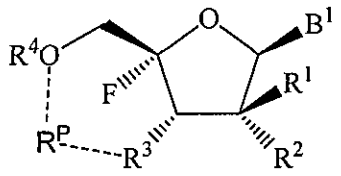
CLAIMS

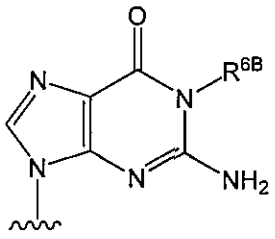
1. A compound of Formula (I), or a pharmaceutically acceptable salt thereof, having the structure:



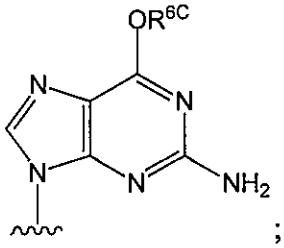
(I)

wherein:

B^1 is selected from the group consisting of an optionally substituted



and an optionally substituted



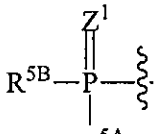
;

R^1 is selected from the group consisting of an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl and an optionally substituted C_{3-6} cycloalkyl;

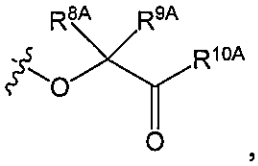
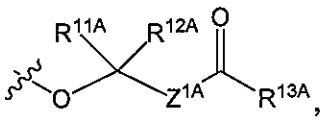
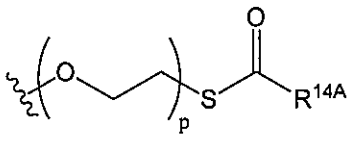
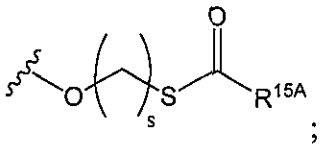
each -------- is absent and R^p is absent;

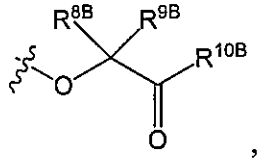
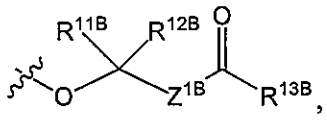
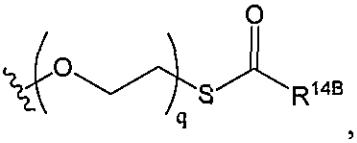
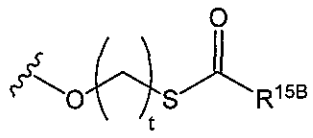
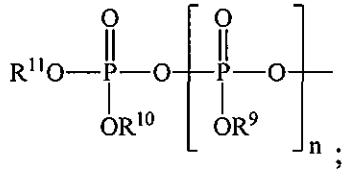
R^2 is halo;

R^3 is –OH or –OC(=O)R^8;

R^4 is hydrogen or  ;

R^{5A} is selected from the group consisting of O^-, OH, an optionally substituted N-linked amino acid, an optionally substituted N-linked amino acid ester derivative,




and

;

R^{5B} is selected from the group consisting of O^-, OH, an –O–optionally substituted aryl, an –O–optionally substituted heteroaryl, an –O–optionally substituted heterocyclyl, an optionally substituted N-linked amino acid, an optionally substituted N-linked amino acid ester derivative,  ,  ,  , and  and  ;

R^{6B} and R^{6C} are independently selected from the group consisting of hydrogen, an unsubstituted C_{1-6} alkyl, an unsubstituted C_{3-6} alkenyl, an unsubstituted C_{3-6} alkynyl and an unsubstituted C_{3-6} cycloalkyl;

R^8 is an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl;

R^9, R^{10} and R^{11} are independently absent or hydrogen;

R^{8A}, R^{9A}, R^{11A}, R^{12A}, R^{8B}, R^{9B}, R^{11B} and R^{12B} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

R^{10A}, R^{10B}, R^{13A} and R^{13B} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl, an optionally substituted aryl, an optionally substituted –O–C_{1-24} alkyl, an optionally substituted –O–aryl, an optionally substituted –O–heteroaryl and an optionally substituted –O–monocyclic heterocyclyl;

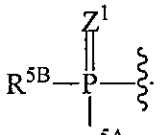
R^{14A}, R^{14B}, R^{15A} and R^{15B} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

n is 0 or 1;

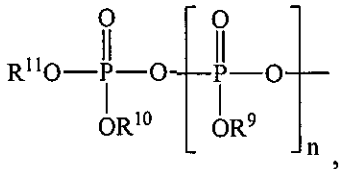
p and q are independently 1 or 2;

s and t are independently 3, 4 or 5;

Z^1, Z^{1A} and Z^{1B} are independently O or S; and

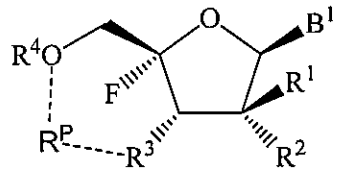


provided that when R^4 is ; and R^{5A} is O^- or OH, then R^{5B} is O^-, OH, or



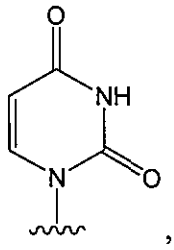
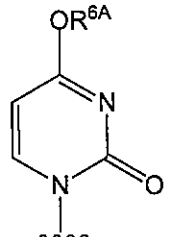
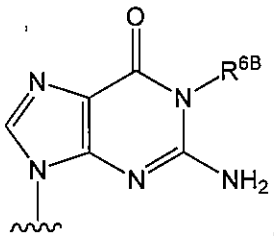
, an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative.

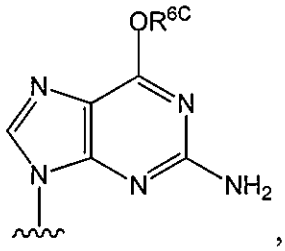
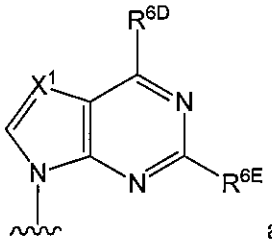
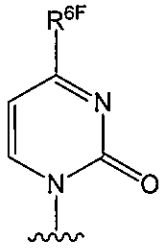
2. A compound of Formula (I), or a pharmaceutically acceptable salt thereof, having the structure:



(I)

wherein:

B^1 is selected from the group consisting of an optionally substituted  , an optionally substituted  , an optionally substituted  , an

optionally substituted  , an optionally substituted  and an optionally substituted  ;

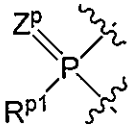
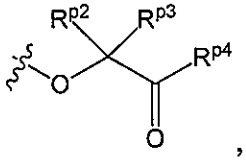
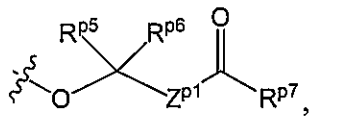
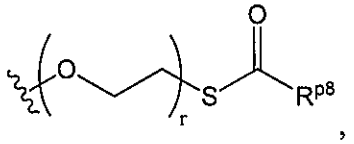
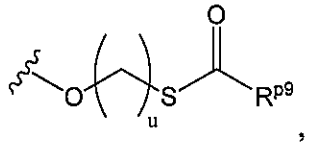
R^1 is selected from the group consisting of an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl and an optionally substituted C_{3-6} cycloalkyl;

each -------- is single bond;

R^2 is halo, N_3, $-OR^{7A}$ or $-N(R^{7B}R^{7C})$;

R^4 is absent;

R^3 is O; and

R^p is  , wherein Z^p is O or S and R^{p1} is selected from the group consisting of O^-, OH, an –O–optionally substituted C_{1-6} alkyl,  ,  ,  ,  , an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

R^{6A} is an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl;

R^{6B} and R^{6C} are independently selected from the group consisting of hydrogen, an unsubstituted C_{1-6} alkyl, an unsubstituted C_{3-6} alkenyl, an unsubstituted C_{3-6} alkynyl and an unsubstituted C_{3-6} cycloalkyl;

R^{6D} is NHR^{6G};

R^{6E} is hydrogen, halogen or NHR^{6H};

R^{6F} is NHR^{6I};

R^{6G} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{3-6} alkenyl, an optionally substituted C_{3-6} cycloalkyl, $-C(=O)R^{A1}$ and $-C(=O)OR^{A2}$;

R^{6H} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{3-6} alkenyl, an optionally substituted C_{3-6} cycloalkyl, $-C(=O)R^{A3}$ and $-C(=O)OR^{A4}$;

R^{6I} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{3-6} alkenyl, an optionally substituted C_{3-6} cycloalkyl, $-C(=O)R^{A5}$ and $-C(=O)OR^{A6}$;

X^1 is N or $-CR^{6J}$,

R^{6J} is selected from the group consisting of hydrogen, halogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl and an optionally substituted C_{2-6} alkynyl;

R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5} and R^{A6} are independently selected from the group consisting of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkenyl, C_{6-10} aryl, heteroaryl, heterocyclyl, aryl(C_{1-6} alkyl), heteroaryl(C_{1-6} alkyl) and heterocyclyl(C_{1-6} alkyl);

R^{7A} is hydrogen or $-C(=O)R^{12}$;

R^{7B} and R^{7C} are independently hydrogen or an optionally substituted C_{1-6} alkyl;

R^{12} is an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl;

R^{p2}, R^{p3}, R^{p5} and R^{p6} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

R^{p4} and R^{p7} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl, an optionally substituted aryl, an optionally substituted

–O–C_{1-24} alkyl, an optionally substituted –O–aryl, an optionally substituted –O–heteroaryl and an optionally substituted –O–monocyclic heterocyclyl;

R^{p8} and R^{p9} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

r is 1 or 2;

u is 3, 4 or 5; and

Z^{p1} is O or S.

3. The compound of Claim 2, wherein R^2 is halo.

4. The compound of Claim 2, wherein R^2 is $-OR^{7A}$.

5. The compound of Claim 2, wherein R^{7A} is hydrogen.

6. The compound of Claim 2, wherein R^2 is selected from the group consisting of $-N_3$, $-N(R^{7B}R^{7C})$ and $-NH_2$.

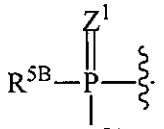
7. *The compound of any one of Claims 1-6, wherein* R^1 *is an optionally substituted* C_{1-6} alkyl.

8. The compound of any one of Claims 1-6, wherein R^1 is selected from the group consisting of an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl and an optionally substituted C_{3-6} cycloalkyl.

9. The compound of any one of Claims 1 and 7-8, wherein R^3 is –OH.

10. The compound of any one of Claims 1 and 7-8, wherein R^3 is $-OC(=O)R^8$.

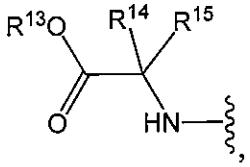
11. The compound of any one of Claims 1 and 7-10, wherein R^4 is hydrogen.

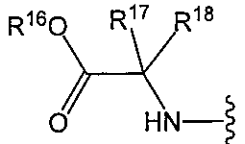
12. The compound of any one of Claims 1 and 7-10, wherein R^4 is  .

13. The compound of Claim 12, wherein R^{5A} is an optionally substituted N-linked amino acid or is an optionally substituted N-linked amino acid ester derivative; and R^{5B} is an optionally substituted N-linked amino acid or is an optionally substituted N-linked amino acid ester derivative.

14. The compound of Claim 12, wherein R^{5A} is selected from the group consisting of alanine isopropyl ester, alanine cyclohexyl ester, alanine neopentyl ester, valine isopropyl ester, isoleucine isopropyl ester, methionine isopropyl ester and leucine isopropyl ester; and R^{5B} is selected from the group consisting of alanine isopropyl ester, alanine cyclohexyl ester, alanine

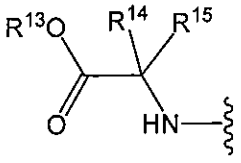
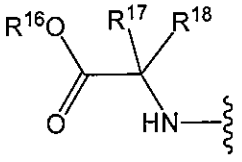
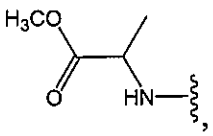
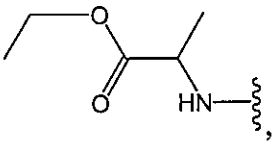
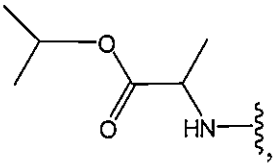
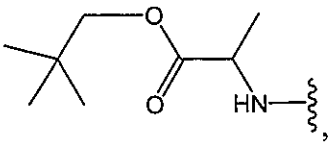
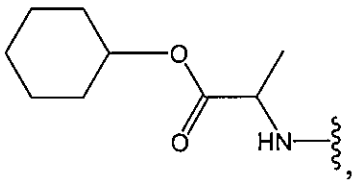
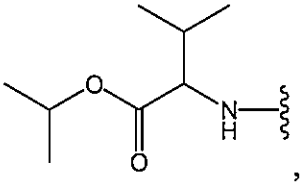
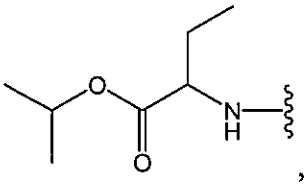
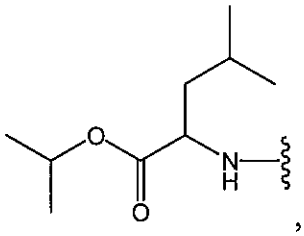
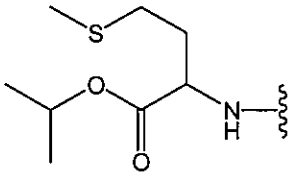
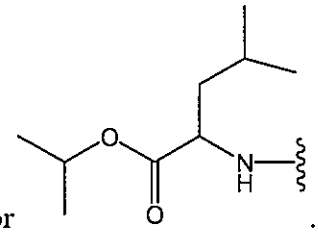
neopentyl ester, valine isopropyl ester, isoleucine isopropyl ester, methionine isopropyl ester and leucine isopropyl ester.

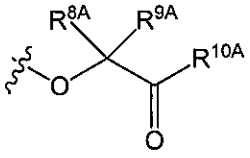
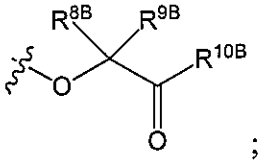
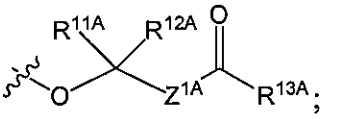
15. The compound of Claim 12, wherein R^{5A} has the structure  , wherein R^{13} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6}-alkyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted aryl, an optionally substituted aryl(C_{1-6} alkyl) and an optionally substituted haloalkyl; R^{14} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{1-6} haloalkyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_6 aryl, an optionally substituted C_{10} aryl and an optionally substituted aryl(C_{1-6} alkyl); and R^{15} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{14} and R^{15} is taken together to form an optionally substituted C_{3-6} cycloalkyl; and

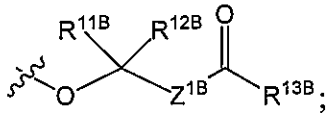
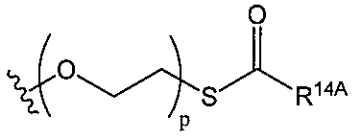
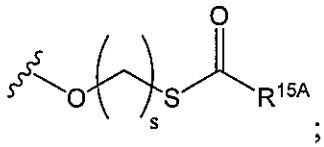
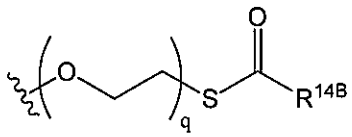
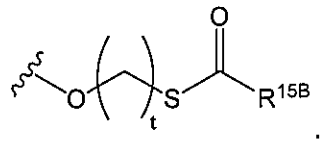
R^{5B} has the structure  , wherein R^{16} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6}-alkyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted aryl, an optionally substituted aryl(C_{1-6} alkyl) and an optionally substituted haloalkyl; R^{17} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{1-6} haloalkyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_6 aryl, an optionally C_{10} aryl and an optionally substituted aryl(C_{1-6} alkyl); and R^{18} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{17} and R^{18} is taken together to form an optionally substituted C_{3-6} cycloalkyl.

16. The compound of Claim 15, wherein R^{14}, R^{15}, R^{17} and R^{18} are independently hydrogen or an optionally substituted C_{1-6}-alkyl.

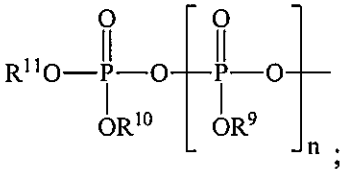
17. The compound of any one of Claim 15-16, wherein R^{13} is an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl.

18. The compound of Claim 15, wherein  and  are independently  ,  ,  ,  ,  ,  ,  ,  ,  , or  .

19. The compound of Claim 12, wherein R^{5A} is  ; and R^{5B} is  ; or wherein R^{5A} is  ; and R^{5B} is

 ; or wherein R^{5A} is  or  ; and R^{5B} is  or  .

20. The compound of Claim 12, wherein R^{5A} is an optionally substituted N-linked amino acid ester derivative; and R^{5B} is selected from the group consisting of an –O–optionally substituted aryl, an –O–optionally substituted heteroaryl and an –O–optionally substituted heterocyclyl.

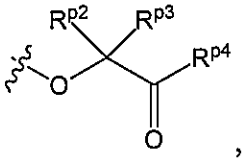
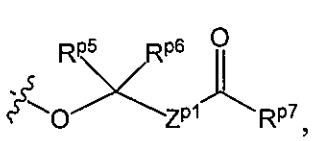
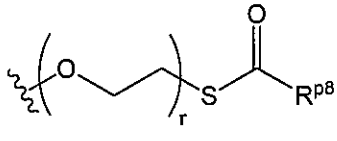
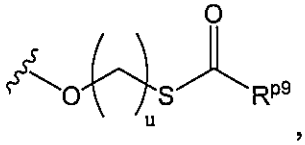
21. The compound of Claim 12, wherein R^{5A} is O^- or OH; R^{5B} is O^-, OH or  ; and n is 0 or 1.

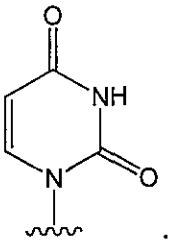
22. The compound of any one of Claims 1 and 7-21, wherein Z^1 is O.

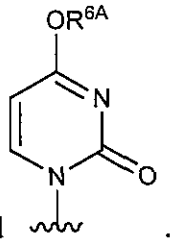
23. The compound of any one of Claims 1 and 7-21, wherein Z^1 is S.

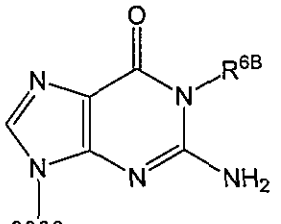
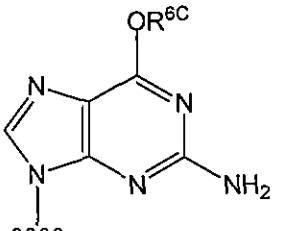
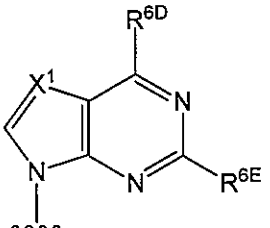
24. The compound of any one of Claims 2-6, wherein Z^p is O.

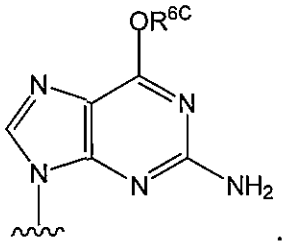
25. The compound of any one of Claims 2-6, wherein Z^p is S.

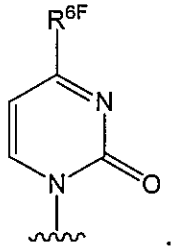
26. The compound of any one of Claims 2-6 and 24-25, wherein R^{p1} is O^-, OH, an –O–optionally substituted C_{1-6} alkyl, an –O–unsubstituted C_{1-6} alkyl,  ,  ,  ,  , an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative.

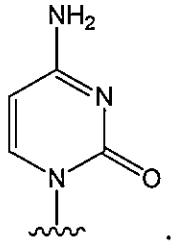
27. The compound of any one of Claims 2-6 and 24-26, wherein B^1 is an optionally substituted  .

28. The compound of any one of Claims 2-6 and 24-26, wherein B^1 is an optionally substituted  .

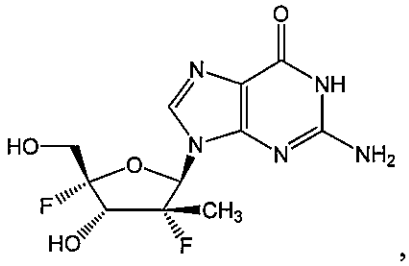
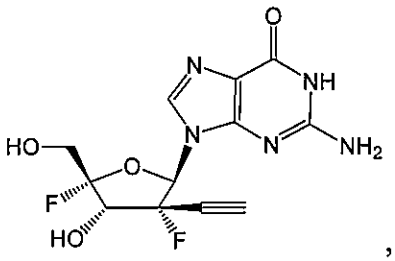
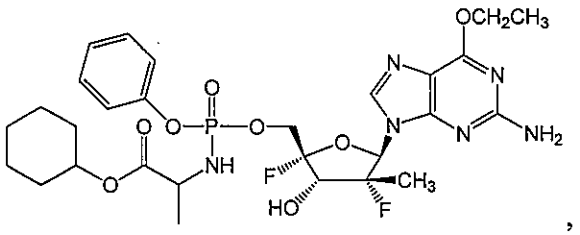
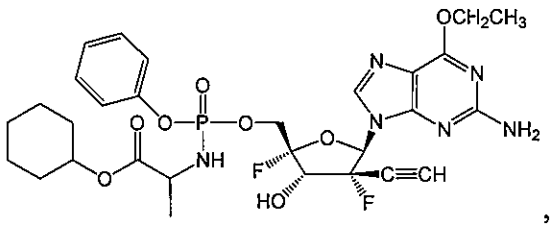
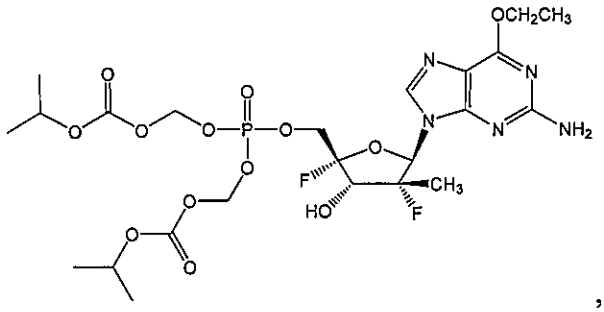
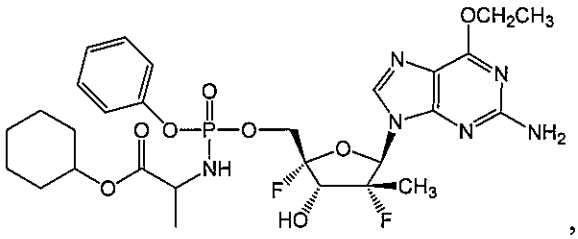
29. The compound of any one of Claims 2-6 and 24-26, wherein B^1 is an optionally substituted  , an optionally substituted  or an optionally substituted  .

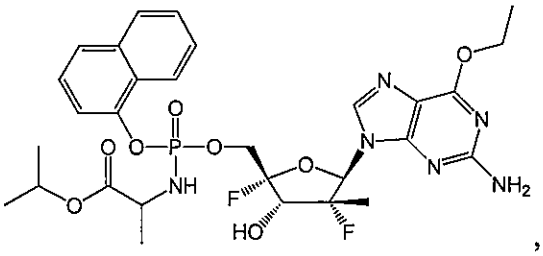
30. The compound of any one of Claims 1-26, wherein B^1 is an optionally substituted  .

31. The compound of any one of Claims 2-6 and 24-26, wherein B^1 is an optionally substituted  .

32. The compound of any one of Claims 2-6 and 24-26, wherein B^1 is an optionally substituted  .

33. The compound of Claim 1 selected from the group consisting of:

 ,
 ,
 ,
 ,
 ,
 ,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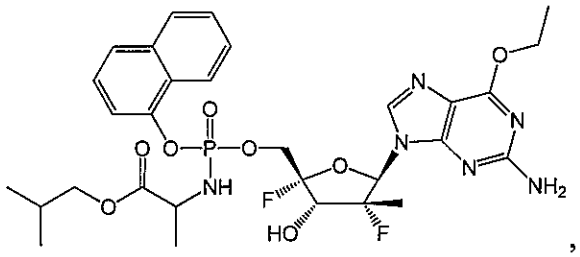
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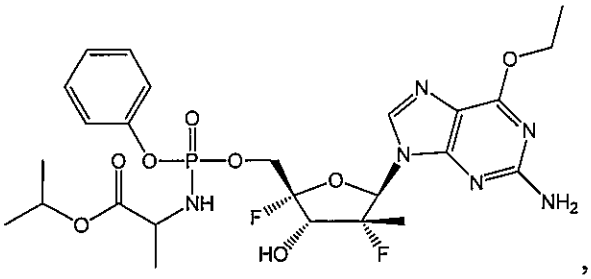
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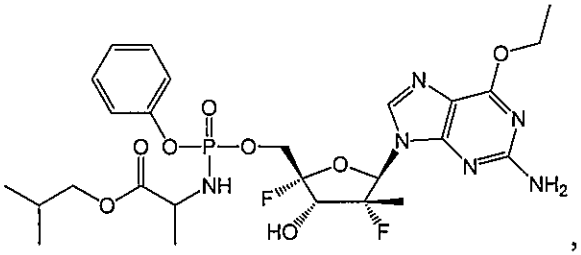
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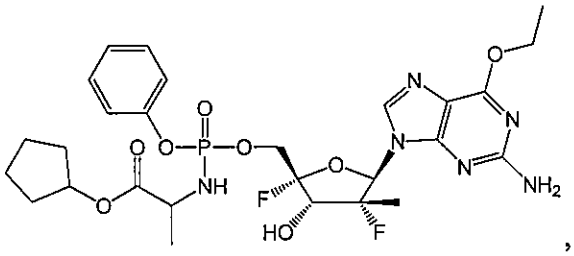
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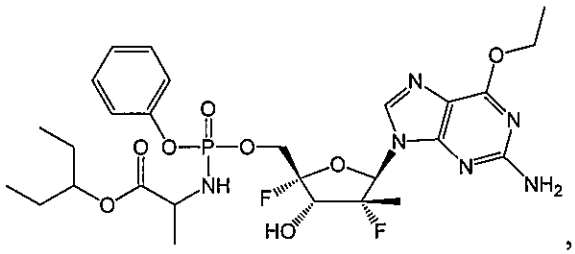
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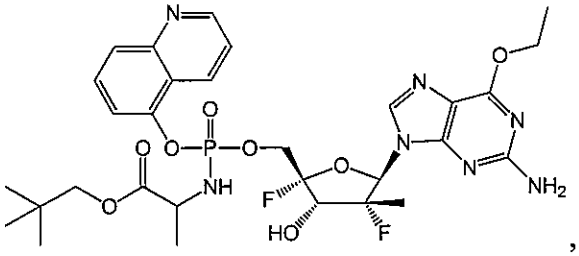
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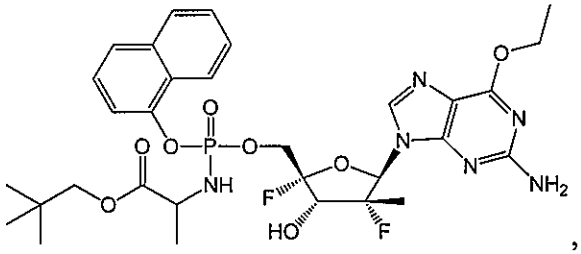
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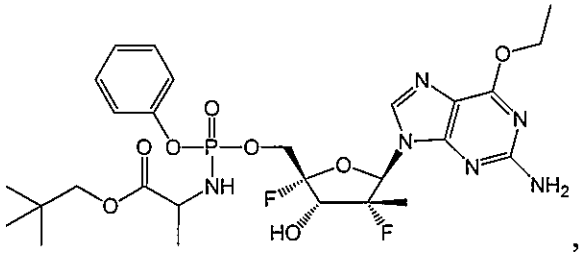
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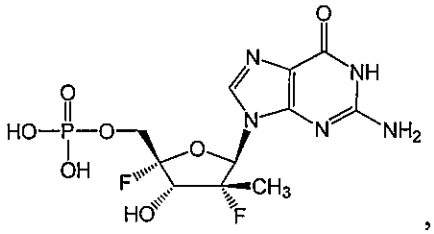
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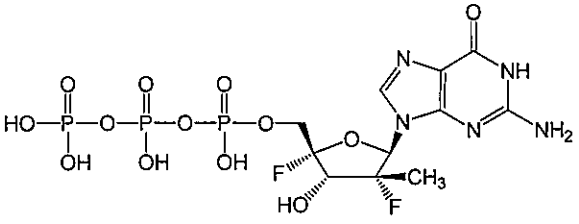
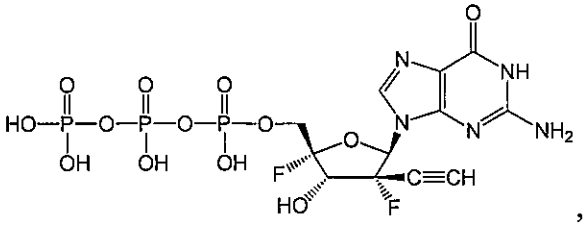
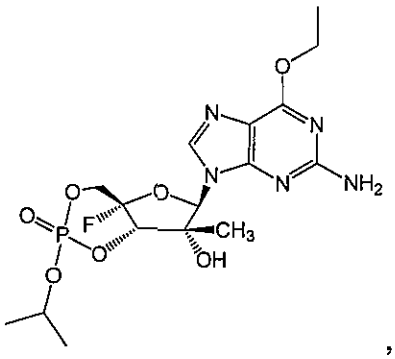


and
,

or a pharmaceutically acceptable salt of the foregoing.

34. The compound of Claim 2 selected from the group consisting of:



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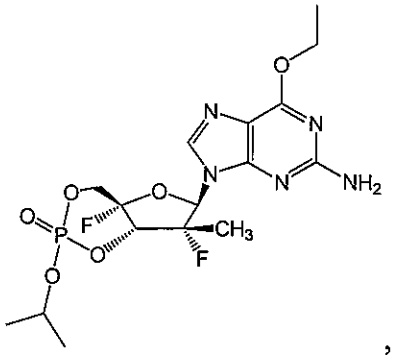

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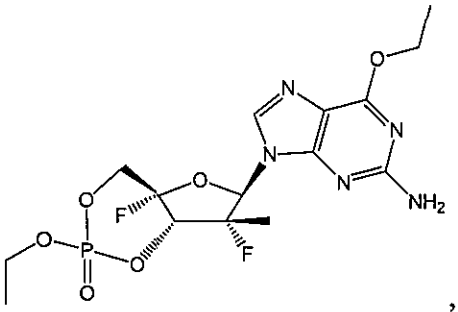

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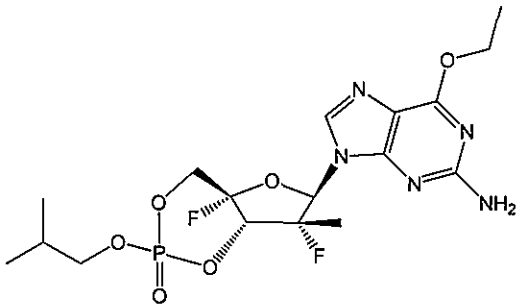
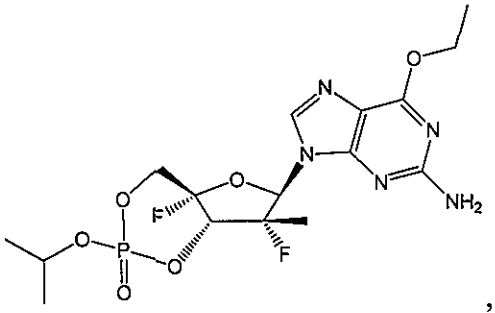
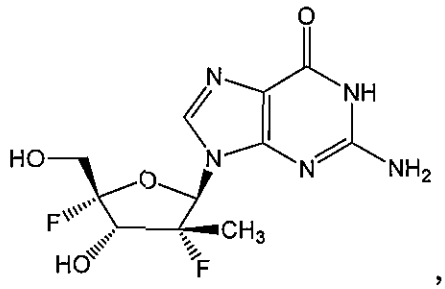


and



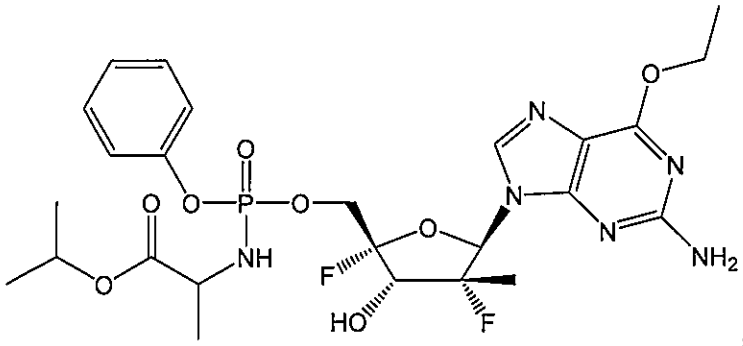
, or a pharmaceutically acceptable salt of the foregoing.

35. The compound of Claim 1, wherein the compound is



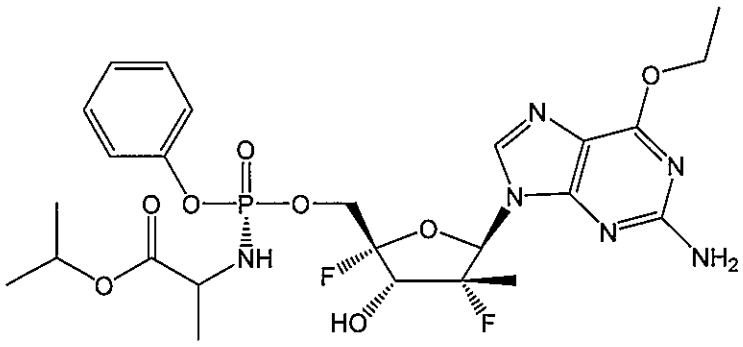
, or a pharmaceutically acceptable salt thereof.

36. The compound of Claim 1, wherein the compound is



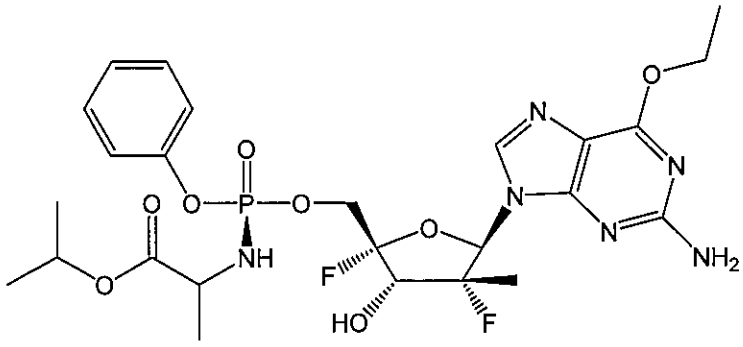
, or a pharmaceutically acceptable salt thereof

37. The compound of Claim 1, wherein the compound is



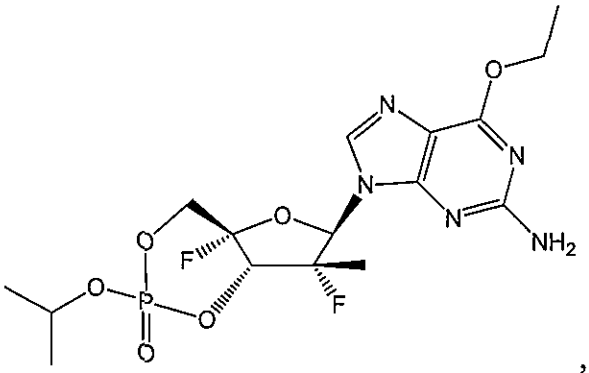
, or a pharmaceutically acceptable salt thereof.

38. The compound of Claim 1, wherein the compound is



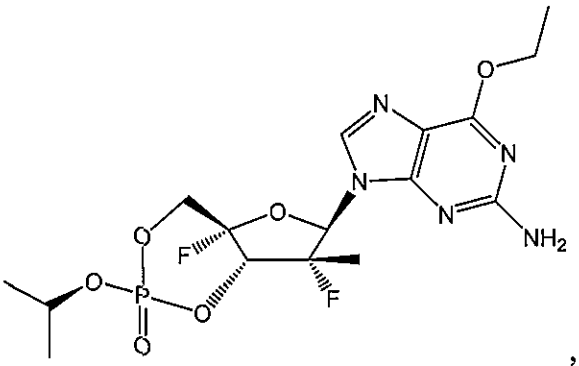
, or a pharmaceutically acceptable salt thereof.

39. The compound of Claim 2, wherein the compound is



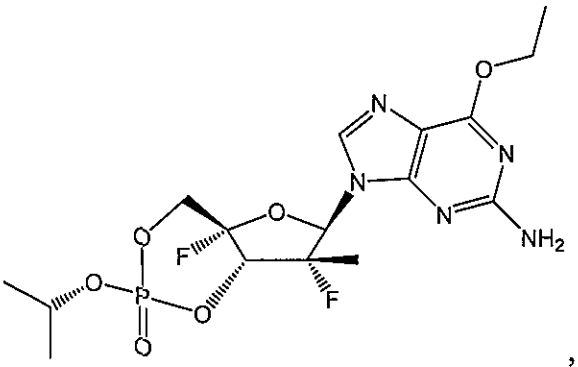
, or a pharmaceutically acceptable salt thereof.

40. The compound of Claim 2, wherein the compound is



, or a pharmaceutically acceptable salt thereof.

41. The compound of Claim 2, wherein the compound is



, or a pharmaceutically acceptable salt thereof.

42. A pharmaceutical composition comprising an effective amount of a compound of any one of Claims 1-41, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent, excipient or combination thereof.

43. Use of a compound of any one of Claims 1-41, or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 42 for preparing a medicament for ameliorating or treating a HCV infection.

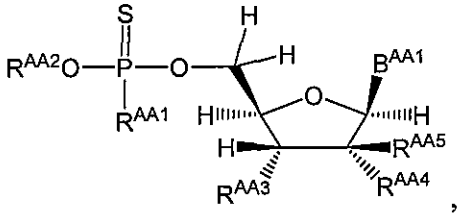
44. Use of a compound of any one of Claims 1-41, or a pharmaceutically acceptable salt thereof, for preparing a medicament for inhibiting NS5B polymerase activity of a hepatitis C virus.

45. Use of a compound of any one of Claims 1-41, or a pharmaceutically acceptable salt thereof, for preparing a medicament for inhibiting replication of a hepatitis C virus.

46. Use of a compound of any one of Claims 1-41, or a pharmaceutically acceptable salt thereof, for preparing a medicament for contacting a cell infected with a hepatitis C virus, thereby ameliorating or treating the HCV infection.

47. Use of a compound of any one of Claims 1-41 in the preparation of a medicament for ameliorating or treating a HCV infection, wherein the medicament is manufactured for use in combination with one or more agents, or pharmaceutically acceptable salts thereof, selected from the group consisting of an interferon, ribavirin, a HCV protease inhibitor, a HCV polymerase inhibitor, a NS5A inhibitor, an antiviral compound, a compound of Formula (AA), a compound of Formula (BB) and a compound of Formula (CC), wherein:

Formula (AA) has the structure:

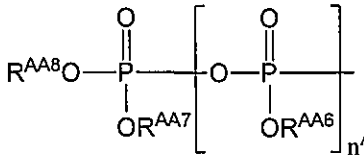


, wherein:

B^{AA1} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

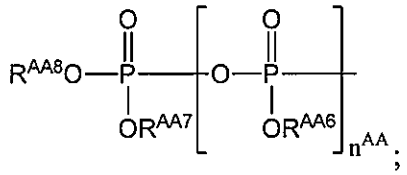
R^{AA1} is selected from O^-, OH, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

R^{AA2} is absent or selected from hydrogen, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl and



, wherein R^{AA6}, R^{AA7} and R^{AA8} are independently absent or hydrogen, and n^{AA} is 0 or 1;

provided that when R^{AA1} is O^- or OH, then R^{AA2} is absent, hydrogen or



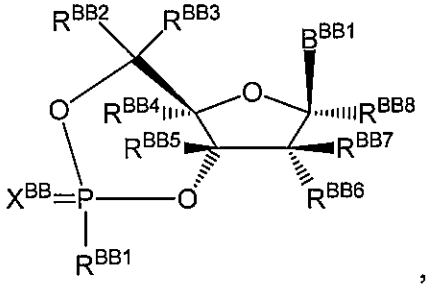
R^{AA3} is selected from hydrogen, halogen, $-OR^{AA9}$ and $-OC(=O)R^{AA10}$;

R^{AA4} is selected from halogen, $-OR^{AA11}$ and $-OC(=O)R^{AA12}$; or R^{AA3} and R^{AA4} are both an oxygen atom which are linked together by a carbonyl group;

R^{AA5} is selected from an optionally substituted C_{2-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl and an optionally substituted C_{3-6} cycloalkyl; or R^{AA4} and R^{AA5} together form $-(C_{1-6}$ alkyl)-O– or –O-(C_{1-6} alkyl)–;

R^{AA9} and R^{AA11} are independently hydrogen or an optionally substituted C_{1-6} alkyl; and R^{AA10} and R^{AA12} are independently an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl;

Formula (BB) has the structure:



, wherein:

B^{BB1} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

X^{BB} is O (oxygen) or S (sulfur);

R^{BB1} is selected from $-Z^{BB}-R^{BB9}$, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

Z^{BB} is selected from O (oxygen), S (sulfur) and $N(R^{BB10})$;

R^{BB2} and R^{BB3} are independently selected from hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl, an optionally substituted C_{1-6} haloalkyl and an optionally substituted aryl(C_{1-6} alkyl); or R^{BB2} and R^{BB3} are taken together to form a group

selected from an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, an optionally substituted C_{3-6} aryl and an optionally substituted C_{3-6} heteroaryl;

R^{BB4} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl and an optionally substituted allenyl;

R^{BB5} is hydrogen or an optionally substituted C_{1-6} alkyl;

R^{BB6} is selected from hydrogen, halogen, azido, amino, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{BB11}$ and $-OC(=O)R^{BB12}$;

R^{BB7} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{BB13}$ and $-OC(=O)R^{BB14}$;

R^{BB8} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{BB15}$ and $-OC(=O)R^{BB16}$;

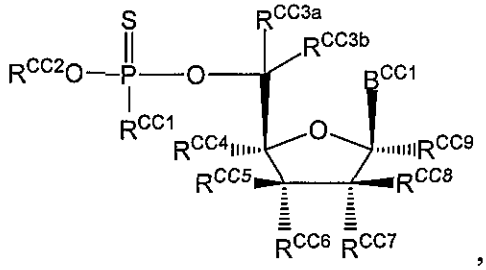
R^{BB9} is selected from an optionally substituted alkyl, an optionally substituted alkenyl, an optionally substituted alkynyl, an optionally substituted cycloalkyl, an optionally substituted cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl, an optionally substituted aryl(C_{1-6}alkyl), an optionally substituted heteroaryl(C_{1-6}alkyl) and an optionally substituted heterocyclyl(C_{1-6}alkyl);

R^{BB10} is selected from hydrogen, an optionally substituted alkyl, an optionally substituted alkenyl, an optionally substituted alkynyl, an optionally substituted cycloalkyl, an optionally substituted cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl, an optionally substituted aryl(C_{1-6}alkyl), an optionally substituted heteroaryl(C_{1-6}alkyl) and an optionally substituted heterocyclyl(C_{1-6}alkyl);

R^{BB11}, R^{BB13} and R^{BB15} are independently hydrogen or an optionally substituted C_{1-6} alkyl; and

R^{BB12}, R^{BB14} and R^{BB16} are independently an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl; and

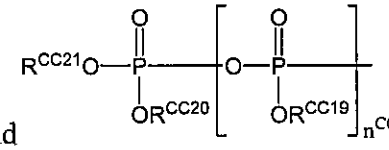
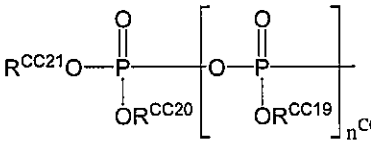
Formula (CC) has the structure:



, wherein:

B^{CC1} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

R^{CC1} is selected from O^-, OH, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

R^{CC2} is selected from an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl and  , wherein R^{CC19}, R^{CC20} and R^{CC21} are independently absent or hydrogen, and n^{CC} is 0 or 1; provided that when R^{CC1} is O^- or OH, then R^{CC2} is  ;

R^{CC3a} and R^{CC3b} are independently selected from hydrogen, deuterium, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl, an optionally substituted C_{1-6} haloalkyl and aryl(C_{1-6} alkyl); or R^{CC3a} and R^{CC3b} are taken together to form an optionally substituted C_{3-6} cycloalkyl;

R^{CC4} is selected from hydrogen, azido, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl and an optionally substituted C_{2-6} alkynyl;

R^{CC5} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC10}$ and $-OC(=O)R^{CC11}$;

R^{CC6} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC12}$ and $-OC(=O)R^{CC13}$;

R^{CC7} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC14}$ and $-OC(=O)R^{CC15}$; or R^{CC6} and R^{CC7} are both oxygen atoms and linked together by a carbonyl group;

R^{CC8} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC16}$ and $-OC(=O)R^{CC17}$;

R^{CC9} is selected from hydrogen, azido, cyano, an optionally substituted C_{1-6} alkyl and $-OR^{CC18}$;

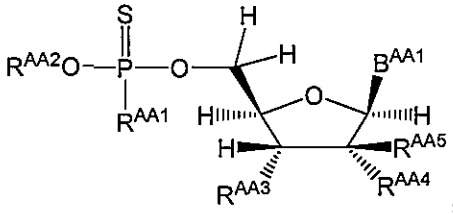
R^{CC10}, R^{CC12}, R^{CC14}, R^{CC16} and R^{CC18} are independently selected from hydrogen and an optionally substituted C_{1-6} alkyl; and

R^{CC11}, R^{CC13}, R^{CC15} and R^{CC17} are independently selected from an optionally substituted C_{1-6} alkyl and an optionally substituted C_{3-6} cycloalkyl,

or a pharmaceutically acceptable salt of any of the aforementioned compounds.

48. Use of a compound of any one of Claims 1-41 in the preparation of a medicament for contacting a cell infected with a hepatitis C virus, wherein the medicament is manufactured for use in combination with one or more agents, or pharmaceutically acceptable salts thereof, selected from the group consisting of an interferon, ribavirin, a HCV protease inhibitor, a HCV polymerase inhibitor, a NS5A inhibitor, an antiviral compound, a compound of Formula (AA) , a compound of Formula (BB) and a compound of Formula (CC), wherein:

Formula (AA) has the structure:

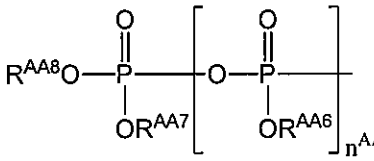


, wherein:

B^{AA1} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

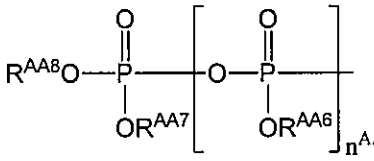
R^{AA1} is selected from O^-, OH, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

R^{AA2} is absent or selected from hydrogen, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl and



, wherein R^{AA6}, R^{AA7} and R^{AA8} are independently absent or hydrogen, and n^{AA} is 0 or 1;

provided that when R^{AA1} is O^- or OH, then R^{AA2} is absent, hydrogen or



;

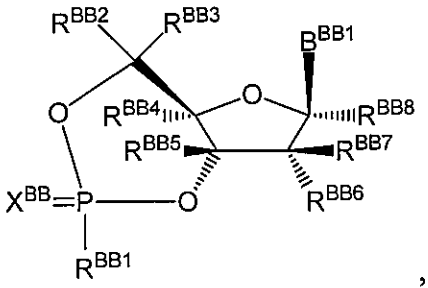
R^{AA3} is selected from hydrogen, halogen, $-OR^{AA9}$ and $-OC(=O)R^{AA10}$;

R^{AA4} is selected from halogen, $-OR^{AA11}$ and $-OC(=O)R^{AA12}$; or R^{AA3} and R^{AA4} are both an oxygen atom which are linked together by a carbonyl group;

R^{AA5} is selected from an optionally substituted C_{2-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl and an optionally substituted C_{3-6} cycloalkyl; or R^{AA4} and R^{AA5} together form $-(C_{1-6}$ alkyl)-O– or –O-(C_{1-6} alkyl)–;

R^{AA9} and R^{AA11} are independently hydrogen or an optionally substituted C_{1-6} alkyl; and R^{AA10} and R^{AA12} are independently an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl;

Formula (BB) has the structure:



, wherein:

B^{BB1} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

X^{BB} is O (oxygen) or S (sulfur);

R^{BB1} is selected from $–Z^{BB}–R^{BB9}$, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

Z^{BB} is selected from O (oxygen), S (sulfur) and $N(R^{BB10})$;

R^{BB2} and R^{BB3} are independently selected from hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl, an optionally substituted C_{1-6} haloalkyl and an optionally substituted aryl(C_{1-6} alkyl); or R^{BB2} and R^{BB3} are taken together to form a group selected from an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, an optionally substituted C_{3-6} aryl and an optionally substituted C_{3-6} heteroaryl;

R^{BB4} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl and an optionally substituted allenyl;

R^{BB5} is hydrogen or an optionally substituted C_{1-6} alkyl;

R^{BB6} is selected from hydrogen, halogen, azido, amino, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{BB11}$ and $-OC(=O)R^{BB12}$;

R^{BB7} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{BB13}$ and $-OC(=O)R^{BB14}$;

R^{BB8} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{BB15}$ and $-OC(=O)R^{BB16}$;

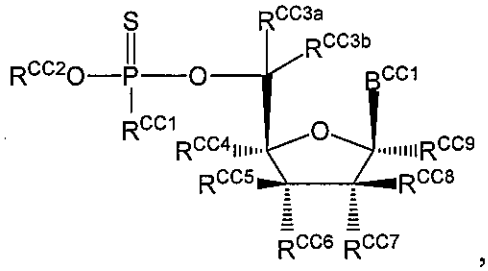
R^{BB9} is selected from an optionally substituted alkyl, an optionally substituted alkenyl, an optionally substituted alkynyl, an optionally substituted cycloalkyl, an optionally substituted cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl, an optionally substituted aryl(C_{1-6}alkyl), an optionally substituted heteroaryl(C_{1-6}alkyl) and an optionally substituted heterocyclyl(C_{1-6}alkyl);

R^{BB10} is selected from hydrogen, an optionally substituted alkyl, an optionally substituted alkenyl, an optionally substituted alkynyl, an optionally substituted cycloalkyl, an optionally substituted cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl, an optionally substituted aryl(C_{1-6}alkyl), an optionally substituted heteroaryl(C_{1-6}alkyl) and an optionally substituted heterocyclyl(C_{1-6}alkyl);

R^{BB11}, R^{BB13} and R^{BB15} are independently hydrogen or an optionally substituted C_{1-6} alkyl; and

R^{BB12}, R^{BB14} and R^{BB16} are independently an optionally substituted C_{1-6} alkyl or an optionally substituted C_{3-6} cycloalkyl; and

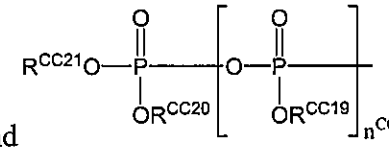
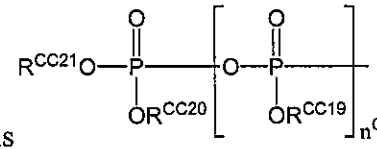
Formula (CC) has the structure:



, wherein:

B^{CC1} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

R^{CC1} is selected from O^-, OH, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

R^{CC2} is selected from an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted heterocyclyl and  , wherein R^{CC19}, R^{CC20} and R^{CC21} are independently absent or hydrogen, and n^{CC} is 0 or 1; provided that when R^{CC1} is O^- or OH, then R^{CC2} is  ;

R^{CC3a} and R^{CC3b} are independently selected from hydrogen, deuterium, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{2-6} alkynyl, an optionally substituted C_{1-6} haloalkyl and aryl(C_{1-6} alkyl); or R^{CC3a} and R^{CC3b} are taken together to form an optionally substituted C_{3-6} cycloalkyl;

R^{CC4} is selected from hydrogen, azido, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl and an optionally substituted C_{2-6} alkynyl;

R^{CC5} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC10}$ and $-OC(=O)R^{CC11}$;

R^{CC6} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC12}$ and $-OC(=O)R^{CC13}$;

R^{CC7} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC14}$ and $-OC(=O)R^{CC15}$; or R^{CC6} and R^{CC7} are both oxygen atoms and linked together by a carbonyl group;

R^{CC8} is selected from hydrogen, halogen, azido, cyano, an optionally substituted C_{1-6} alkyl, $-OR^{CC16}$ and $-OC(=O)R^{CC17}$;

R^{CC9} is selected from hydrogen, azido, cyano, an optionally substituted C_{1-6} alkyl and $-OR^{CC18}$;

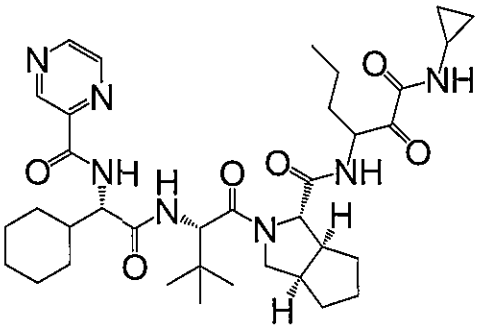
R^{CC10}, R^{CC12}, R^{CC14}, R^{CC16} and R^{CC18} are independently selected from hydrogen and an optionally substituted C_{1-6} alkyl; and

R^{CC11}, R^{CC13}, R^{CC15} and R^{CC17} are independently selected from an optionally substituted C_{1-6} alkyl and an optionally substituted C_{3-6} cycloalkyl,

or a pharmaceutically acceptable salt of any of the aforementioned compounds.

49. The use of any one of Claims 47-48, wherein the one or more agents, or pharmaceutically acceptable salts thereof, are selected from the group consisting of

ABT-450, GS-9256, GS-9451, IDX-320, ACH-1625, ACH-2684, PHX1766, PSI-661, GS-6620, TMC649128, NM283, BCX5191, IDX19368, IDX19370, ABT-333, BI-207127, ABT-072, MK-3281, TMC647055, BMS-791325, PPI-383, GS9669, PPI-461, ACH-2928, GS-5885, BMS-824393, ABT 267, ACH-3102, AZD-7295, IDX719, PPI-668, MK8742, GSK805, alisporivir, MIR-122, clemizole, ITX 5061, BIT225, NIM811, SCY-635, miravirsen, GS9620,



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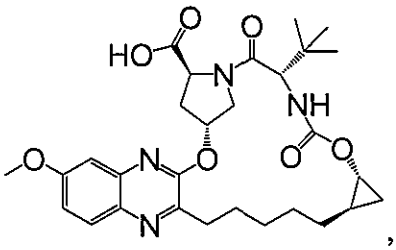

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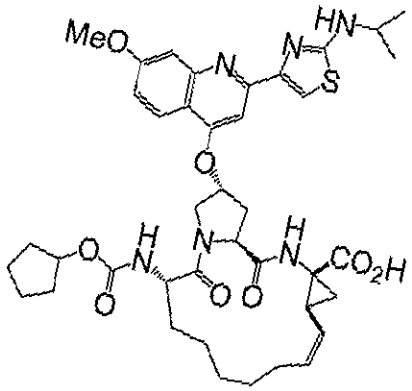

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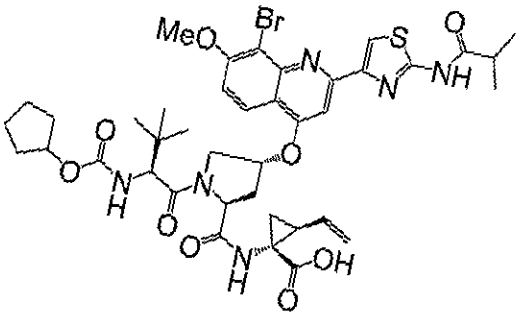

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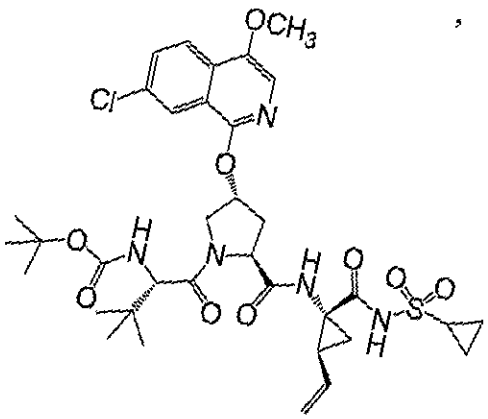

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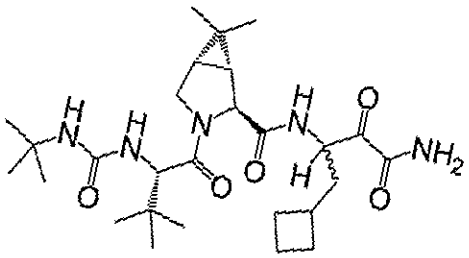

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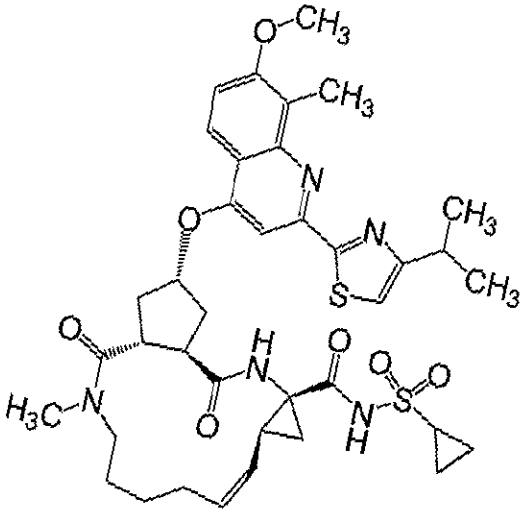

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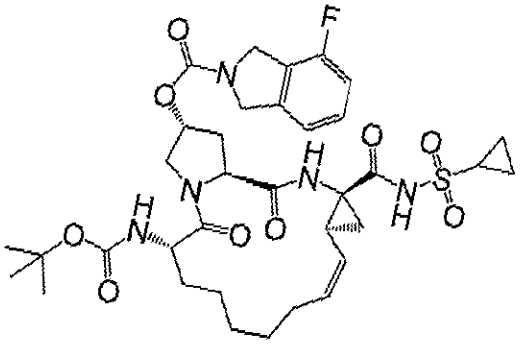

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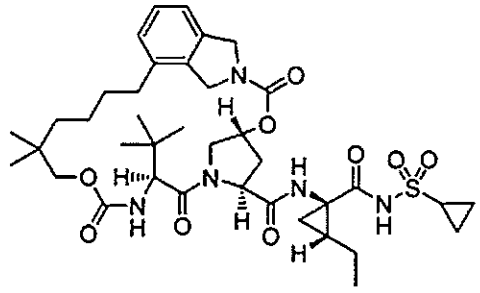
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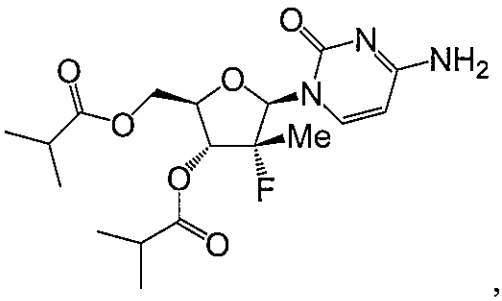
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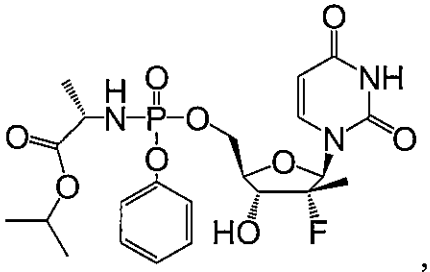
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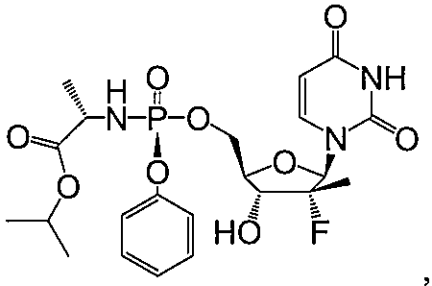
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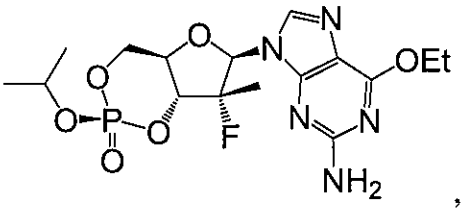
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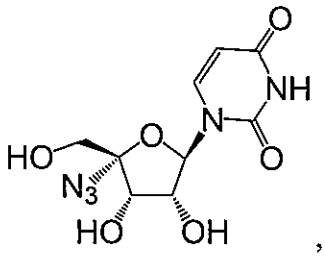
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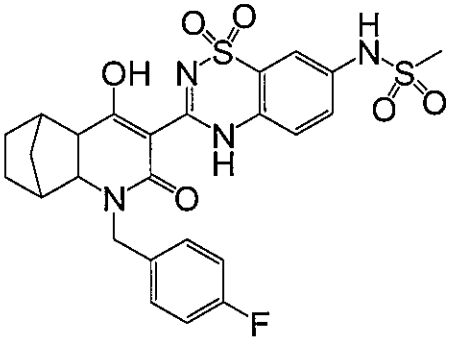
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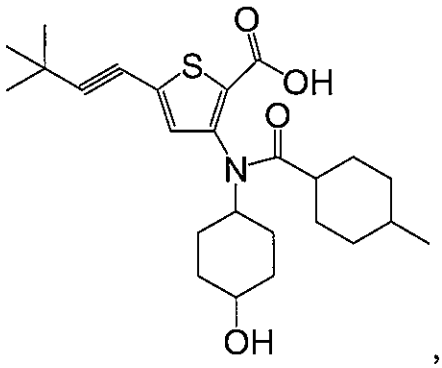
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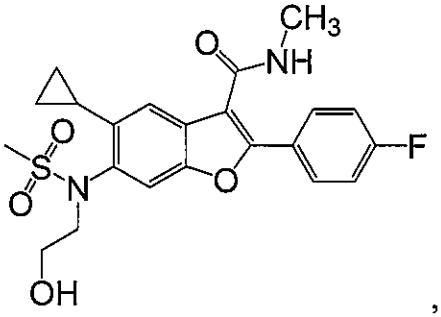
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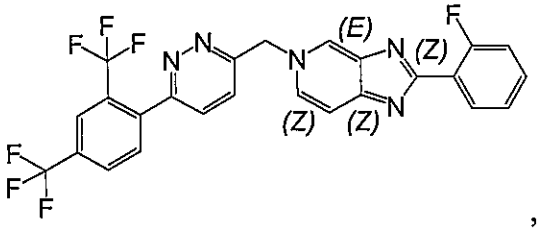
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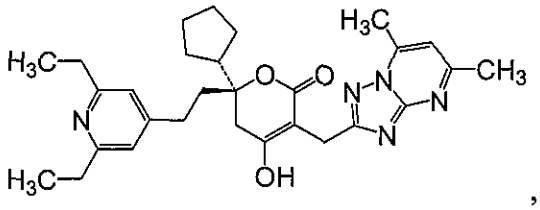
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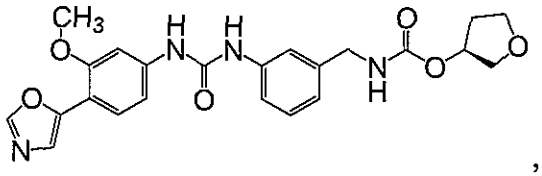
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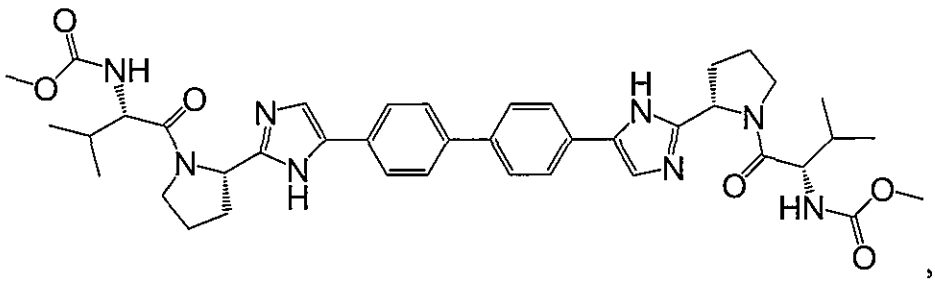
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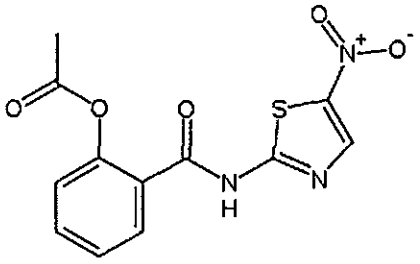
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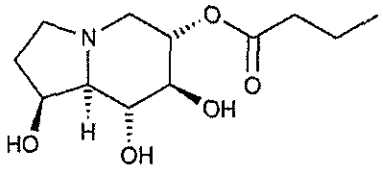
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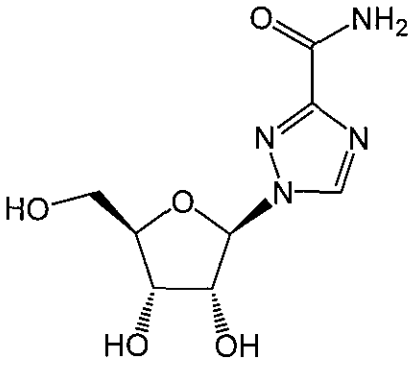
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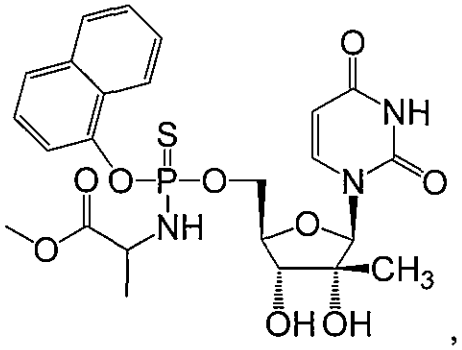
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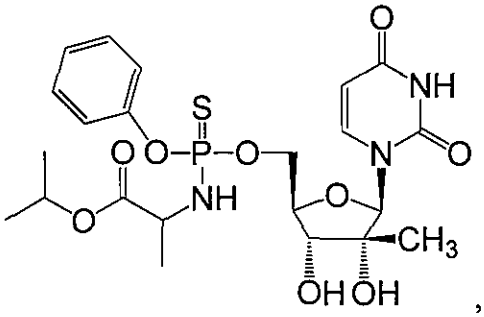
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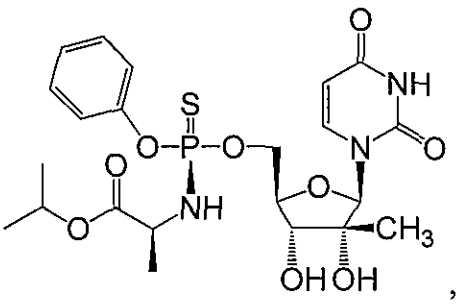
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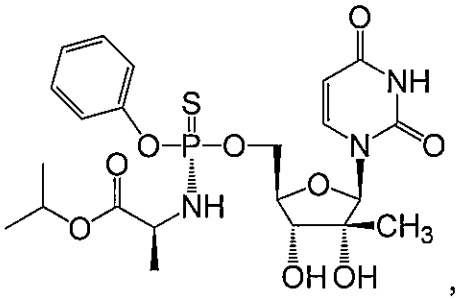
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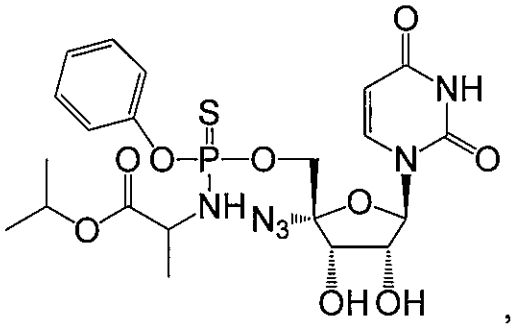
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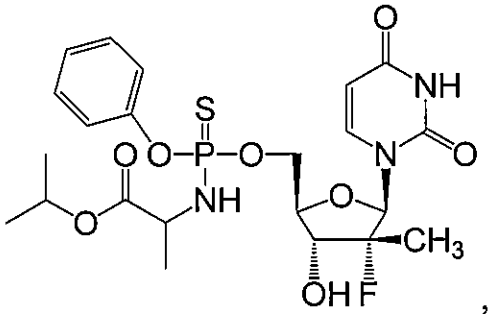
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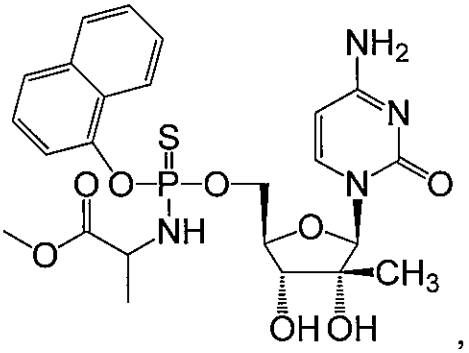
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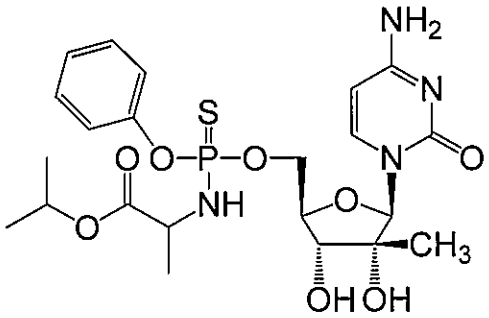
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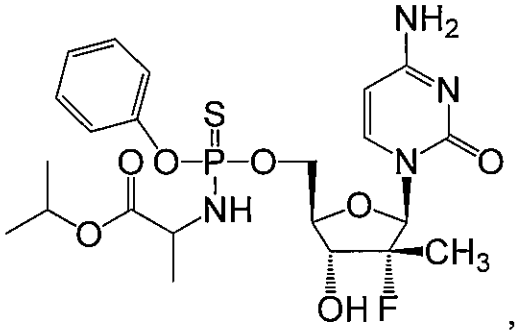
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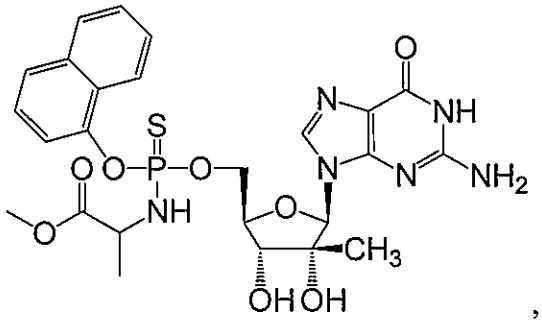
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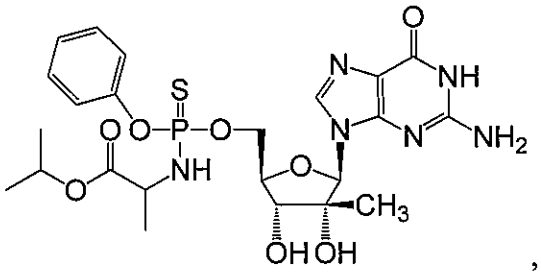
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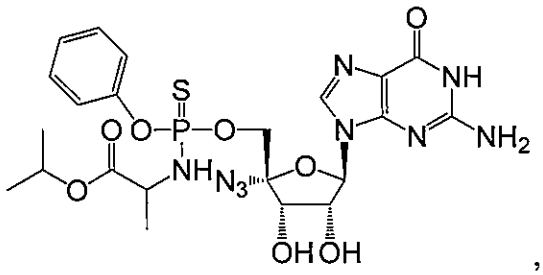
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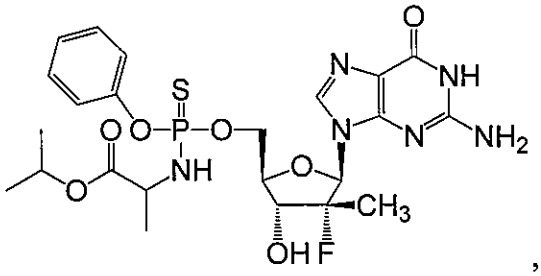
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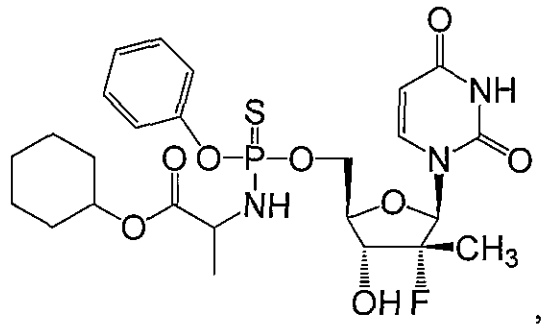
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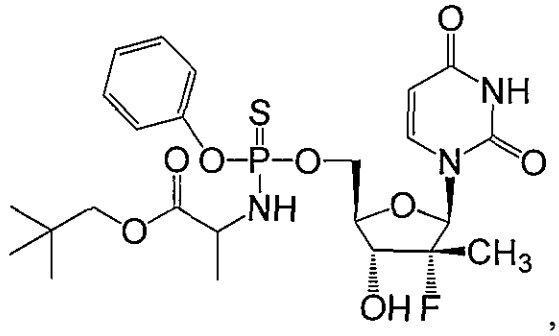
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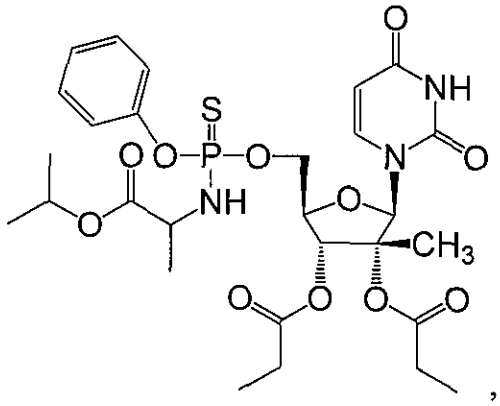
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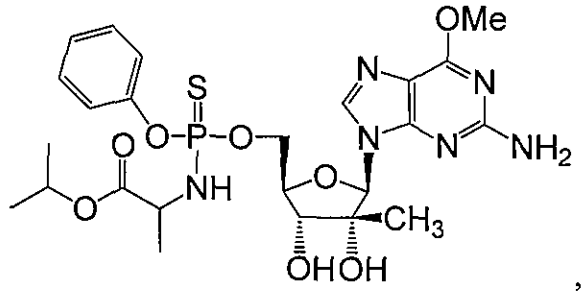
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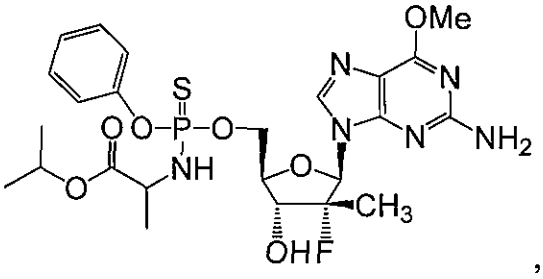
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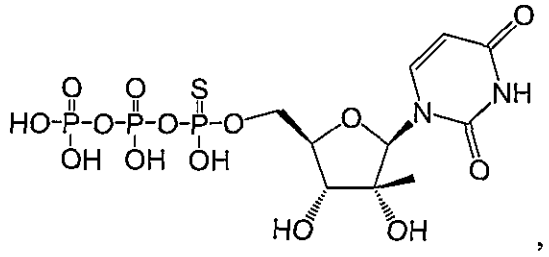
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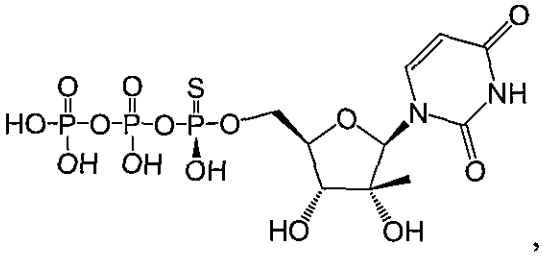
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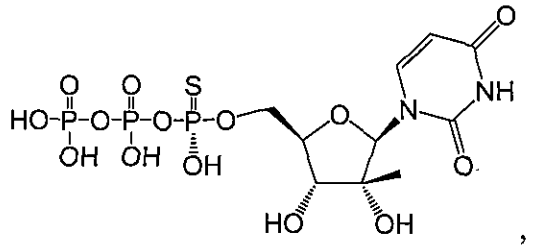
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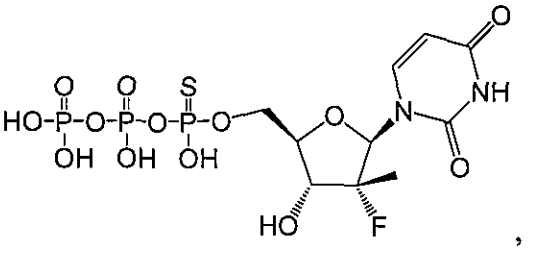
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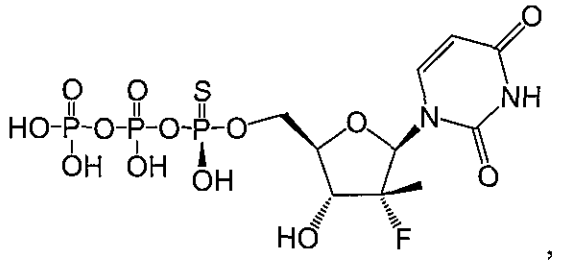
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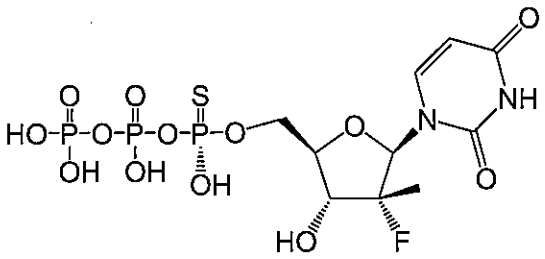
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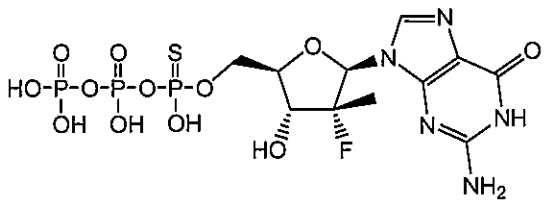
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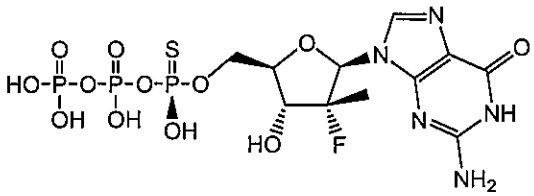
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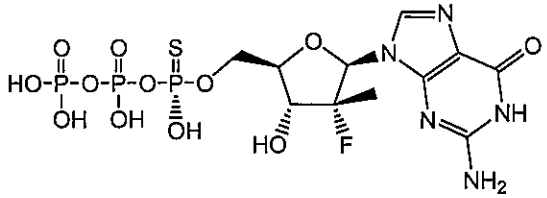
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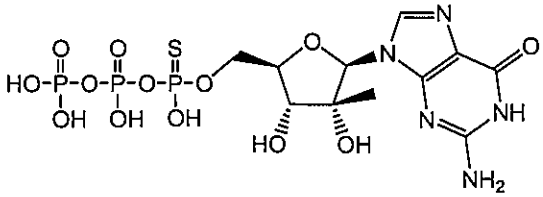
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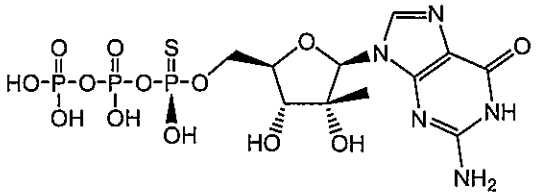
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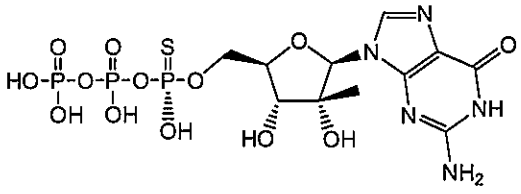
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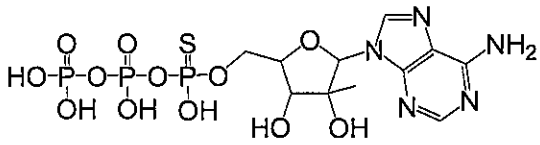
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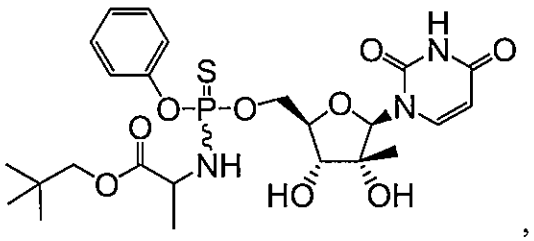
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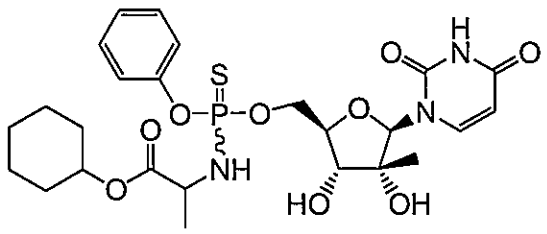
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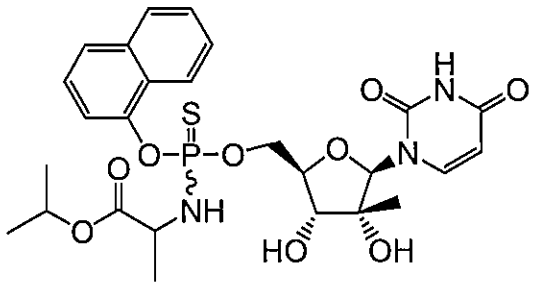
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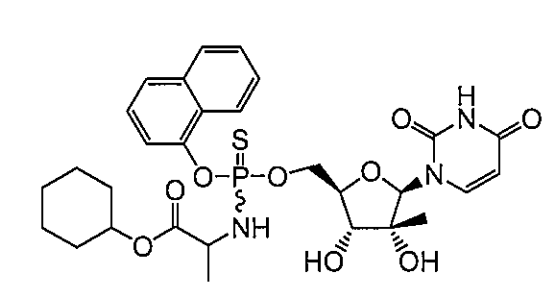
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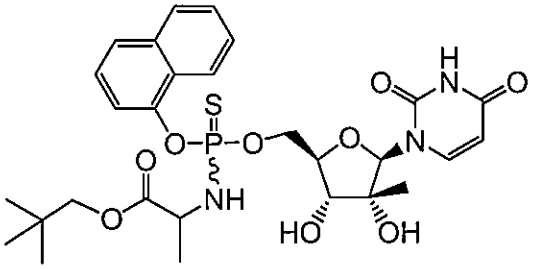
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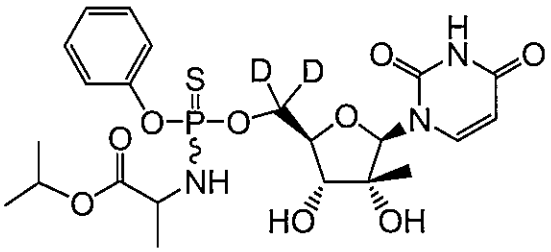
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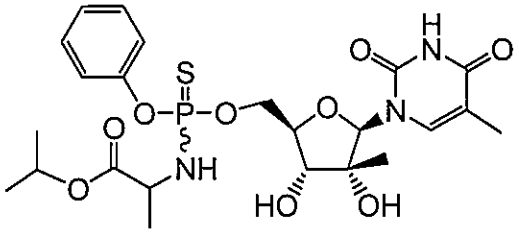
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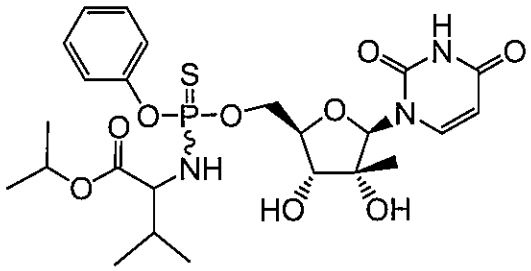
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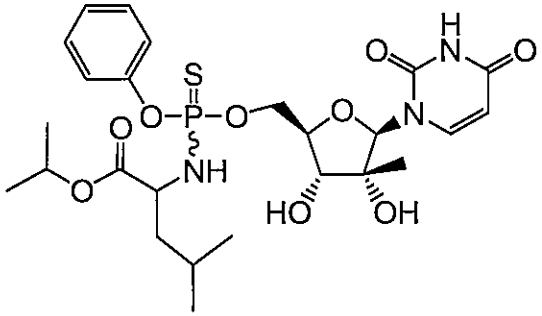
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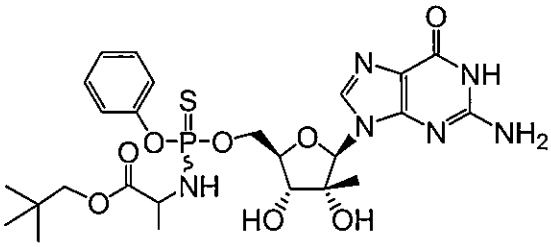
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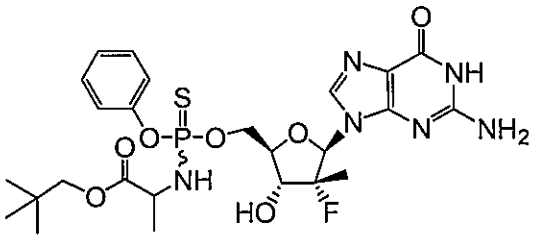
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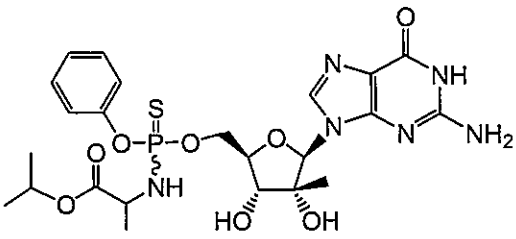
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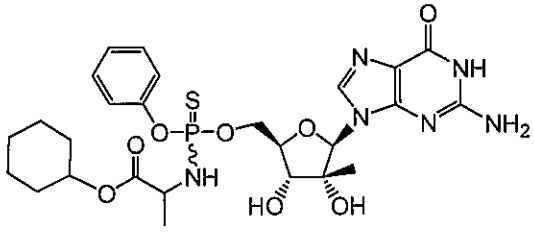
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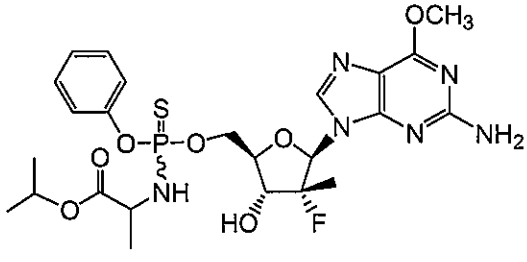
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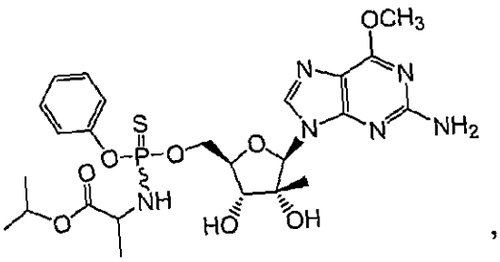
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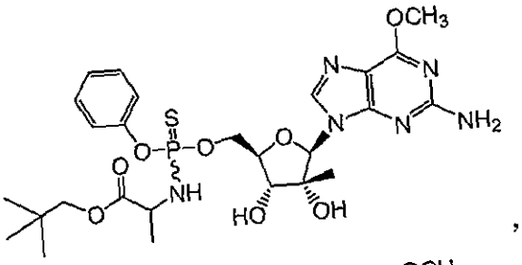
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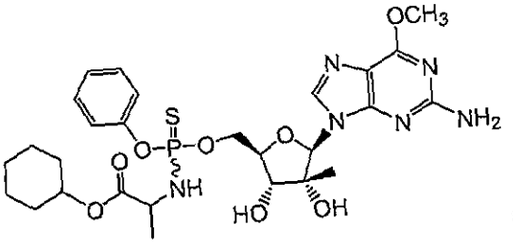
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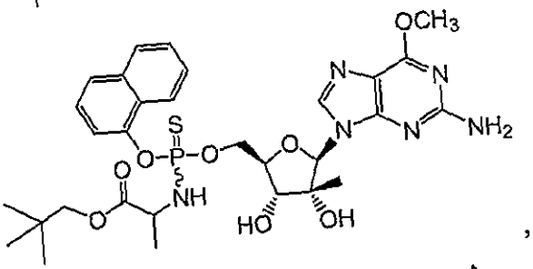
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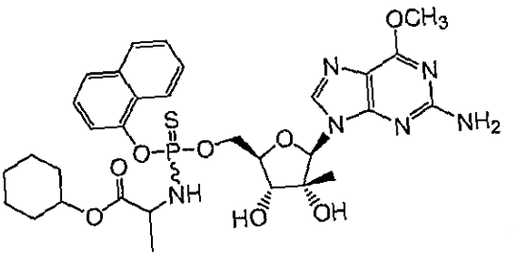
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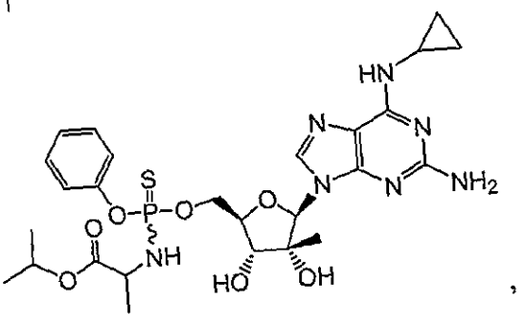
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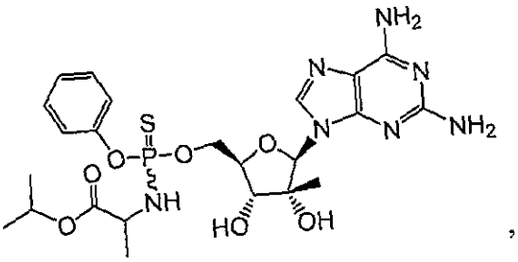
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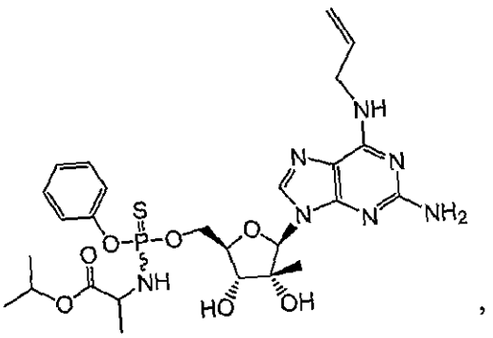
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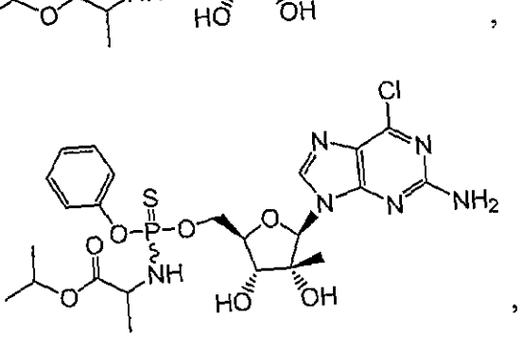
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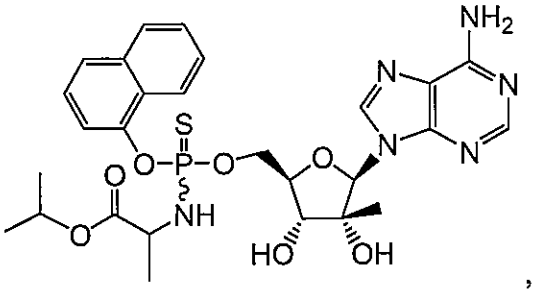
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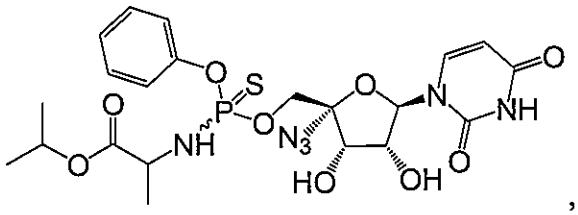
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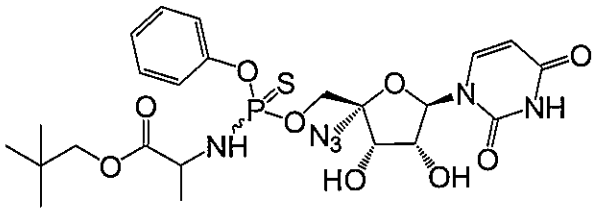
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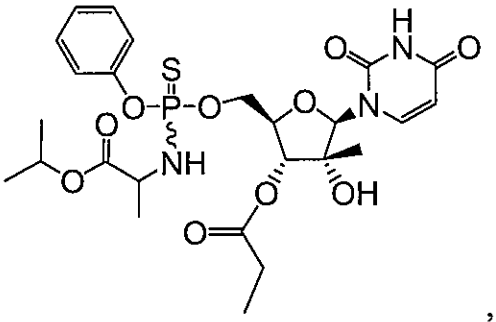
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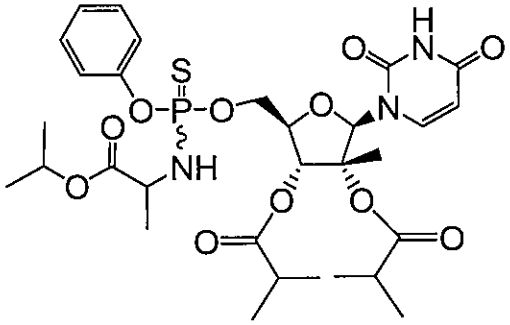
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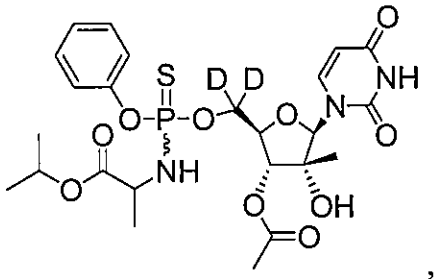
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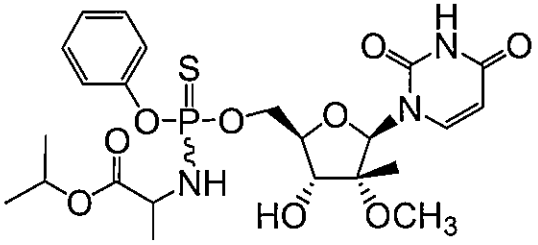
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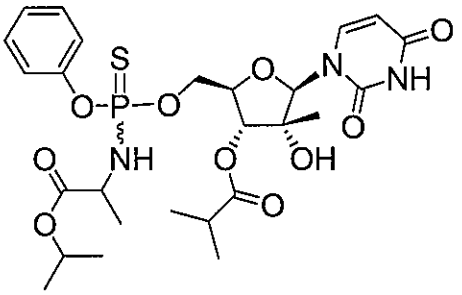
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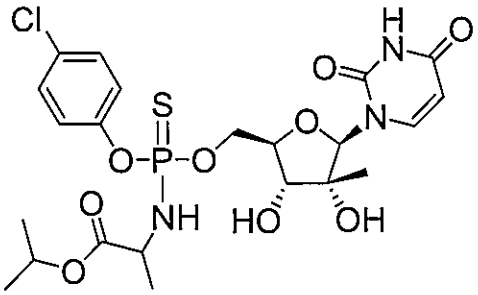
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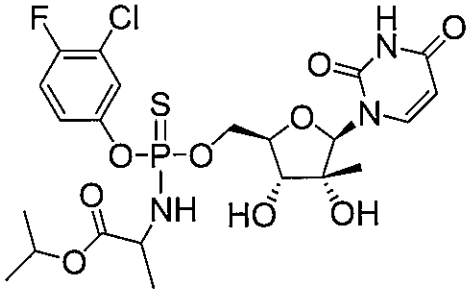
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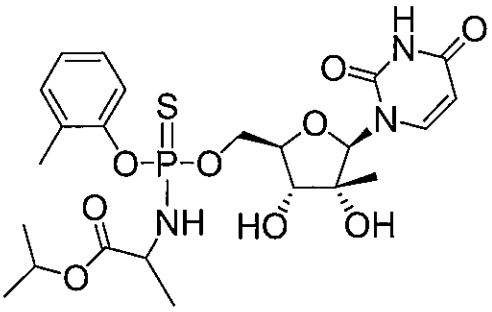
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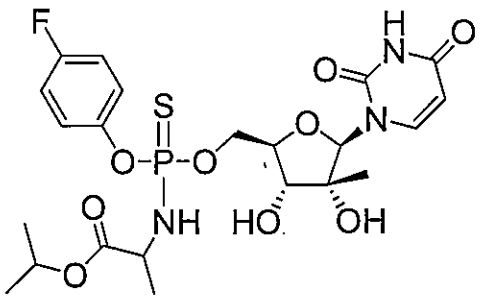
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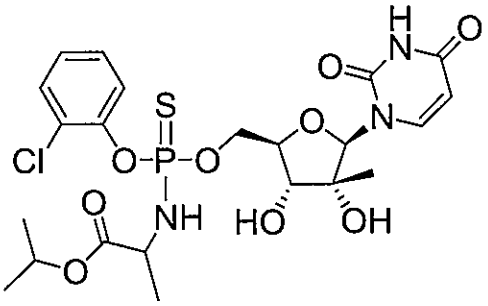
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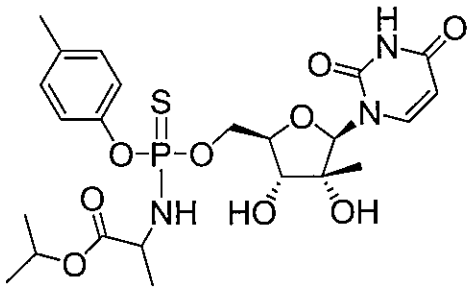
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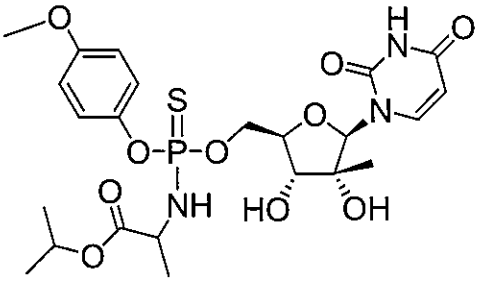
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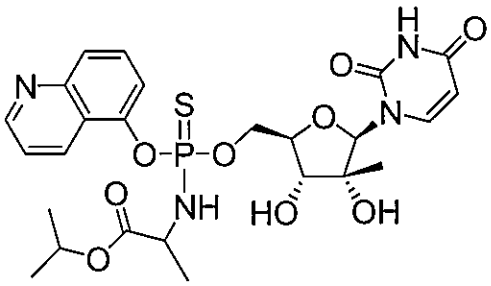
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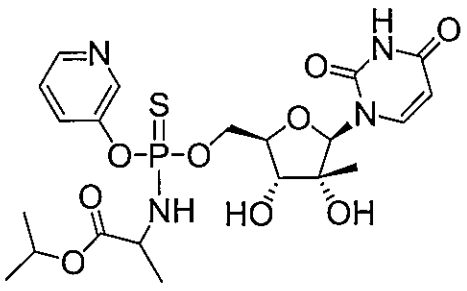
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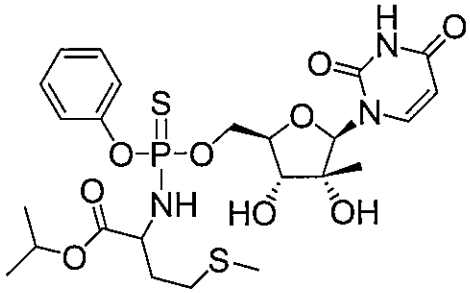
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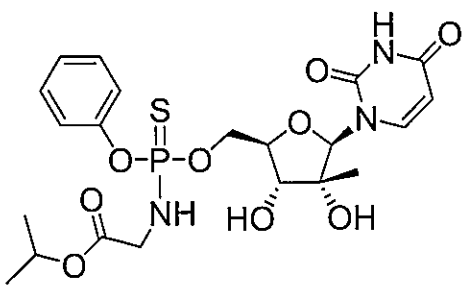
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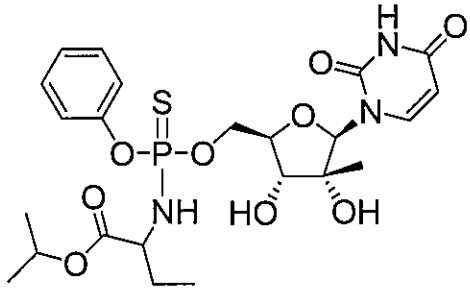
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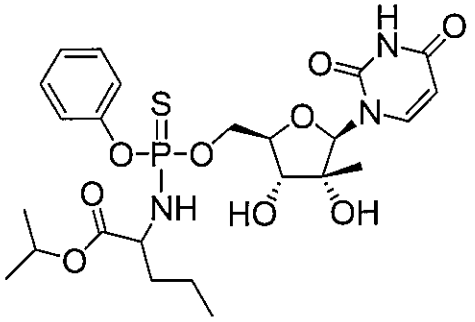

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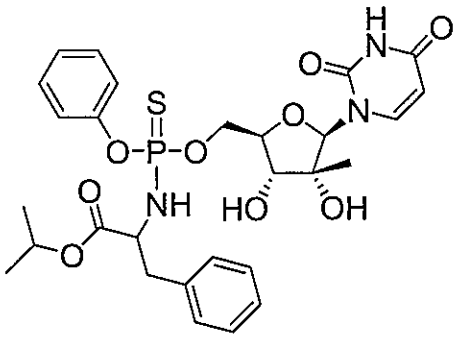

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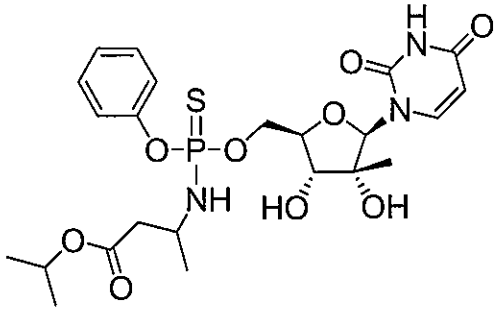

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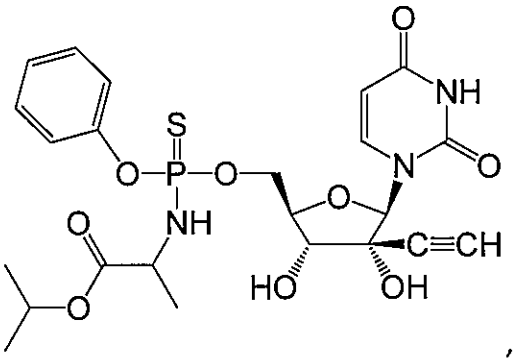

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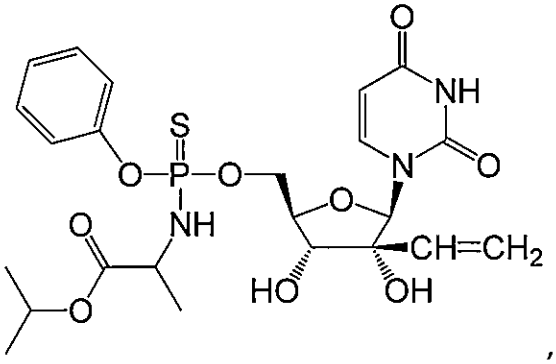

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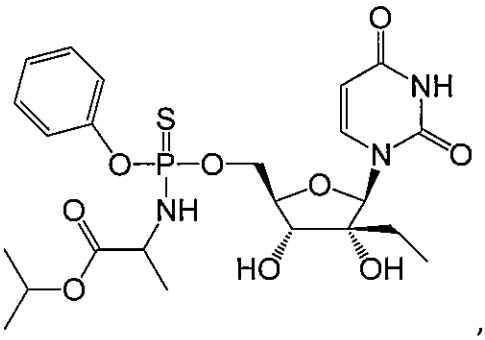

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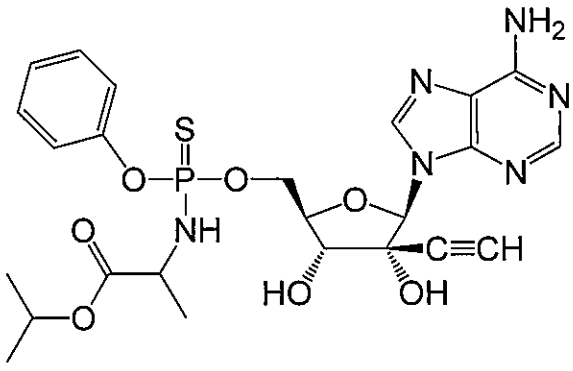

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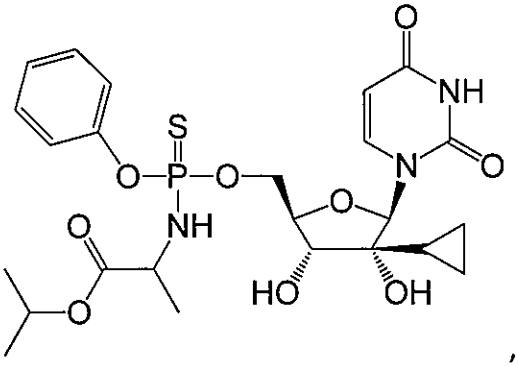

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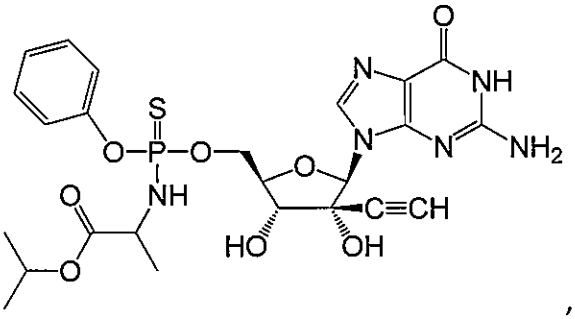
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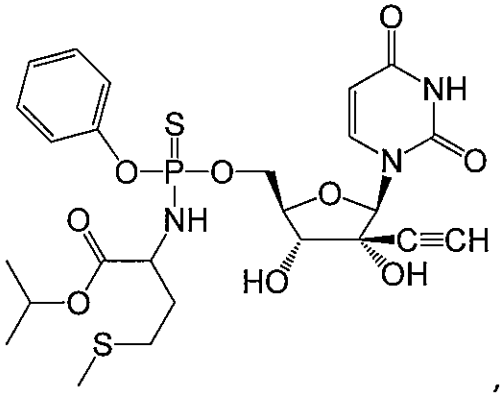
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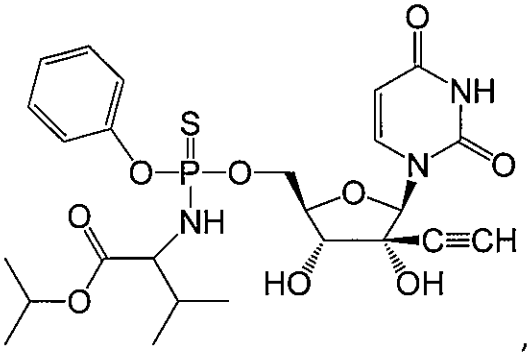
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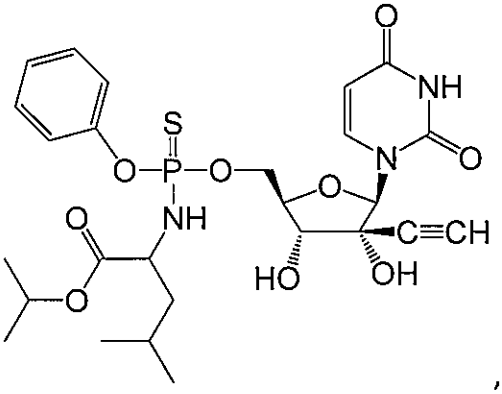
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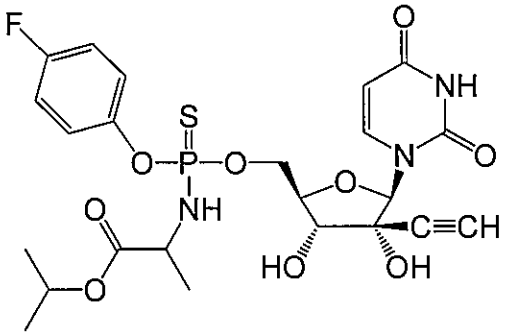
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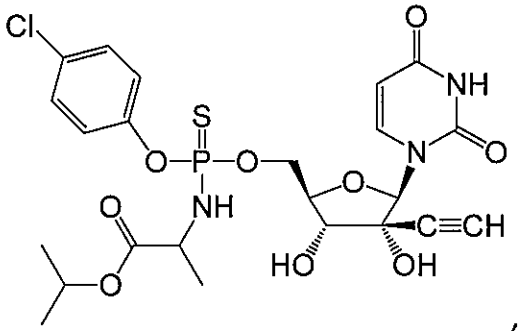
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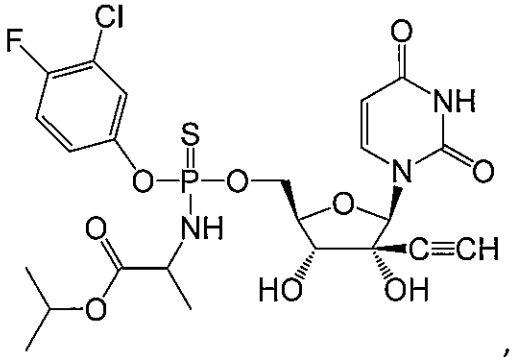
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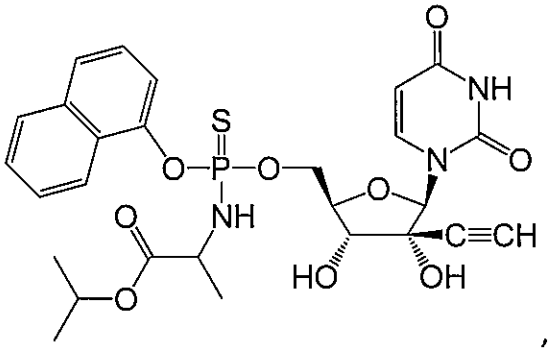
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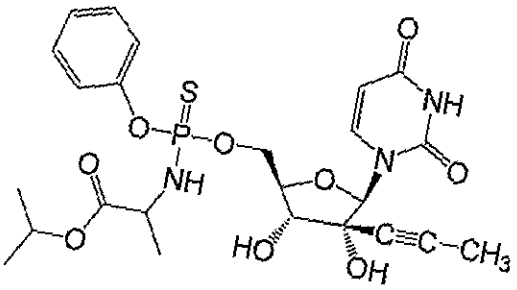

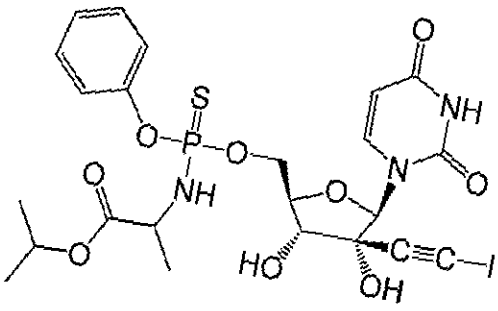

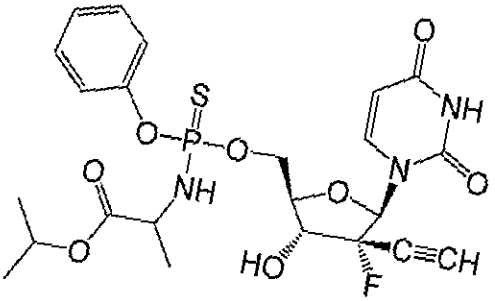

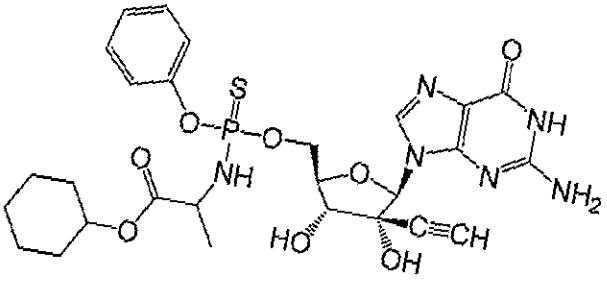

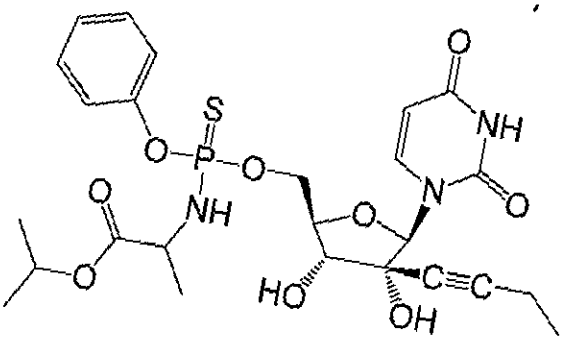

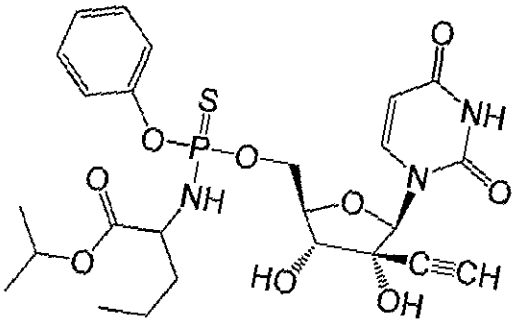

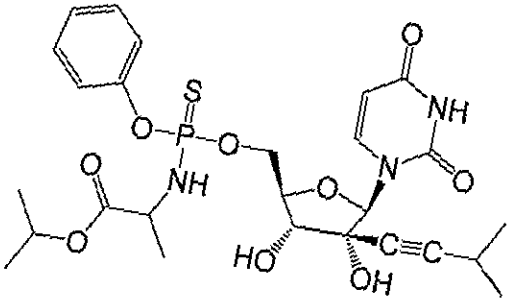

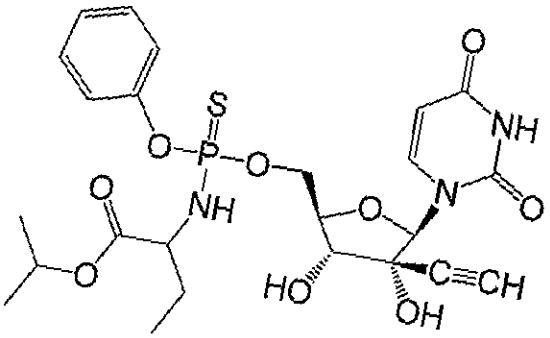

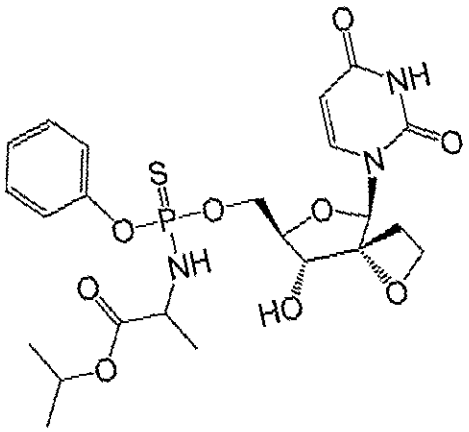

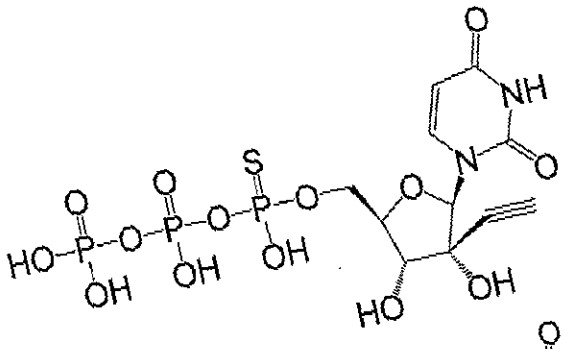

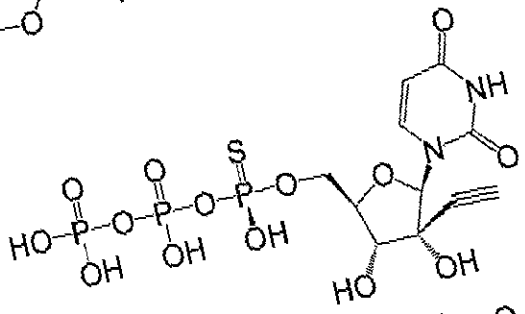

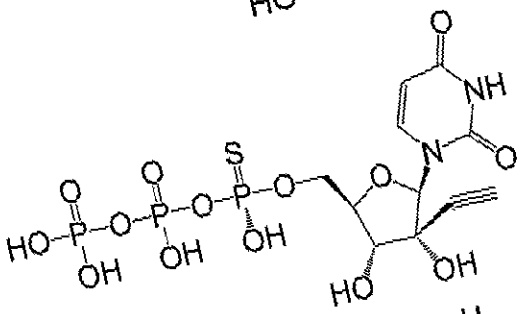

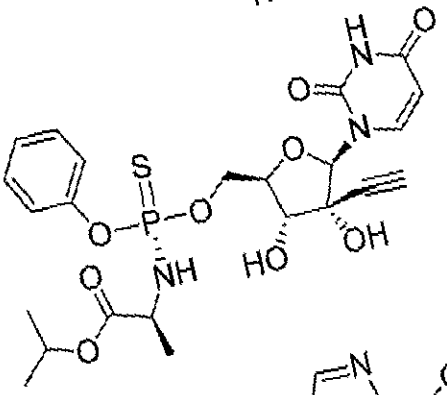

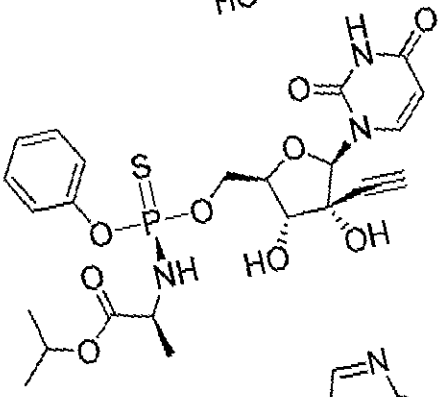

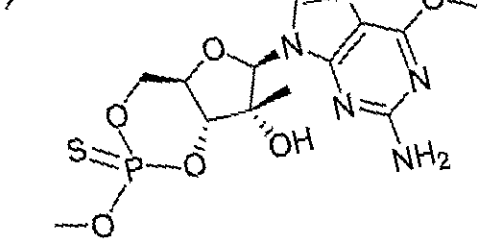

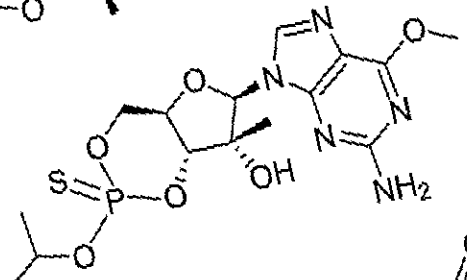

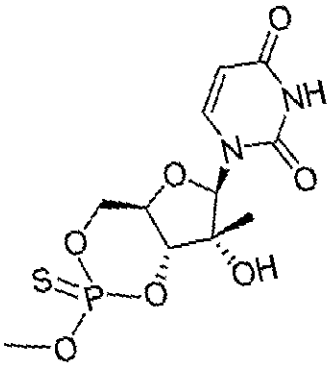

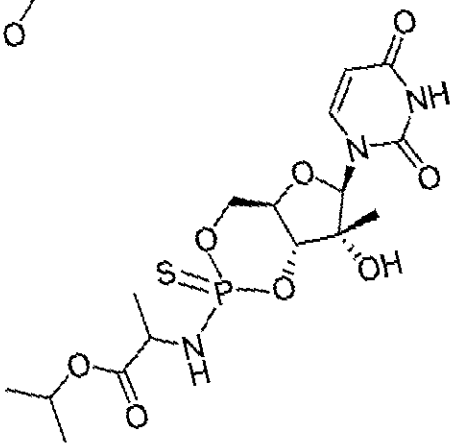

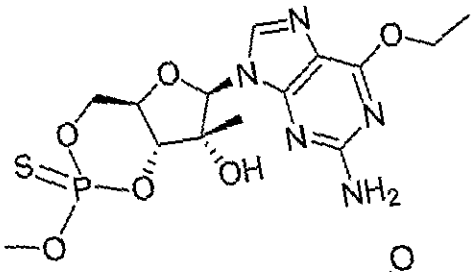
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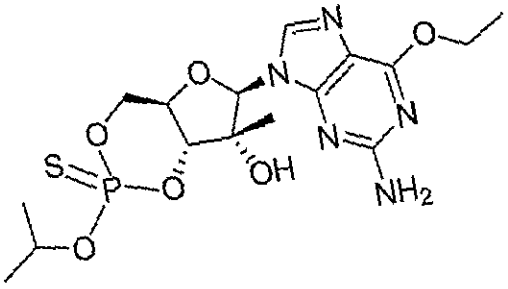
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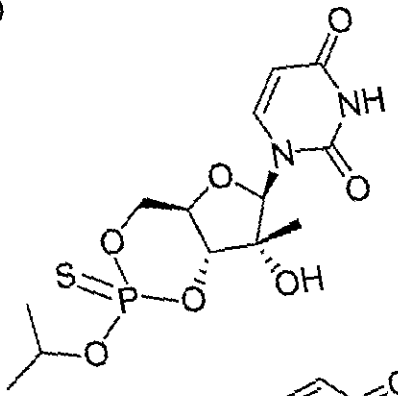
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or a pharmaceutically acceptable salt of any of the aforementioned compounds.