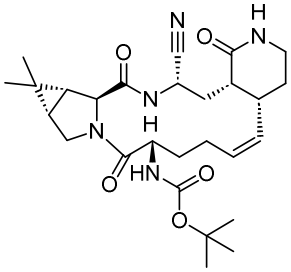
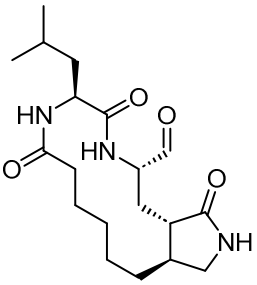
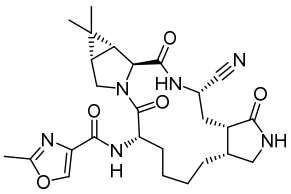
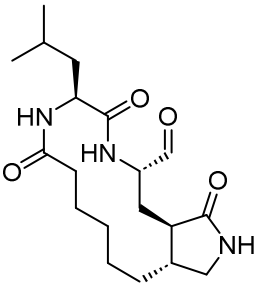
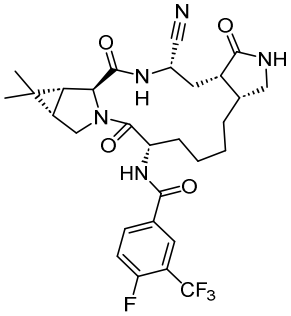
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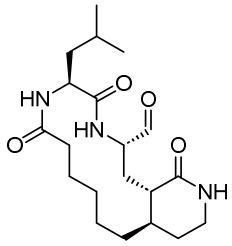
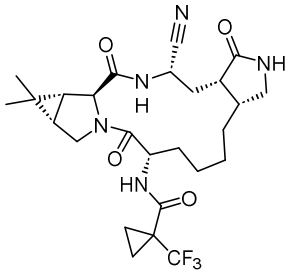
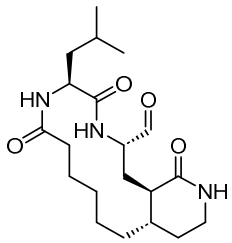
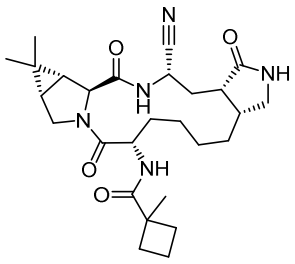
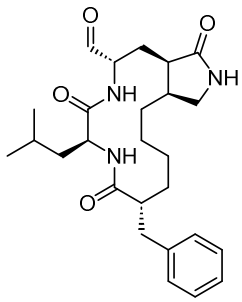
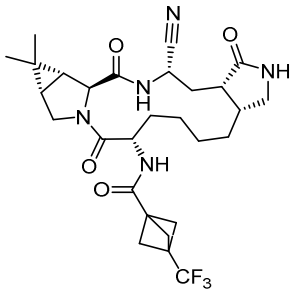
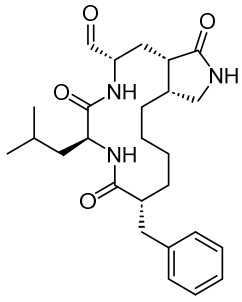
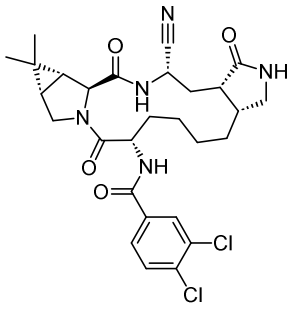
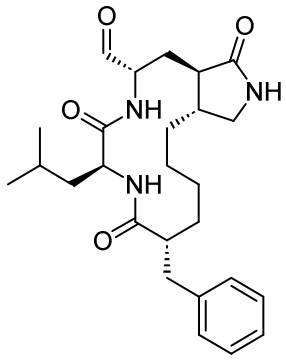
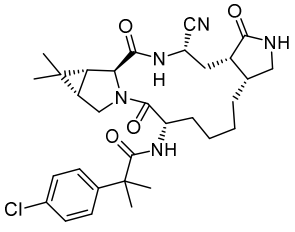
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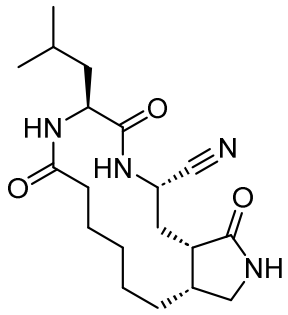
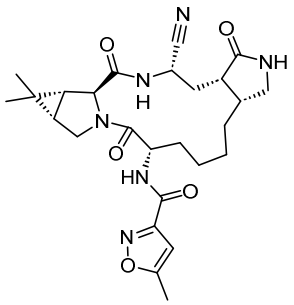
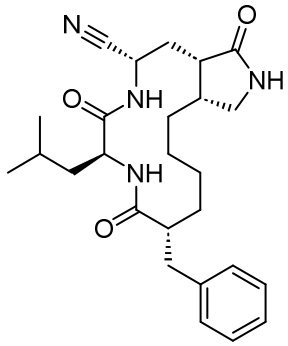
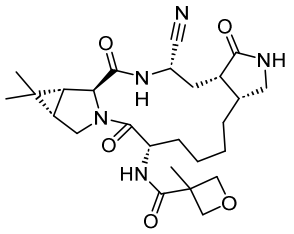
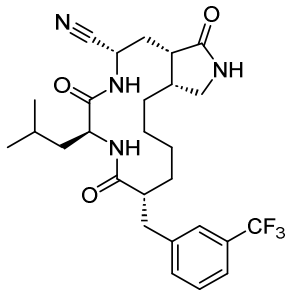
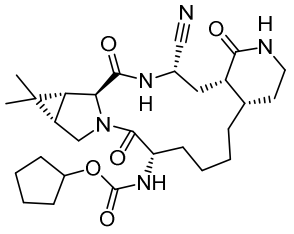
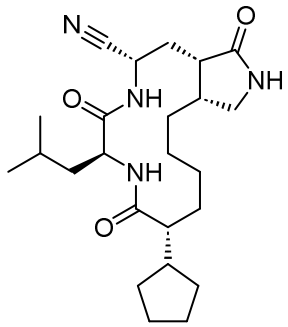
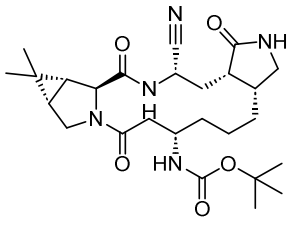
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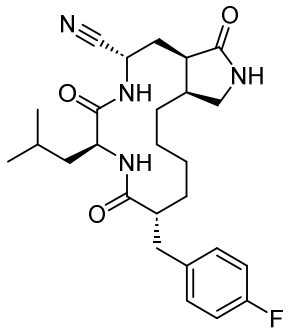
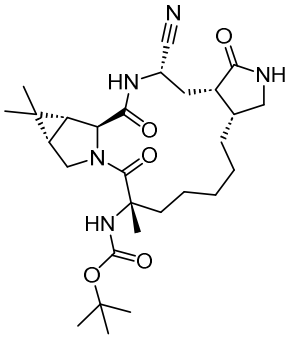
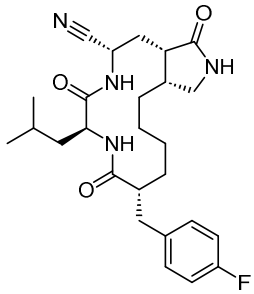
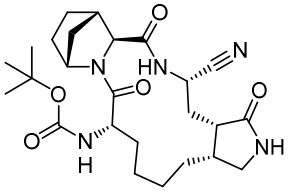
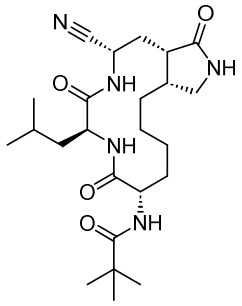
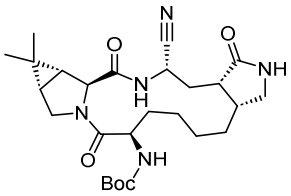
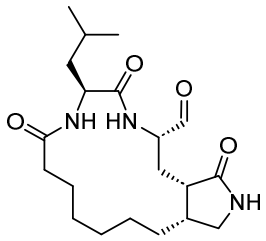
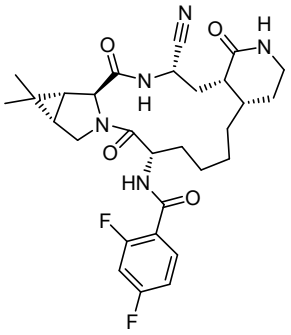
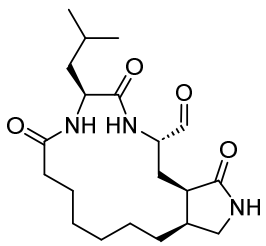
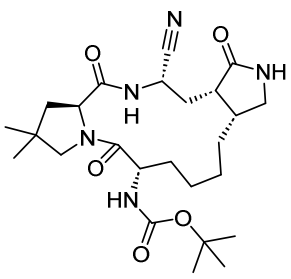
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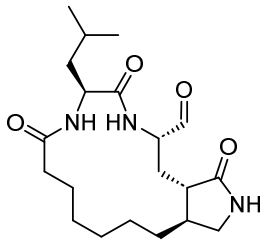
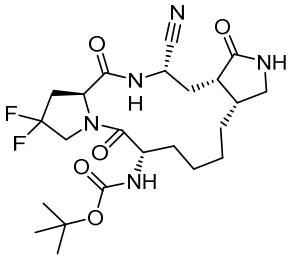
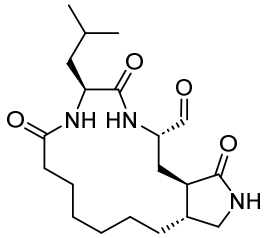
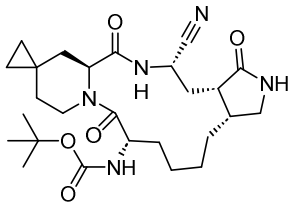
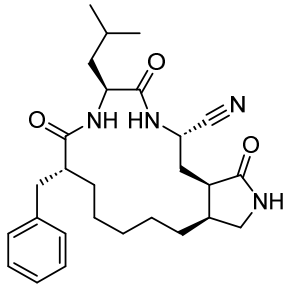
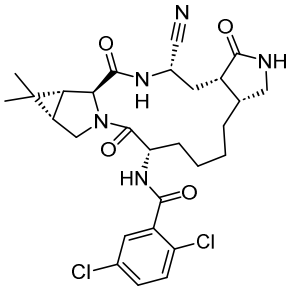
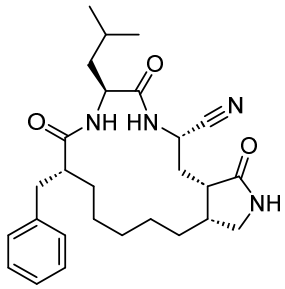
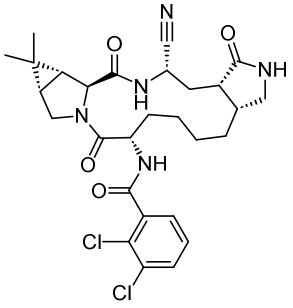
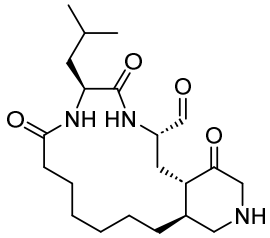
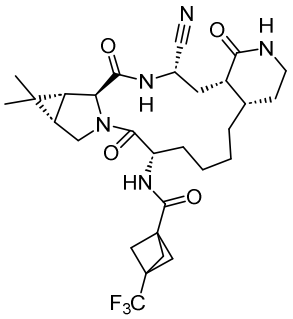
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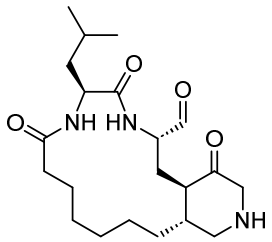
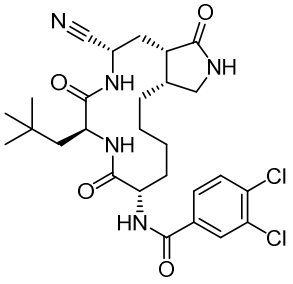
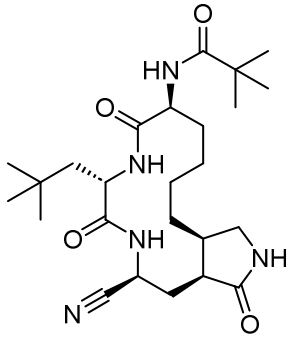
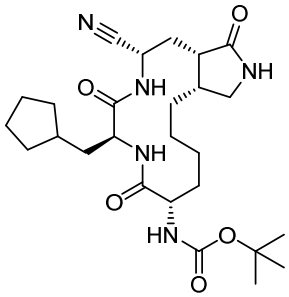
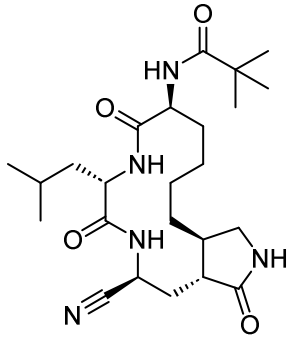
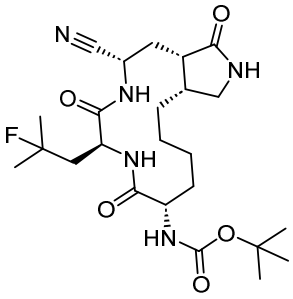
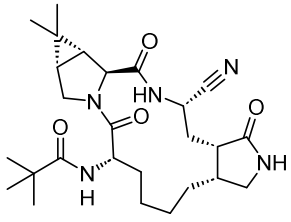
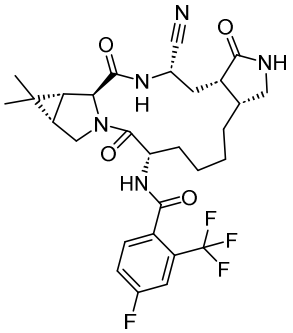
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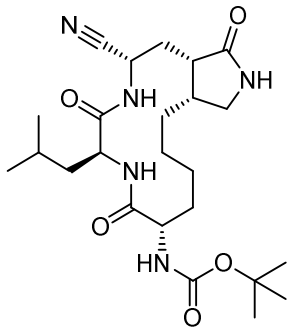
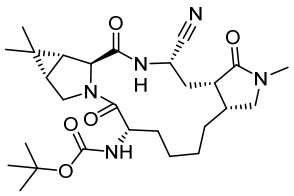
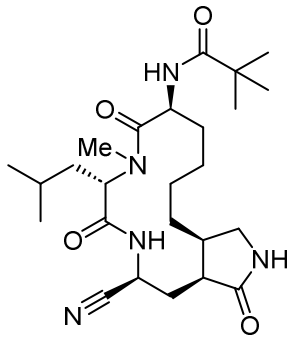
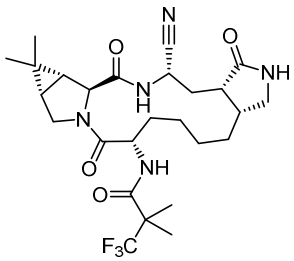
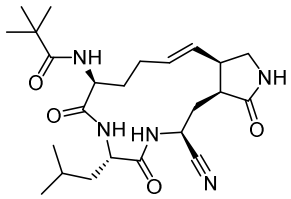
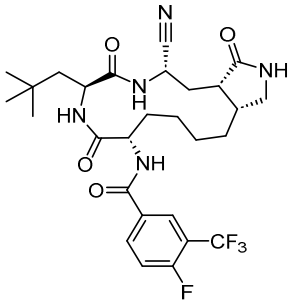
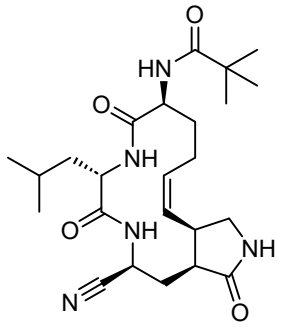
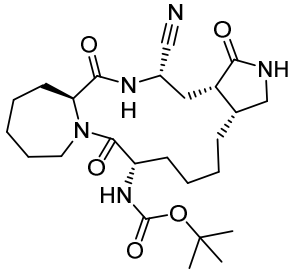
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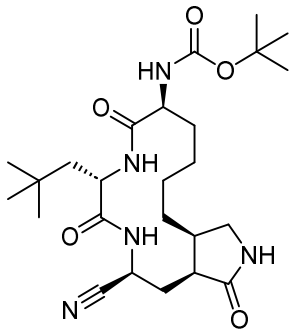
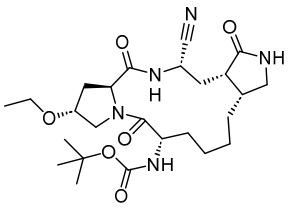
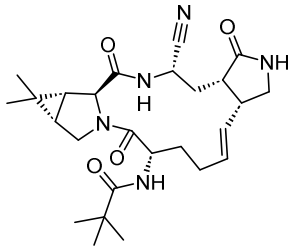
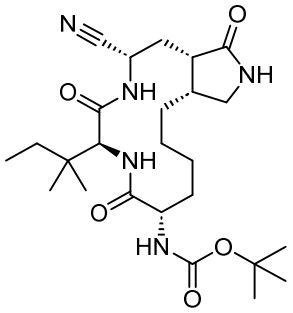
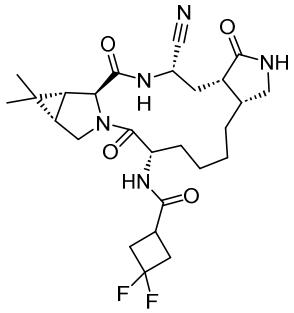
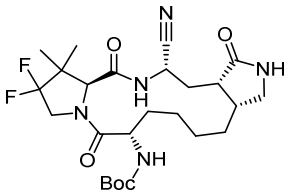
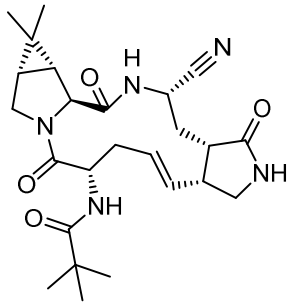
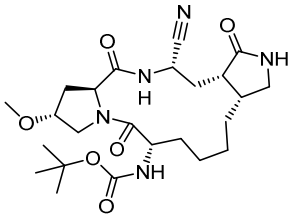
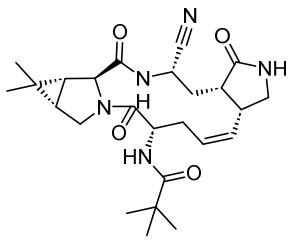
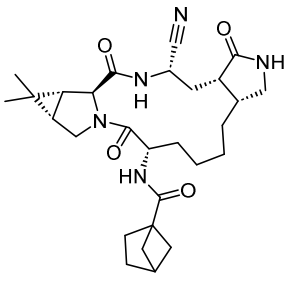
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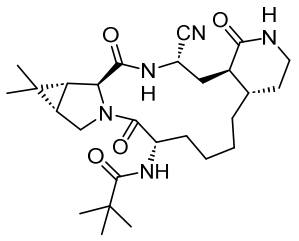
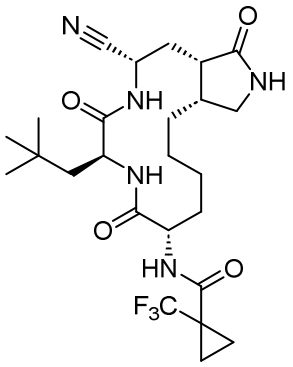
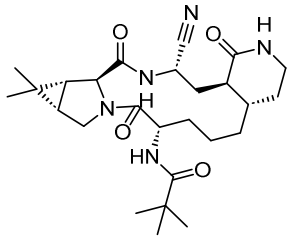
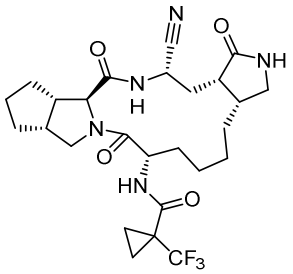
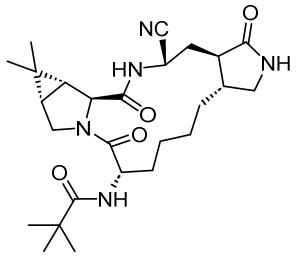
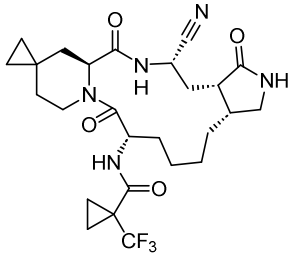
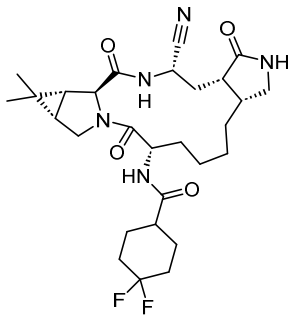
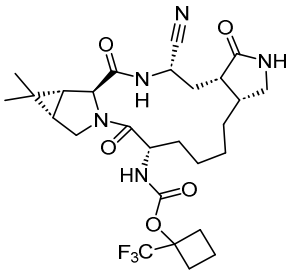
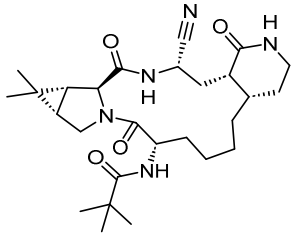
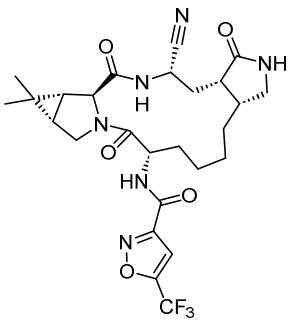
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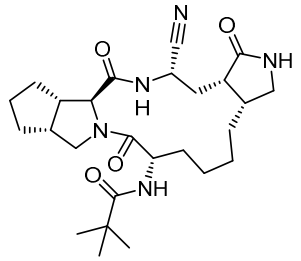
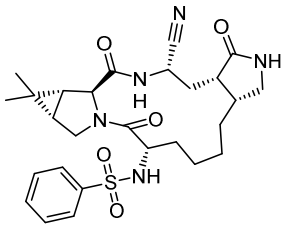
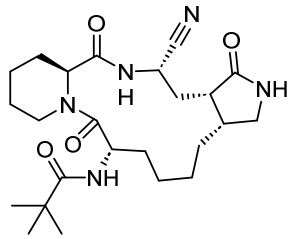
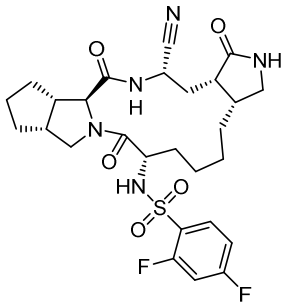
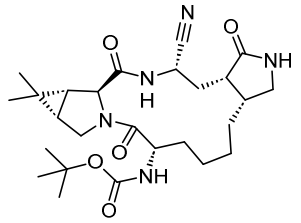
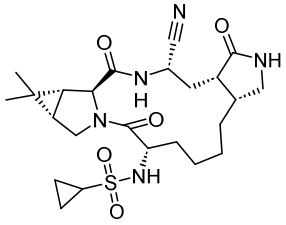
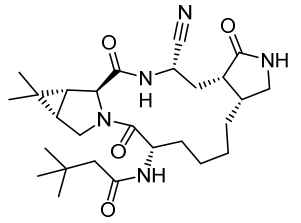
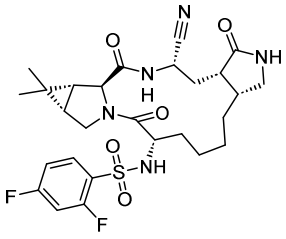
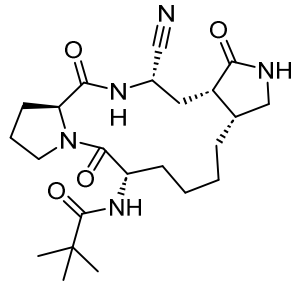
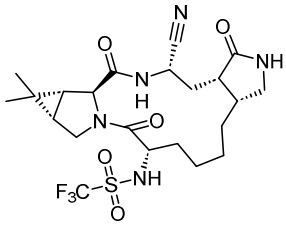
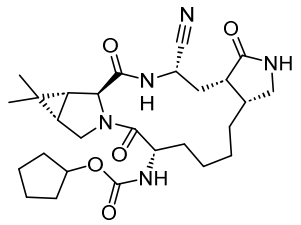
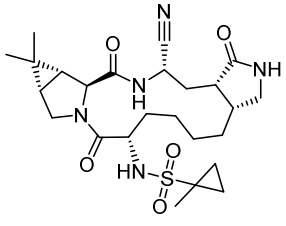
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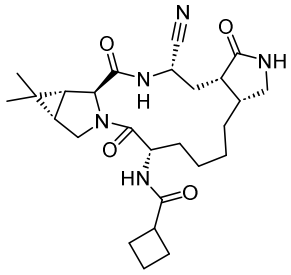
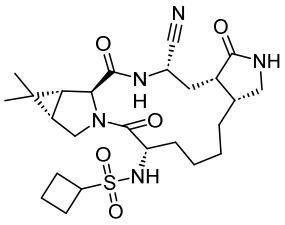
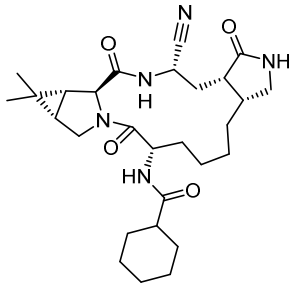
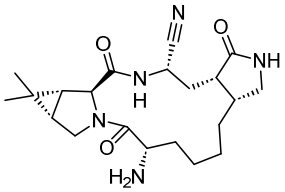
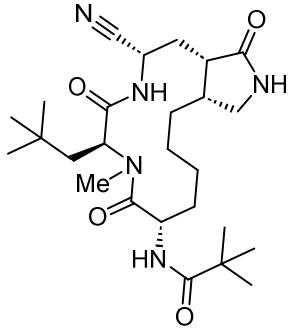
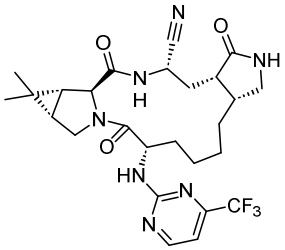
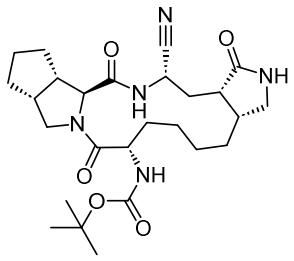
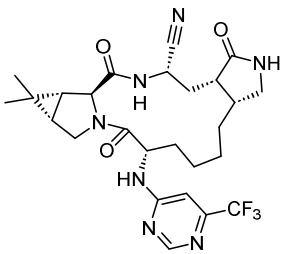
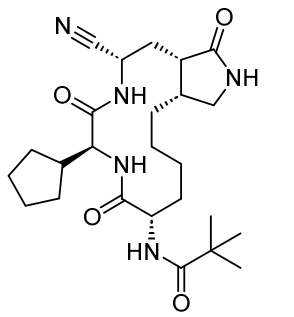
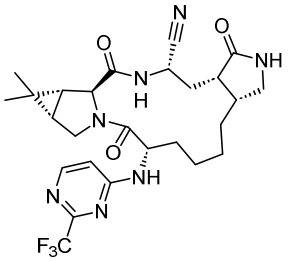
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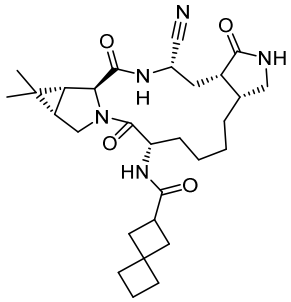
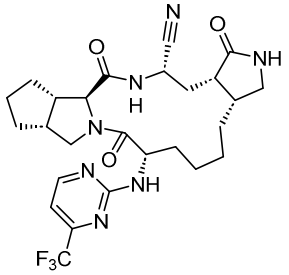
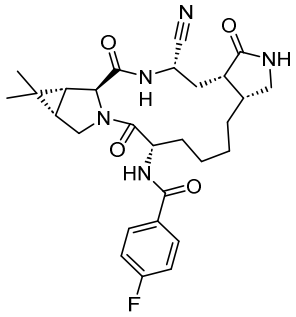
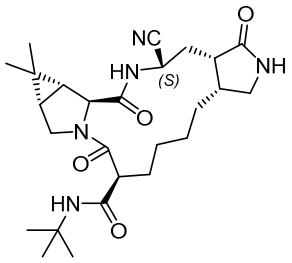
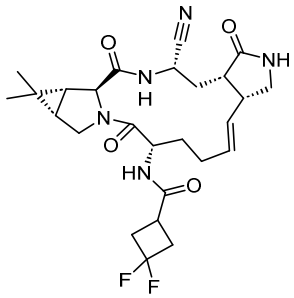
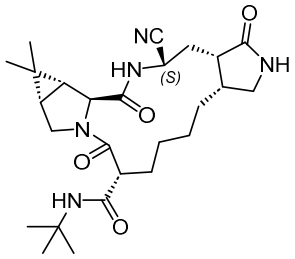
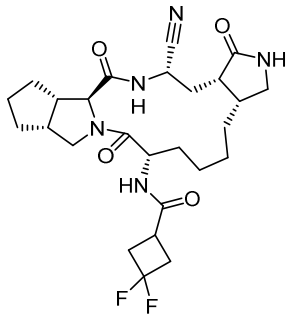
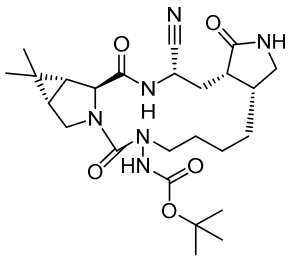
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11. A pharmaceutical composition comprising an effective amount of a compound of Formula (I) according to any one of claims 1 to 10 or a pharmaceutically acceptable salt, solvate, stereoisomer or prodrug thereof, and optionally in combination with a pharmaceutically acceptable carrier, excipient or diluent.

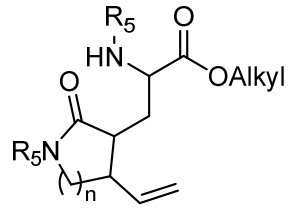
12. Use of a compound of formula (I) according to any one of claims 1 to 10 or a pharmaceutically acceptable salt, solvate, stereoisomer or prodrug thereof in the manufacture of a medicament for treating a coronavirus related disease or condition.

13. A compound of formula (I) according to any one of claims 1 to 10 or a pharmaceutically acceptable salt, solvate, stereoisomer or prodrug thereof for use in treating a coronavirus related disease or condition.

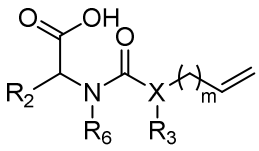
14. The use according to claim 12, wherein the coronavirus related disease or condition is caused by a virus selected from SARS-CoV-1, SARS-CoV-2, MERS-CoV, CoV-229E, and HCoV-OC43.

15. A method of fabricating a compound of Formula (I) according to any one of claims 1 to 10, comprising:

i) reacting a compound of Formula (II) with a compound of Formula (III) under dehydrating conditions in order to form an amide bond:

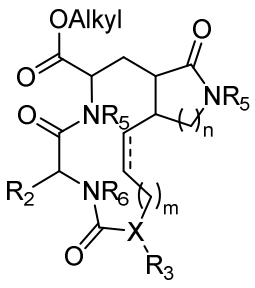


(II)



(III);

ii) performing a ring closing olefin metathesis reaction in order to form a compound of Formula (IV):



(IV); and

iii) converting the alkyloxyacyl moiety in Formula (IV) into a R_1 moiety in order to form a compound of Formula (I).