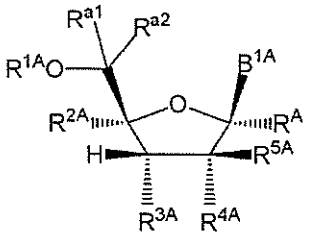
WHAT IS CLAIMED IS:

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

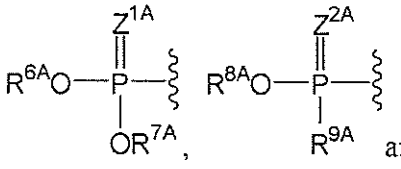
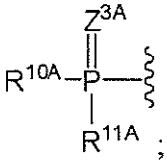


(I)

wherein:

B^{1A} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

R^{A} is hydrogen or deuterium;

R^{1A} is selected from the group consisting of hydrogen, an optionally substituted acyl, an optionally substituted O-linked amino acid,  and ;

R^{a1} and R^{a2} are independently hydrogen or deuterium;

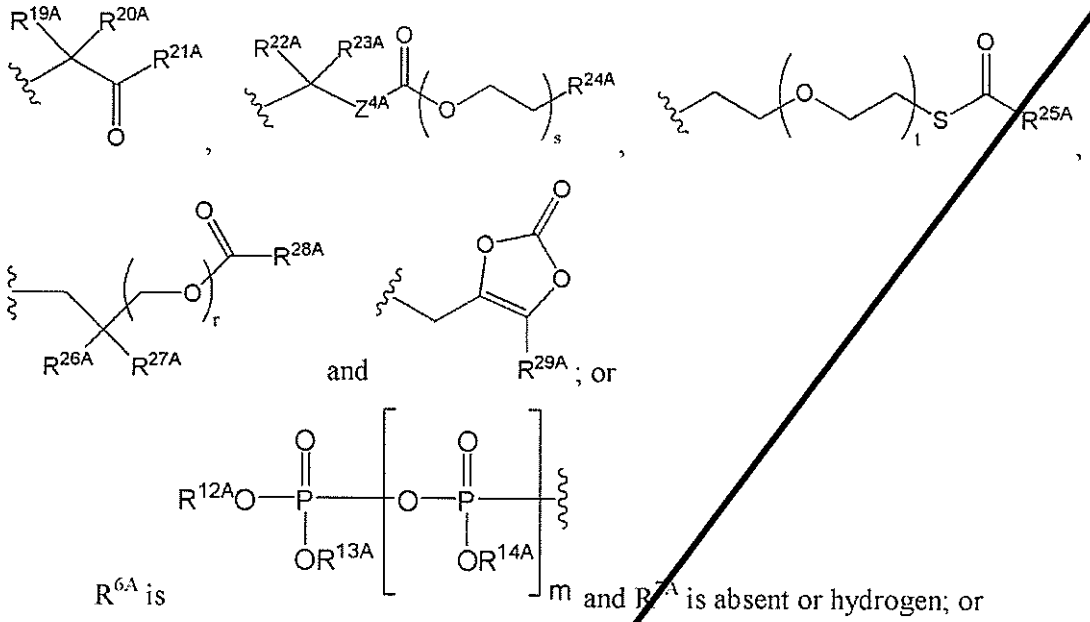
R^{2A} is a C_{1-6} azidoalkyl or a C_{1-6} aminoalkyl;

R^{3A} is selected from the group consisting of OH, $-OC(=O)R^{"A}$ and an optionally substituted O-linked amino acid;

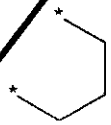
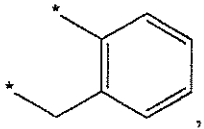
R^{4A} is halogen;

R^{5A} is hydrogen or halogen;

R^{6A}, R^{7A} and R^{8A} are independently selected from the group consisting of absent, hydrogen, an optionally substituted C_{1-24} alkyl, an optionally substituted C_{3-24} alkenyl, an optionally substituted C_{3-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted aryl(C_{1-6} alkyl), an optionally substituted $*-(CR^{15A}R^{16A})_p-O-C_{1-24}$ alkyl, an optionally substituted $*-(CR^{17A}R^{18A})_q-O-C_{1-24}$ alkenyl,



R^{6A} is m and R^{7A} is absent or hydrogen; or

R^{6A} and R^{7A} are taken together to form a moiety selected from the group consisting of an optionally substituted  and an optionally substituted , wherein the oxygens connected to R^{6A} and R^{7A}, the phosphorus and the moiety form a six-membered to ten-membered ring system;.

R^{9A} is independently selected from the group consisting of an optionally substituted C_{1-24} alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, $NR^{30A}R^{31A}$, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

R^{10A} and R^{11A} are independently an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative;

R^{12A}, R^{13A} and R^{14A} are independently absent or hydrogen;

each R^{15A}, each R^{16A}, each R^{17A} and each R^{18A} are independently hydrogen, an optionally substituted C_{1-24} alkyl or alkoxy;

R^{19A}, R^{20A}, R^{22A} and R^{23A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

R^{21A} and R^{24A} 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^{25A} and R^{29A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

R^{26A} and R^{27A} are independently -C≡N or an optionally substituted substituent selected from the group consisting of C_{2-8} organylcarbonyl, C_{2-8} alkoxycarbonyl and C_{2-8} organylaminocarbonyl;

R^{28A} is selected from the group consisting of hydrogen, an optionally substituted C_{1-24}-alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl and an optionally substituted C_{3-6} cycloalkenyl;

R^{30A} and R^{31A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24}-alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl and an optionally substituted C_{3-6} cycloalkenyl;

$R^{"A}$ is an optionally substituted C_{1-24}-alkyl;

m and t are independently 0 or 1;

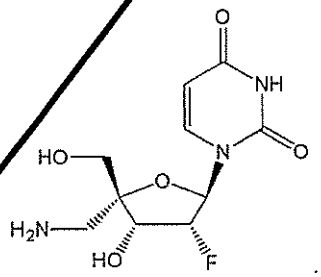
p and q are independently selected from the group consisting of 1, 2 and 3;

r is 1 or 2;

s is 0, 1, 2 or 3; and

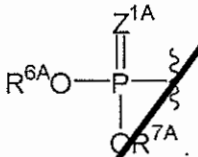
Z^{1A}, Z^{2A}, Z^{3A} and Z^{4A} are independently O or S; and

a compound of Formula (I), or a pharmaceutically acceptable salt, cannot be



2. The compound of Claim 1, wherein R^{2A} is azidomethyl.

3. The compound of Claim 1, wherein R^{2A} is aminomethyl.



4. The compound of any one of Claims 1-3, wherein R^{1A} is .

5. The compound of Claim 4, wherein R^{6A} and R^{7A} are both hydrogen.

6. The compound of Claim 4, wherein R^{6A} and R^{7A} are both absent.

7. The compound of Claim 4, wherein both R^{6A} and R^{7A} are independently selected from the group consisting of an optionally substituted C_{1-24} alkyl, an optionally substituted C_{3-24} alkenyl, an optionally substituted C_{3-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl and an optionally substituted aryl(C_{1-6} alkyl).

8. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted C_{1-24} alkyl.

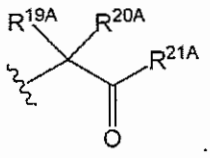
9. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted C_{3-24} alkenyl.

10. The compound of Claim 4, wherein R^{6A} and R^{7A} are both *–$(CR^{15A}R^{16A})_p$–O–C_{1-24} alkyl.

11. The compound of Claim 4, wherein R^{6A} and R^{7A} are both *–$(CR^{17A}R^{18A})_q$–O–C_{2-24} alkenyl.

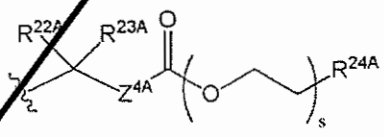
12. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted aryl.

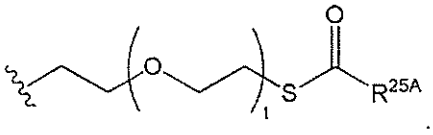
13. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted aryl(C_{1-6} alkyl).

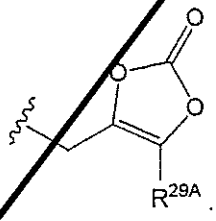


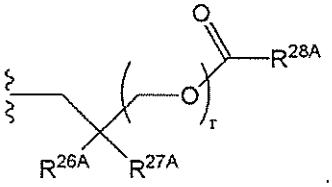
14. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

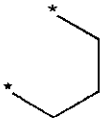
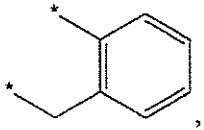
15. The compound of Claim 4, wherein R^{6A} and R^{7A} are both



16. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

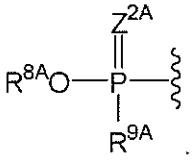
17. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

18. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

19. The compound of Claim 4, wherein R^{6A} and R^{7A} can be taken together to form a moiety selected from the group consisting of an optionally substituted  and an optionally substituted , wherein the oxygens connected to R^{6A} and R^{7A}, the phosphorus and the moiety form a six-membered to ten-membered ring system.

20. The compound of any one of Claims 1 to 19, wherein Z^{1A} is O.

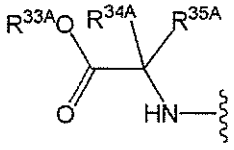
21. The compound of any one of Claims 1 to 19, wherein Z^{1A} is S.

22. The compound of Claim 1, wherein R^{1A} is .

23. The compound of Claim 22, wherein R^{8A} is hydrogen, and R^{9A} is $NR^{30A}R^{31A}$, wherein R^{30A} and R^{31A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl and an optionally substituted C_{3-6} cycloalkenyl.

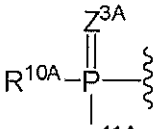
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24. The compound of Claim 22, wherein R^{8A} is an optionally substituted aryl; and R^{9A} is an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative.

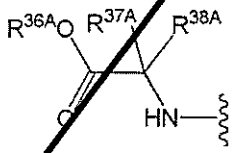
25. The compound of Claim 22, wherein R^{8A} is an optionally substituted aryl; and R^{9A} has the structure  wherein R^{33A} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6}-alkyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted aryl, an optionally substituted aryl(C_{1-6} alkyl) and an optionally substituted haloalkyl; R^{34A} 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^{35A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{34A} and R^{35A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

26. The compound of any one of Claims 22 to 25, wherein Z^{2A} is O.

27. The compound of any one of Claims 22 to 25, wherein Z^{2A} is S.

28. The compound of Claim 1, wherein R^{1A} is .

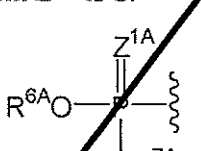
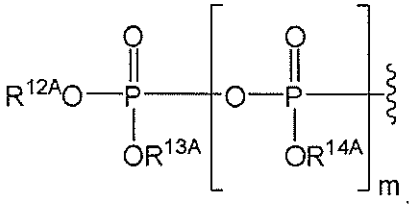
29. The compound of Claim 28, wherein R^{10A} and R^{11A} are both an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative.

30. The compound of Claim 28, wherein R^{10A} and R^{11A} are independently have the structure  wherein R^{36A} 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^{37A} 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^{38A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{37A} and R^{38A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

31. The compound of any one of Claims 28 to 30, wherein Z^{3A} is O.

32. The compound of any one of Claims 28 to 30, wherein Z^{3A} is S.

33. The compound of Claim 1, wherein R^{1A} is , and R^{16} is .

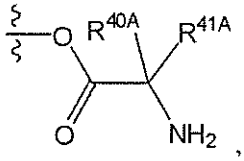
34. The compound of Claim 33, wherein m is 0, and R^{12A} and R^{13A} are independently absent or hydrogen.

35. The compound of Claim 33, wherein m is 1, and R^{12A}, R^{13A} and R^{14A} are independently absent or hydrogen.

36. The compound of Claim 1, wherein R^{1A} is H.

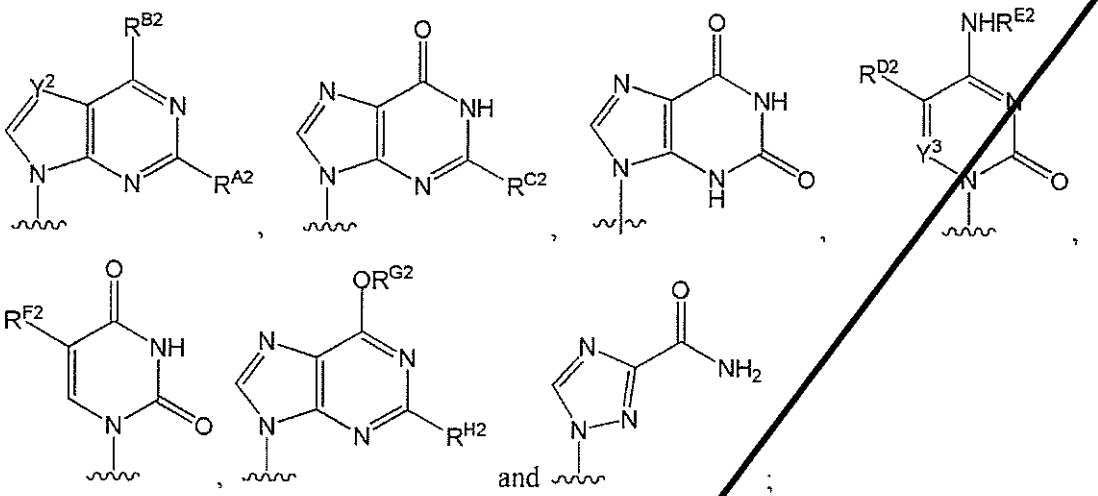
37. The compound of Claim 1, wherein R^{1A} is an optionally substituted acyl.

38. The compound of Claim 1, wherein R^{1A} is an optionally substituted O-linked amino acid.

39. The compound of Claim 1, wherein R^{1A} is , wherein R^{40A} 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^{41A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{40A} and R^{41A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

40. The compound of any one of Claims 1 to 39, wherein B^{1A} is selected from the group consisting of:

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wherein:

R^{A2} is selected from the group consisting of hydrogen, halogen and NHR^{J2}, wherein R^{J2} is selected from the group consisting of hydrogen, $-C(=O)R^{K2}$ and $-C(=O)OR^{L2}$;

R^{B2} is halogen or NHR^{W2}, wherein R^{W2} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{3-8} cycloalkyl, $-C(=O)R^{M2}$ and $-C(=O)OR^{N2}$;

R^{C2} is hydrogen or NHR^{O2} wherein R^{O2} is selected from the group consisting of hydrogen, $-C(=O)R^{P2}$ and $-C(=O)OR^{Q2}$;

R^{D2} is selected from the group consisting of hydrogen, deuterium, halogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl and an optionally substituted C_{2-6} alkynyl;

R^{E2} is selected from the group consisting of hydrogen, hydroxy, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{3-8} cycloalkyl, $-C(=O)R^{R2}$ and $-C(=O)OR^{S2}$;

R^{F2} 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;

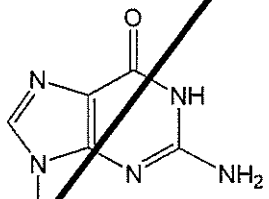
Y^2 and Y^3 are independently N or CR^{I2}, wherein R^{I2} is selected from the group consisting of hydrogen, halogen, an optionally substituted C_{1-6}-alkyl, an optionally substituted C_{2-6}-alkenyl and an optionally substituted C_{2-6}-alkynyl;

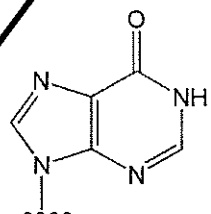
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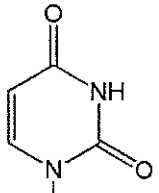
R^{G2} is an optionally substituted C_{1-6} alkyl;

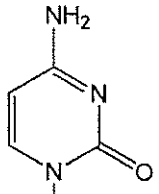
R^{H2} is hydrogen or NHR^{T2}, wherein R^{T2} is independently selected from the group consisting of hydrogen, $-C(=O)R^{U2}$ and $-C(=O)OR^{V2}$; and

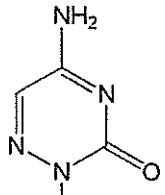
R^{K2}, R^{L2}, R^{M2}, R^{N2}, R^{P2}, R^{Q2} R^{R2}, R^{S2}, R^{U2} and R^{V2} are independently selected from the group consisting of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkenyl, C_{6-10} aryl, heteroaryl, heterocyclyl, aryl(C_{1-6} alkyl), heteroaryl(C_{1-6} alkyl) and heterocyclyl(C_{1-6} alkyl).

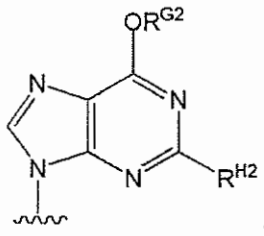
41. The compound of Claim 40, wherein B^{1A} is .

42. The compound of Claim 40, wherein B^{1A} is .

43. The compound of Claim 40, wherein B^{1A} is .

44. The compound of Claim 40, wherein B^{1A} is .

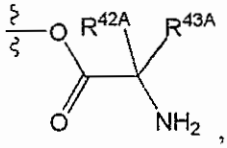
45. The compound of Claim 40, wherein B^{1A} is .

46. The compound of Claim 40, wherein B^{1A} is .

47. The compound of any one of Claims 1 to 46, wherein R^{3A} is OH.

48. The compound of any one of Claims 1 to 46, wherein R^{3A} is $-OC(=O)R^{7A}$.

49. The compound of any one of Claims 1 to 46, wherein R^{3A} is O-linked amino acid.

50. The compound of any one of Claims 1 to 46, wherein R^{3A} is , wherein R^{42A} 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^{43A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{42A} and R^{43A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

51. The compound of any one of Claims 1 to 50, wherein R^{5A} is hydrogen.

52. The compound of any one of Claims 1 to 50, wherein R^{5A} is halogen.

53. The compound of Claim 52, wherein R^{5A} is fluoro or chloro.

54. The compound of any one of Claims 1 to 53, wherein R^{4A} is fluoro.

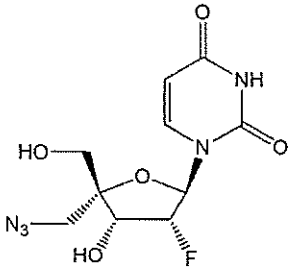
55. The compound of any one of Claims 1 to 53, wherein R^{4A} is chloro.

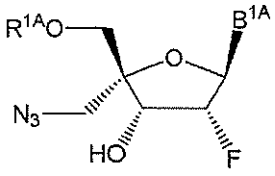
56. The compound of any one of Claims 1 to 55, wherein R^{a1} and R^{a2} are both hydrogen.

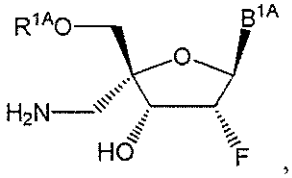
57. The compound of any one of Claims 1 to 55, wherein R^{a1} and R^{a2} are both deuterium.

58. The compound of any one of Claims 1 to 57, wherein R^{A} is hydrogen.

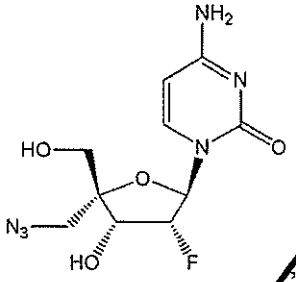
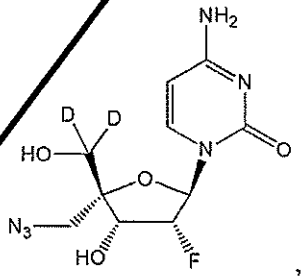
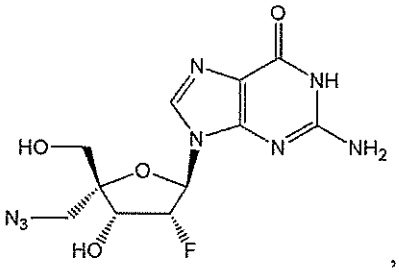
59. The compound of any one of Claims 1 to 57, wherein R^{A} is deuterium.

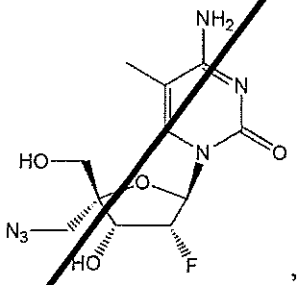
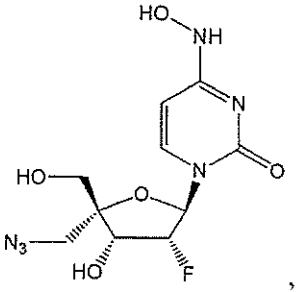
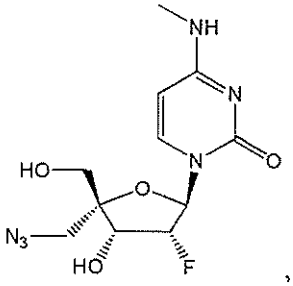
60. The compound of any one of Claims 1 to 59, wherein a compound of Formula (I), or a pharmaceutically acceptable salt, cannot be .

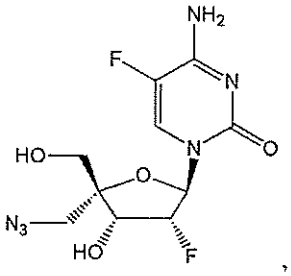
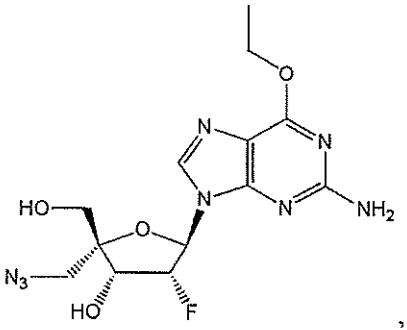
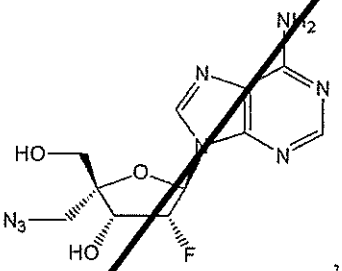
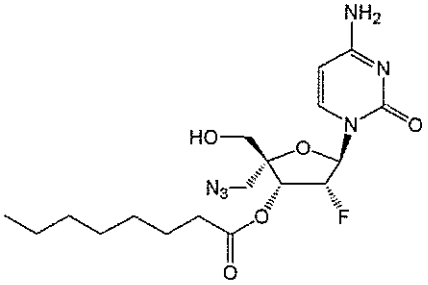
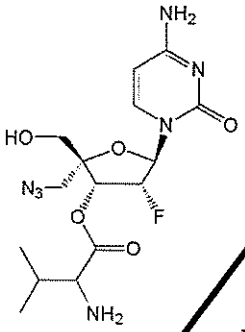
61. The compound of Claim 1, wherein the compound of Formula (I) is: , or a pharmaceutically acceptable salt thereof.

62. The compound of Claim 1, wherein the compound of Formula (I) is: , or a pharmaceutically acceptable salt thereof.

63. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

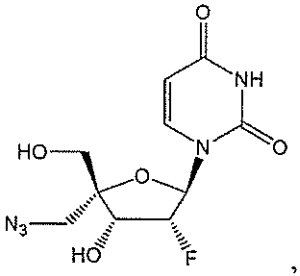
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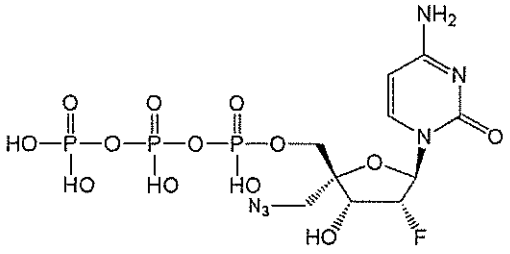
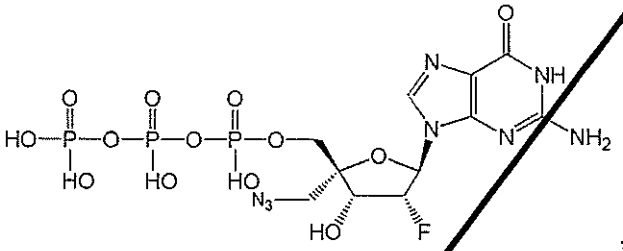
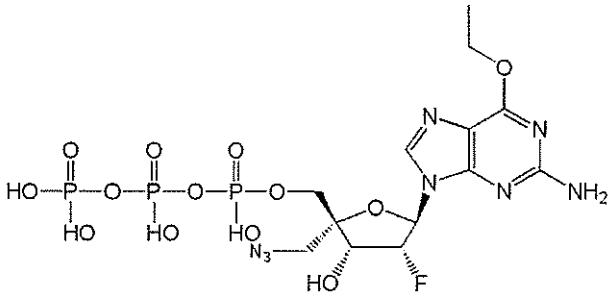
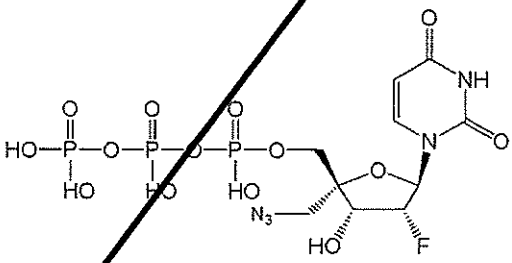
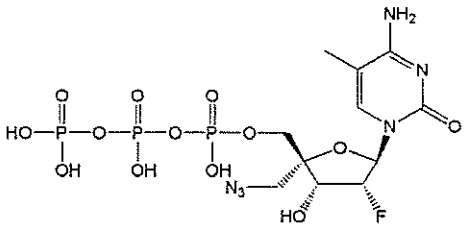
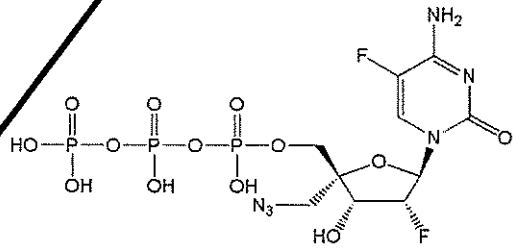
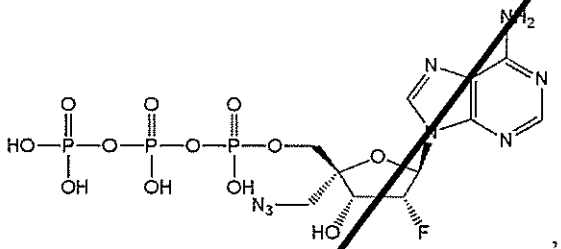
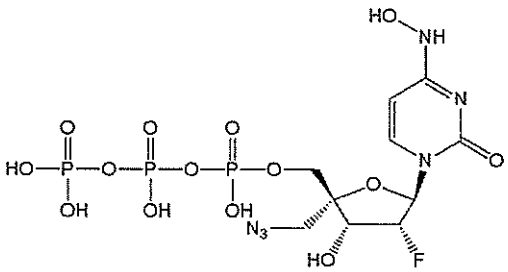
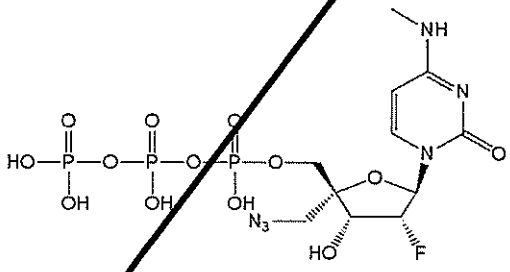
and , or a pharmaceutically acceptable salt of the foregoing.

64. The compound of Claim 1, wherein the compound of Formula (I) is

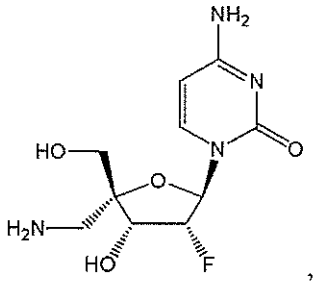
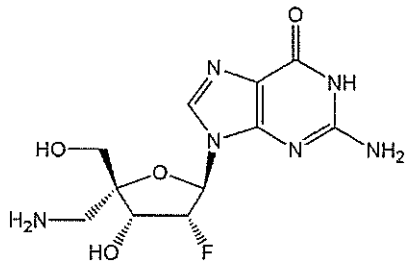
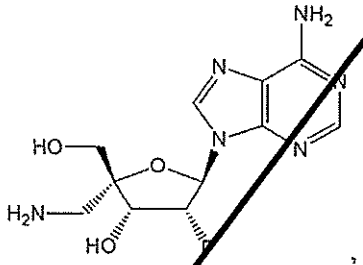


, or a pharmaceutically acceptable salt of the foregoing.

65. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

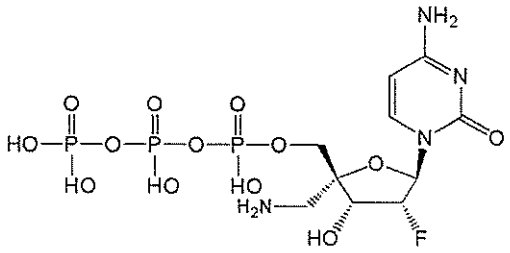
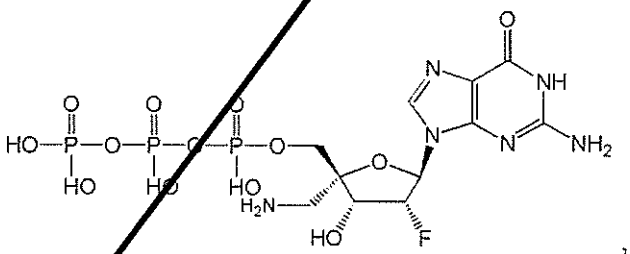
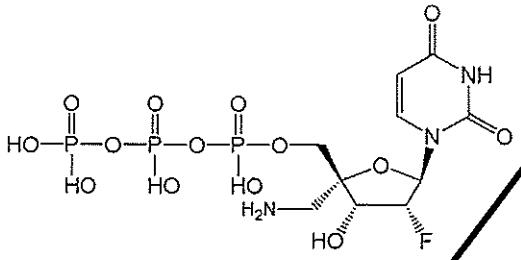
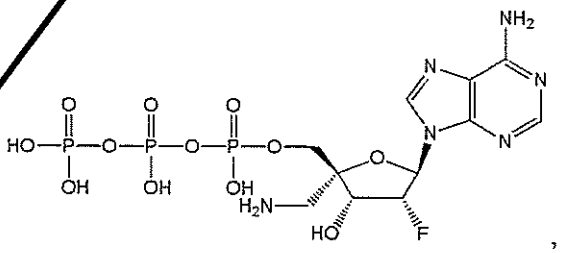

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, or a pharmaceutically acceptable salt of the foregoing.

66. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:


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and

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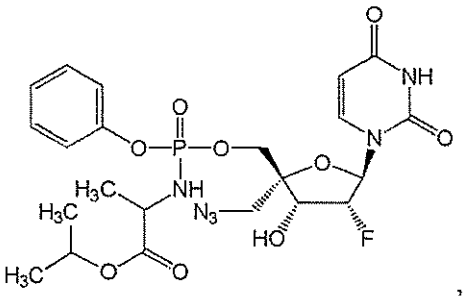
a pharmaceutically acceptable salt of the foregoing.

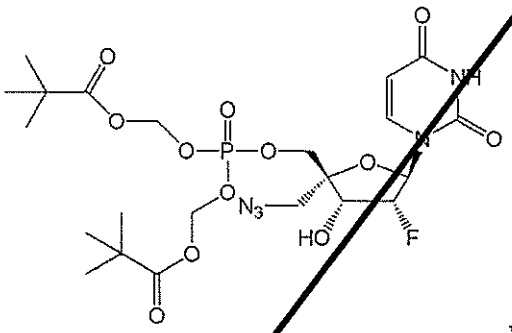
67. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

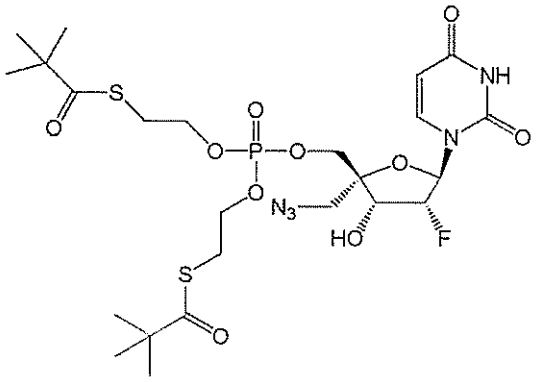

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and

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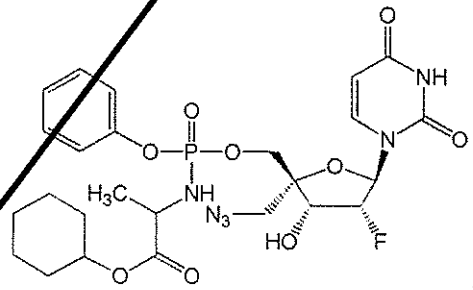
a pharmaceutically acceptable salt of the foregoing.

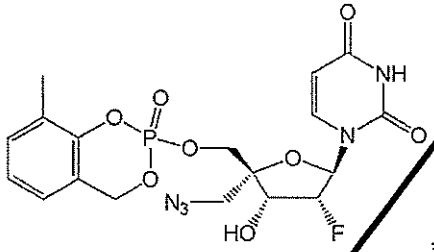
68. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

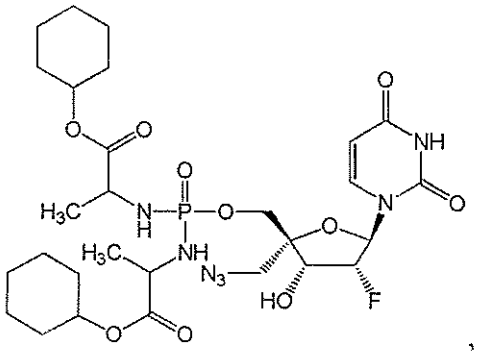


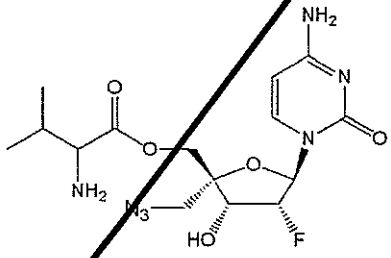


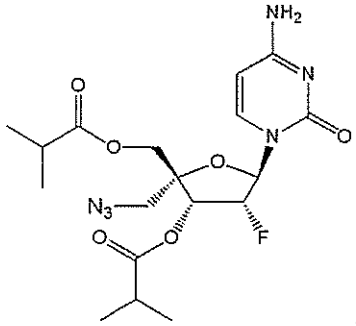


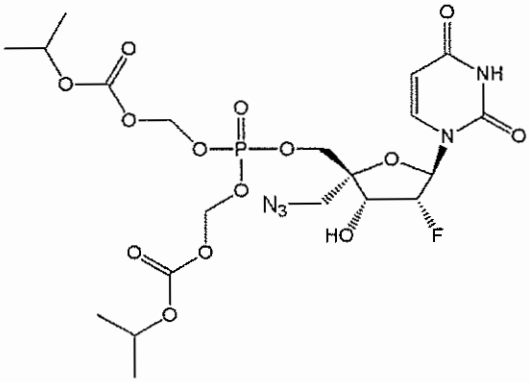


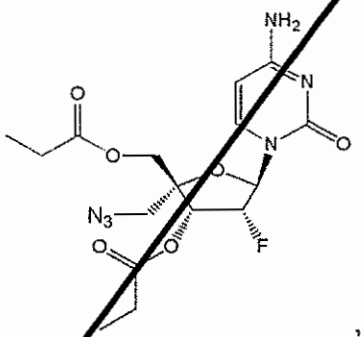


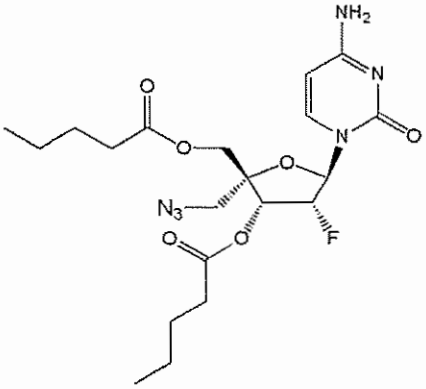


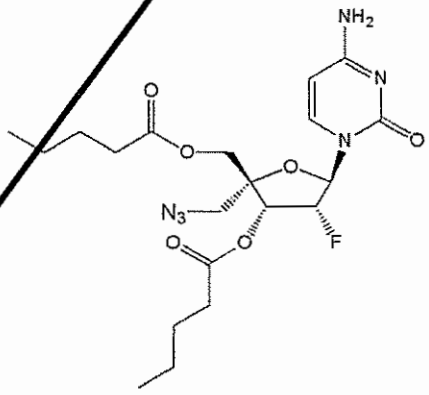


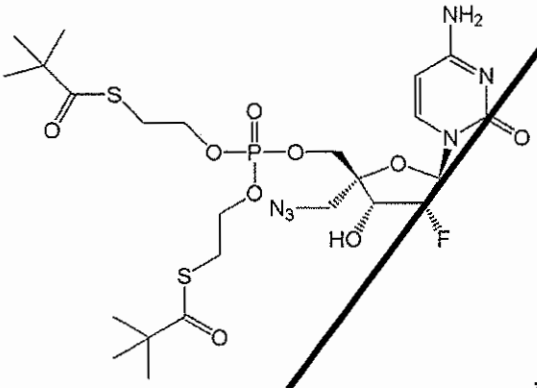


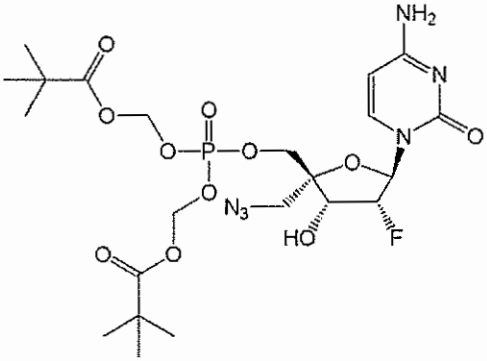


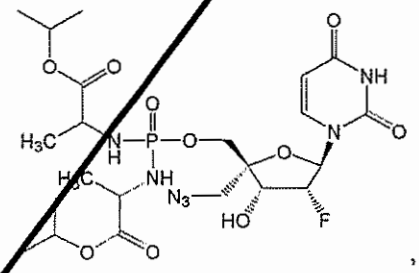


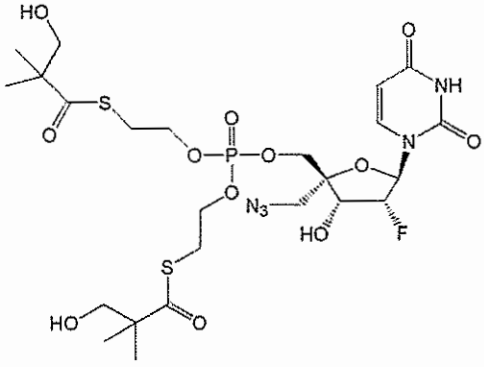


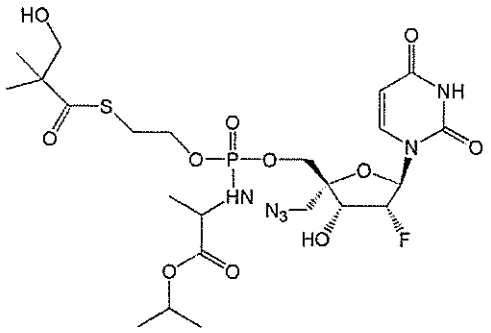




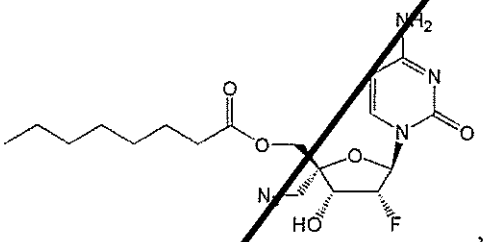




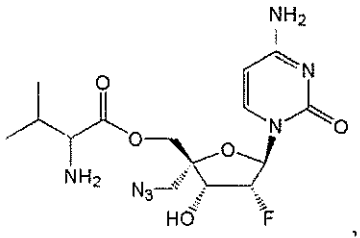




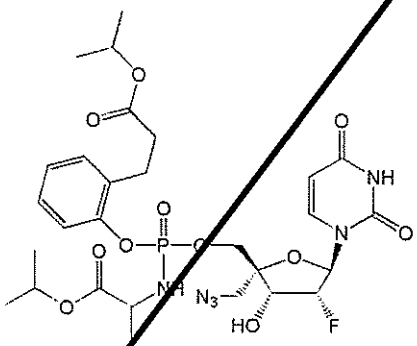
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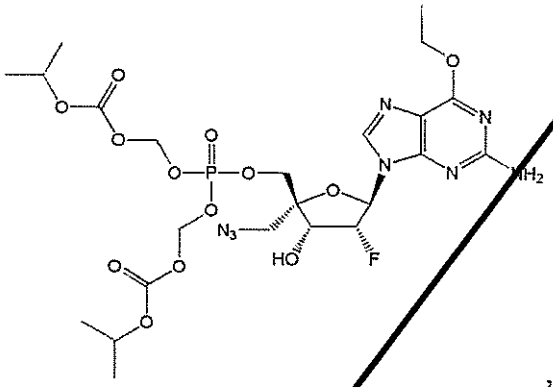
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and



, or a pharmaceutically acceptable salt of the foregoing.

69. A pharmaceutical composition comprising an effective amount of a compound of any one of Claims 1 to 68, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent, excipient, or combination thereof.

70. A method for ameliorating or treating a paramyxovirus viral infection comprising administering to a subject identified as suffering from the paramyxovirus viral infection an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69.

71. A method for inhibiting replication of a paramyxovirus comprising contacting a cell infected with the paramyxovirus with an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69.

72. A method for ameliorating or treating a paramyxovirus viral infection comprising contacting a cell infected with the paramyxovirus in a subject identified as suffering from the viral infection with an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69.

73. A method for ameliorating or treating a paramyxovirus viral infection in combination with one or more agents comprising administering to or contacting a cell in a subject identified as suffering from the paramyxovirus viral infection with an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69.

74. The method of any one of Claims 70 to 73, wherein the paramyxovirus viral infection is a human respiratory syncytial virus infection.

75. The method of any one of Claims 70 to 73, wherein the paramyxovirus viral infection is a human respiratory syncytial virus infection; and wherein the one or more agents is selected from the group consisting of ribavirin, palivizumab, RSV-IGIV, ALN-RSV01, BMS-433771, RFI-641, RSV604, MDT-637, BTA9881, TMC-353121, MBX-300, YM-53403, RV568 and a RSV-F Particle Vaccine.

76. The method of any one of Claims 70 to 73, wherein the paramyxovirus viral infection is a human parainfluenza virus infection.

77. The method of Claim 76, wherein human parainfluenza virus infection is a human parainfluenza virus 3 infection.

78. The method of any one of Claims 70 to 3 wherein the paramyxovirus viral infection is a human metapneumovirus infection.

79. Use of an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69 in the preparation of a medicament for ameliorating or treating a paramyxovirus viral infection in a subject identified as suffering from the paramyxovirus viral infection.

80. Use of an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69 in the preparation of a medicament for inhibiting replication of a paramyxovirus.

81. Use of an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69 in the preparation of a medicament for contacting a cell infected with a paramyxovirus.

82. Use of an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69 in the preparation of a medicament for ameliorating or treating a paramyxovirus viral infection in combination with one or more agents comprising administering to or contacting a cell in a subject identified as suffering from the paramyxovirus viral infection with an effective amount of the compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69.

83. The use of any one of Claims 79 to 82, wherein the paramyxovirus viral infection is a human respiratory syncytial virus infection.

84. The use of any one of Claims 79 to 82, wherein the paramyxovirus viral infection is a human respiratory syncytial virus infection; and wherein the one or more agents is selected from the group consisting of ribavirin, palivizumab, RSV-IGIV, ALN-RSV01, BMS-433771, RFI-641, RSV604, MDT-637, BTA9881, TMC-353121, MBX-300, YM-53403, RV568 and a RSV-F Particle Vaccine.

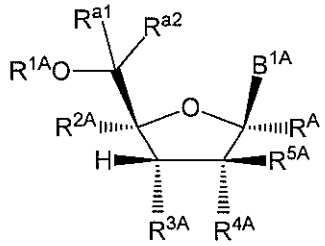
85. The use of any one of Claims 79 to 82, wherein the paramyxovirus viral infection is a human parainfluenza virus infection.

86. The use of Claim 85, wherein human parainfluenza virus infection is a human parainfluenza virus 3 infection.

87. The use of any one of Claims 79 to 82, wherein the paramyxovirus viral infection is a human metapneumovirus infection.

CLAIMS

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

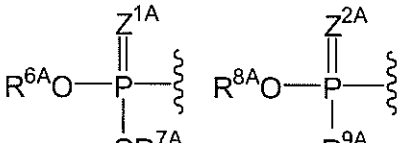
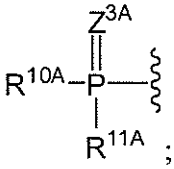


(I)

wherein:

B^{1A} is an optionally substituted heterocyclic base or an optionally substituted heterocyclic base with a protected amino group;

R^{A} is hydrogen or deuterium;

R^{1A} is selected from the group consisting of hydrogen, an optionally substituted acyl, an optionally substituted O-linked amino acid,  and ;

R^{a1} and R^{a2} are independently hydrogen or deuterium;

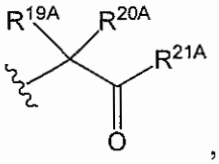
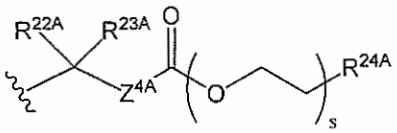
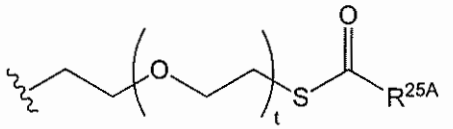
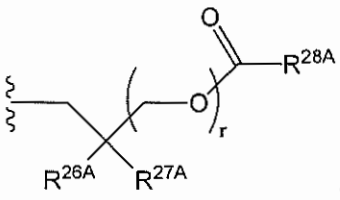
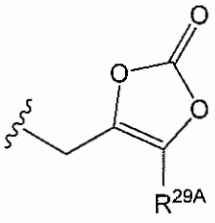
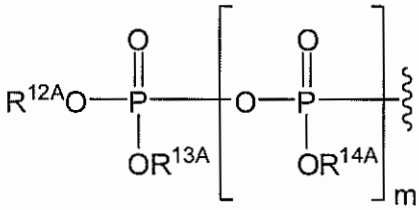
R^{2A} is a C_{1-6} azidoalkyl or a C_{1-6} aminoalkyl;

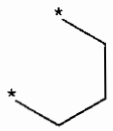
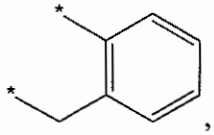
R^{3A} is selected from the group consisting of OH, $-OC(=O)R^{"A}$ and an optionally substituted O-linked amino acid;

R^{4A} is halogen;

R^{5A} is hydrogen or halogen;

R^{6A}, R^{7A} and R^{8A} are independently selected from the group consisting of absent, hydrogen, an optionally substituted C_{1-24} alkyl, an optionally substituted C_{3-24} alkenyl, an optionally substituted C_{3-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl, an optionally substituted aryl(C_{1-6} alkyl), an optionally substituted $*-(CR^{15A}R^{16A})_p-O-C_{1-24}$ alkyl, an optionally substituted $*-(CR^{17A}R^{18A})_q-O-C_{1-24}$ alkenyl,


,

,

,

and

; or

R^{6A} is m and R^{7A} is absent or hydrogen; or

R^{6A} and R^{7A} are taken together to form a moiety selected from the group consisting of an optionally substituted  and an optionally substituted , wherein the oxygens connected to R^{6A} and R^{7A}, the phosphorus and the moiety form a six-membered to ten-membered ring system;.

R^{9A} is independently selected from the group consisting of an optionally substituted C_{1-24} alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, $NR^{30A}R^{31A}$, an optionally substituted N-linked amino acid and an optionally substituted N-linked amino acid ester derivative;

R^{10A} and R^{11A} are independently an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative;

R^{12A}, R^{13A} and R^{14A} are independently absent or hydrogen;

each R^{15A}, each R^{16A}, each R^{17A} and each R^{18A} are independently hydrogen, an optionally substituted C_{1-24} alkyl or alkoxy;

R^{19A}, R^{20A}, R^{22A} and R^{23A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

R^{21A} and R^{24A} 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^{25A} and R^{29A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl and an optionally substituted aryl;

R^{26A} and R^{27A} are independently -C≡N or an optionally substituted substituent selected from the group consisting of C_{2-8} organylcarbonyl, C_{2-8} alkoxycarbonyl and C_{2-8} organylaminocarbonyl;

R^{28A} is selected from the group consisting of hydrogen, an optionally substituted C_{1-24}-alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl and an optionally substituted C_{3-6} cycloalkenyl;

R^{30A} and R^{31A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24}-alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl and an optionally substituted C_{3-6} cycloalkenyl;

R''^{A} is an optionally substituted C_{1-24}-alkyl;

m and t are independently 0 or 1;

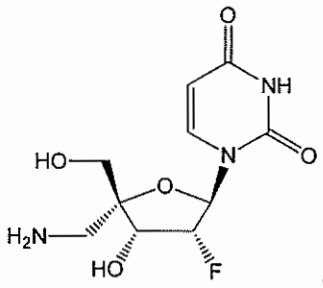
p and q are independently selected from the group consisting of 1, 2 and 3;

r is 1 or 2;

s is 0, 1, 2 or 3; and

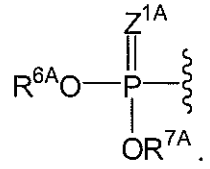
Z^{1A}, Z^{2A}, Z^{3A} and Z^{4A} are independently O or S; and

a compound of Formula (I), or a pharmaceutically acceptable salt, cannot be



2. The compound of Claim 1, wherein R^{2A} is azidomethyl.

3. The compound of Claim 1, wherein R^{2A} is aminomethyl.

4. The compound of any one of Claims 1-3, wherein R^{1A} is .

5. The compound of Claim 4, wherein R^{6A} and R^{7A} are both hydrogen.

6. The compound of Claim 4, wherein R^{6A} and R^{7A} are both absent.

7. The compound of Claim 4, wherein both R^{6A} and R^{7A} are independently selected from the group consisting of an optionally substituted C_{1-24} alkyl, an optionally substituted C_{3-24} alkenyl, an optionally substituted C_{3-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{3-6} cycloalkenyl, an optionally substituted aryl, an optionally substituted heteroaryl and an optionally substituted aryl(C_{1-6} alkyl).

8. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted C_{1-24} alkyl.

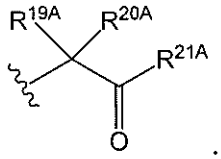
9. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted C_{3-24} alkenyl.

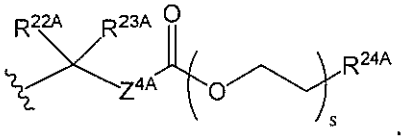
10. The compound of Claim 4, wherein R^{6A} and R^{7A} are both *–$(CR^{15A}R^{16A})_p$–O–C_{1-24} alkyl.

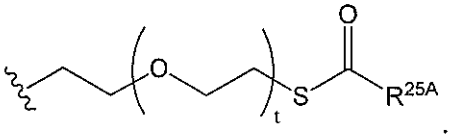
11. The compound of Claim 4, wherein R^{6A} and R^{7A} are both *–$(CR^{17A}R^{18A})_q$–O–C_{2-24} alkenyl.

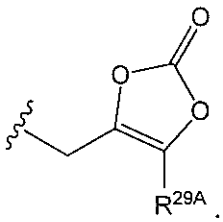
12. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted aryl.

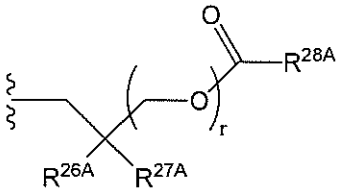
13. The compound of Claim 4, wherein R^{6A} and R^{7A} are both an optionally substituted aryl(C_{1-6} alkyl).

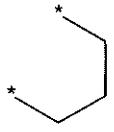
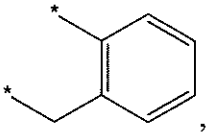
14. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

15. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

16. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

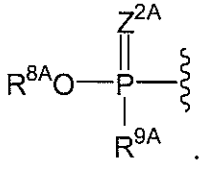
17. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

18. The compound of Claim 4, wherein R^{6A} and R^{7A} are both .

19. The compound of Claim 4, wherein R^{6A} and R^{7A} can be taken together to form a moiety selected from the group consisting of an optionally substituted  and an optionally substituted , wherein the oxygens connected to R^{6A} and R^{7A}, the phosphorus and the moiety form a six-membered to ten-membered ring system.

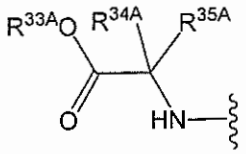
20. The compound of any one of Claims 1 to 19, wherein Z^{1A} is O.

21. The compound of any one of Claims 1 to 19, wherein Z^{1A} is S.

22. The compound of Claim 1, wherein R^{1A} is .

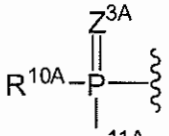
23. The compound of Claim 22, wherein R^{8A} is hydrogen, and R^{9A} is $NR^{30A}R^{31A}$, wherein R^{30A} and R^{31A} are independently selected from the group consisting of hydrogen, an optionally substituted C_{1-24} alkyl, an optionally substituted C_{2-24} alkenyl, an optionally substituted C_{2-24} alkynyl, an optionally substituted C_{3-6} cycloalkyl and an optionally substituted C_{3-6} cycloalkenyl.

24. The compound of Claim 22, wherein R^{8A} is an optionally substituted aryl; and R^{9A} is an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative.

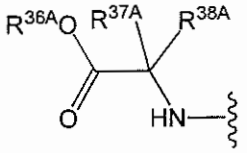
25. The compound of Claim 22, wherein R^{8A} is an optionally substituted aryl; and R^{9A} has the structure  wherein R^{33A} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6}-alkyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted aryl, an optionally substituted aryl(C_{1-6} alkyl) and an optionally substituted haloalkyl; R^{34A} 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^{35A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{34A} and R^{35A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

26. The compound of any one of Claims 22 to 25, wherein Z^{2A} is O.

27. The compound of any one of Claims 22 to 25, wherein Z^{2A} is S.

28. The compound of Claim 1, wherein R^{1A} is .

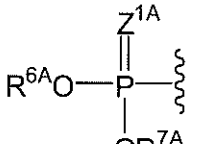
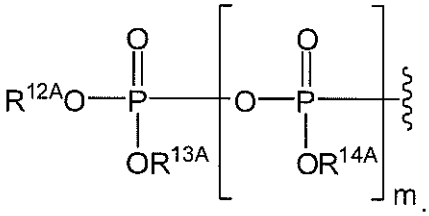
29. The compound of Claim 28, wherein R^{10A} and R^{11A} are both an optionally substituted N-linked amino acid or an optionally substituted N-linked amino acid ester derivative.

30. The compound of Claim 28, wherein R^{10A} and R^{11A} are independently have the structure  wherein R^{36A} 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^{37A} 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^{38A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{37A} and R^{38A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

31. The compound of any one of Claims 28 to 30, wherein Z^{3A} is O.

32. The compound of any one of Claims 28 to 30, wherein Z^{3A} is S.

33. The compound of Claim 1, wherein R^{1A} is , and R^{16} is .

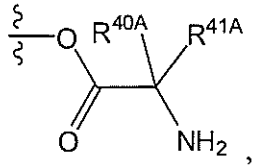
34. The compound of Claim 33, wherein m is 0, and R^{12A} and R^{13A} are independently absent or hydrogen.

35. The compound of Claim 33, wherein m is 1, and R^{12A}, R^{13A} and R^{14A} are independently absent or hydrogen.

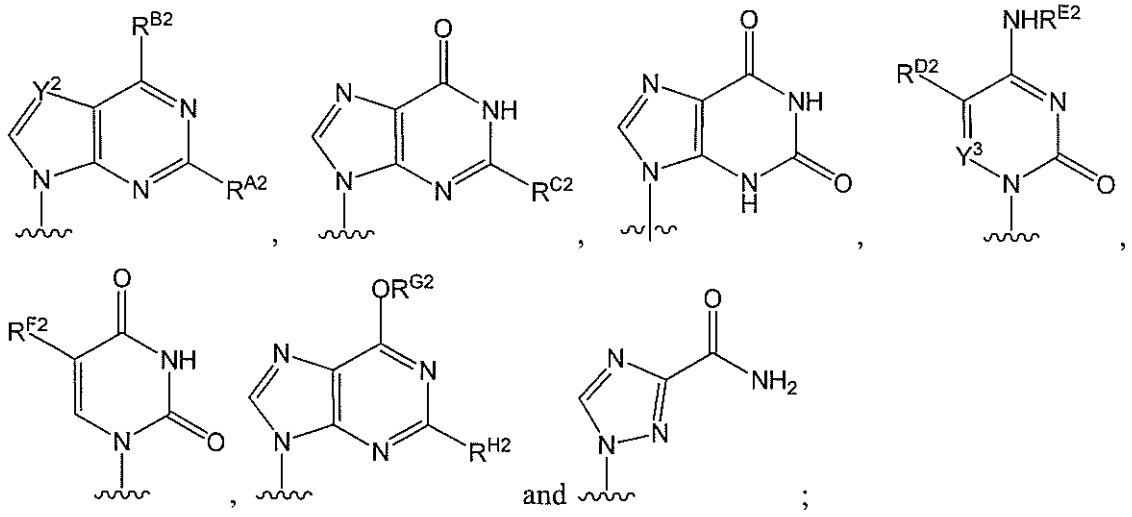
36. The compound of Claim 1, wherein R^{1A} is H.

37. The compound of Claim 1, wherein R^{1A} is an optionally substituted acyl.

38. The compound of Claim 1, wherein R^{1A} is an optionally substituted O-linked amino acid.

39. The compound of Claim 1, wherein R^{1A} is , wherein R^{40A} 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^{41A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{40A} and R^{41A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

40. The compound of any one of Claims 1 to 39, wherein B^{1A} is selected from the group consisting of:



wherein:

R^{A2} is selected from the group consisting of hydrogen, halogen and NHR^{J2}, wherein R^{J2} is selected from the group consisting of hydrogen, $-C(=O)R^{K2}$ and $-C(=O)OR^{L2}$;

R^{B2} is halogen or NHR^{W2}, wherein R^{W2} is selected from the group consisting of hydrogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl, an optionally substituted C_{3-8} cycloalkyl, $-C(=O)R^{M2}$ and $-C(=O)OR^{N2}$;

R^{C2} is hydrogen or NHR^{O2}, wherein R^{O2} is selected from the group consisting of hydrogen, $-C(=O)R^{P2}$ and $-C(=O)OR^{Q2}$;

R^{D2} is selected from the group consisting of hydrogen, deuterium, halogen, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{2-6} alkenyl and an optionally substituted C_{2-6} alkynyl;

R^{E2} is selected from the group consisting of hydrogen, hydroxy, an optionally substituted C_{1-6} alkyl, an optionally substituted C_{3-8} cycloalkyl, $-C(=O)R^{R2}$ and $-C(=O)OR^{S2}$;

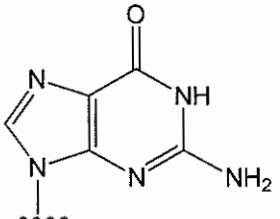
R^{F2} is selected from the group consisting of hydrogen, halogen, an optionally substituted C_{1-6}alkyl, an optionally substituted C_{2-6} alkenyl and an optionally substituted C_{2-6} alkynyl;

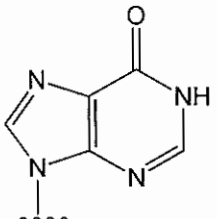
Y^2 and Y^3 are independently N or CR^{I2}, wherein R^{I2} is selected from the group consisting of hydrogen, halogen, an optionally substituted C_{1-6}-alkyl, an optionally substituted C_{2-6}-alkenyl and an optionally substituted C_{2-6}-alkynyl;

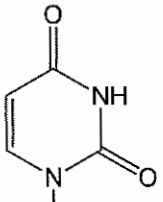
R^{G2} is an optionally substituted C_{1-6} alkyl;

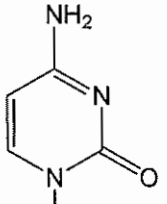
R^{H2} is hydrogen or NHR^{T2}, wherein R^{T2} is independently selected from the group consisting of hydrogen, $-C(=O)R^{U2}$ and $-C(=O)OR^{V2}$; and

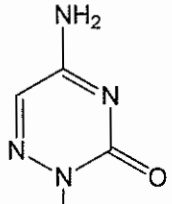
R^{K2}, R^{L2}, R^{M2}, R^{N2}, R^{P2}, R^{Q2} R^{R2}, $R^{S2,}$ R^{U2} and R^{V2} are independently selected from the group consisting of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkenyl, C_{6-10} aryl, heteroaryl, heterocyclyl, aryl(C_{1-6} alkyl), heteroaryl(C_{1-6} alkyl) and heterocyclyl(C_{1-6} alkyl).

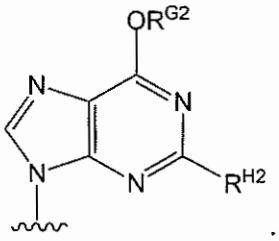
41. The compound of Claim 40, wherein B^{1A} is .

42. The compound of Claim 40, wherein B^{1A} is .

43. The compound of Claim 40, wherein B^{1A} is .

44. The compound of Claim 40, wherein B^{1A} is .

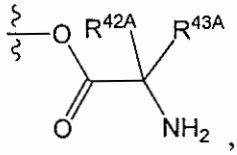
45. The compound of Claim 40, wherein B^{1A} is .

46. The compound of Claim 40, wherein B^{1A} is .

47. The compound of any one of Claims 1 to 46, wherein R^{3A} is OH.

48. The compound of any one of Claims 1 to 46, wherein R^{3A} is $-OC(=O)R^{"A}$.

49. The compound of any one of Claims 1 to 46, wherein R^{3A} is O-linked amino acid.

50. The compound of any one of Claims 1 to 46, wherein R^{3A} is , wherein R^{42A} 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^{43A} is hydrogen or an optionally substituted C_{1-4}-alkyl; or R^{42A} and R^{43A} are taken together to form an optionally substituted C_{3-6} cycloalkyl.

51. The compound of any one of Claims 1 to 50, wherein R^{5A} is hydrogen.

52. The compound of any one of Claims 1 to 50, wherein R^{5A} is halogen.

53. The compound of Claim 52, wherein R^{5A} is fluoro or chloro.

54. The compound of any one of Claims 1 to 53, wherein R^{4A} is fluoro.

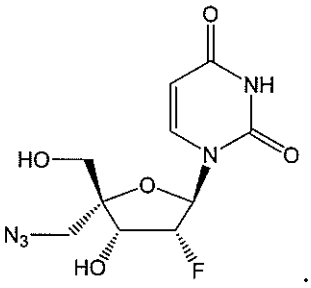
55. The compound of any one of Claims 1 to 53, wherein R^{4A} is chloro.

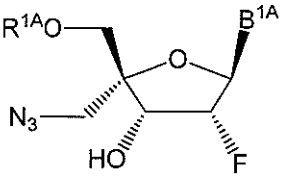
56. The compound of any one of Claims 1 to 55, wherein R^{a1} and R^{a2} are both hydrogen.

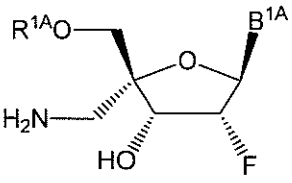
57. The compound of any one of Claims 1 to 55, wherein R^{a1} and R^{a2} are both deuterium.

58. The compound of any one of Claims 1 to 57, wherein R^{A} is hydrogen.

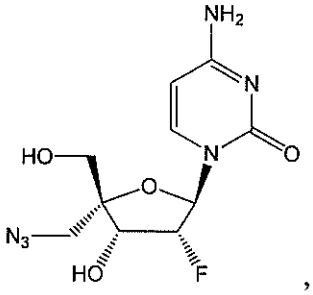
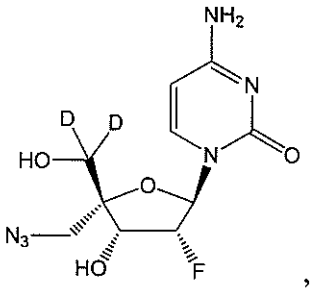
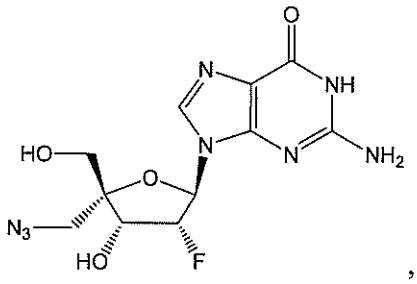
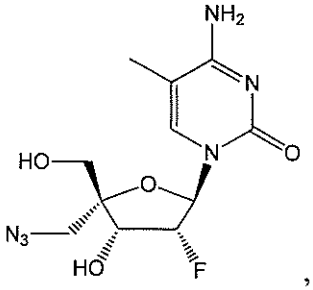
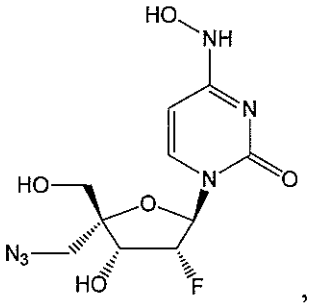
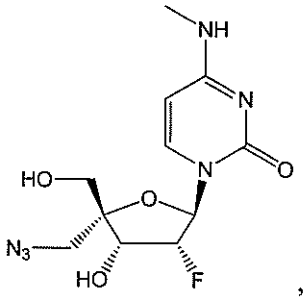
59. The compound of any one of Claims 1 to 57, wherein R^{A} is deuterium.

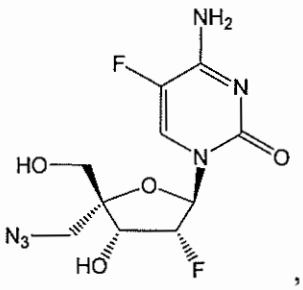
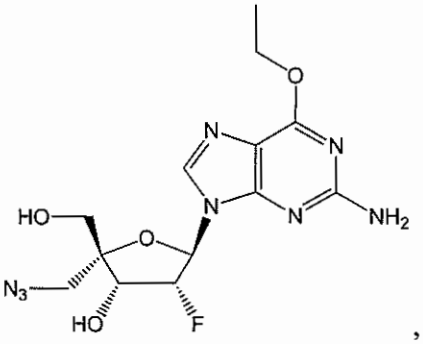
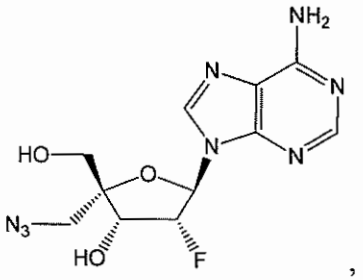
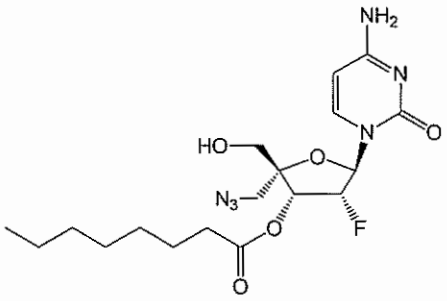
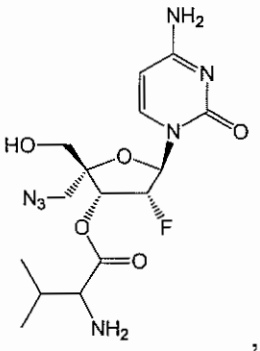
60. The compound of any one of Claims 1 to 59, wherein a compound of Formula (I), or a pharmaceutically acceptable salt, cannot be  .

61. The compound of Claim 1, wherein the compound of Formula (I) is:  , or a pharmaceutically acceptable salt thereof.

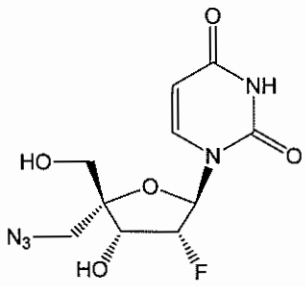
62. The compound of Claim 1, wherein the compound of Formula (I) is:  , or a pharmaceutically acceptable salt thereof.

63. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

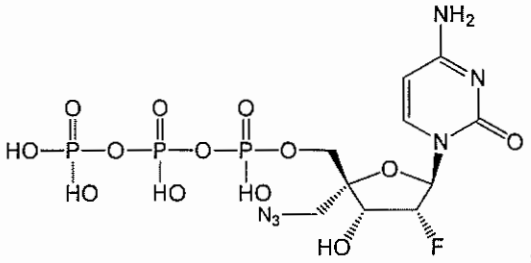
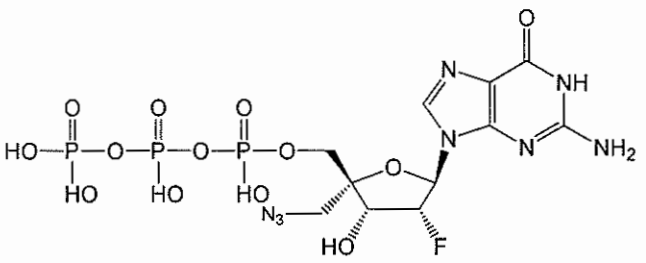
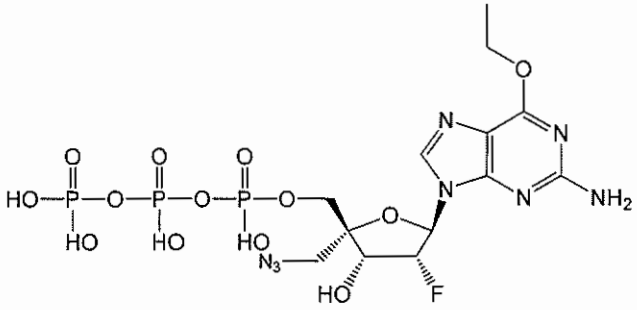
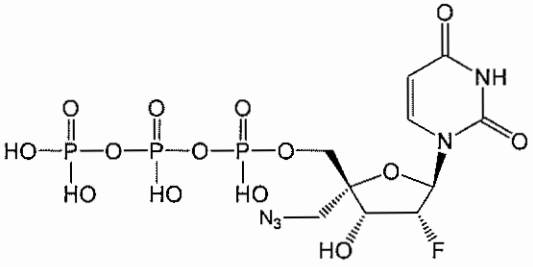
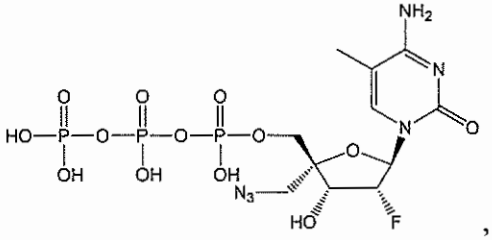
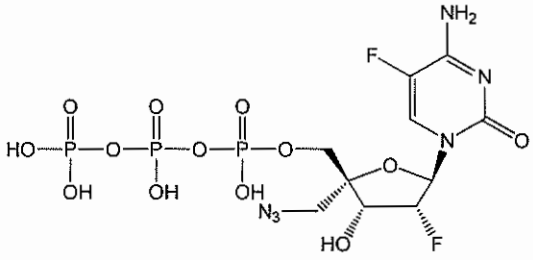
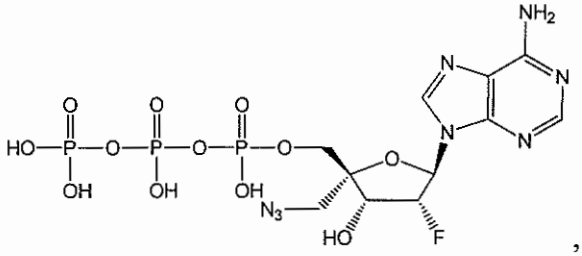
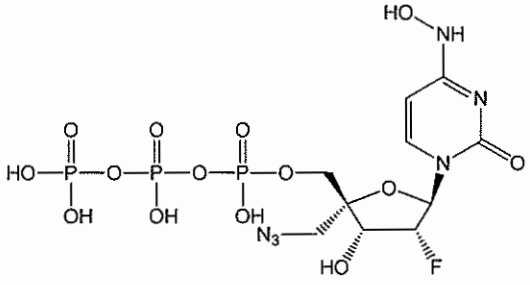
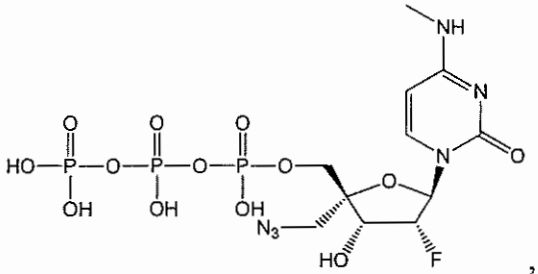
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, or a pharmaceutically acceptable salt of the foregoing.

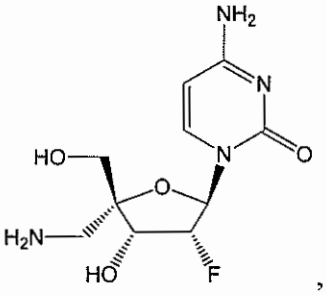
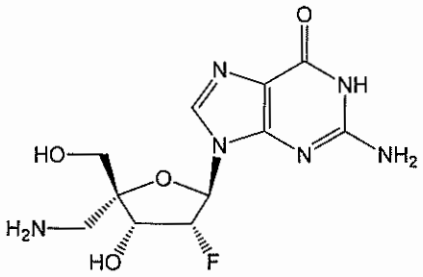
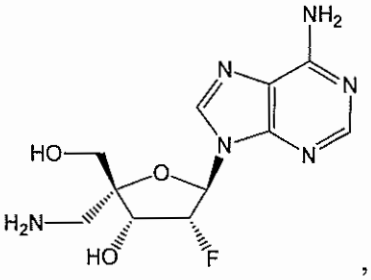
64. The compound of Claim 1, wherein the compound of Formula (I) is


, or a pharmaceutically acceptable salt of the foregoing.

65. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

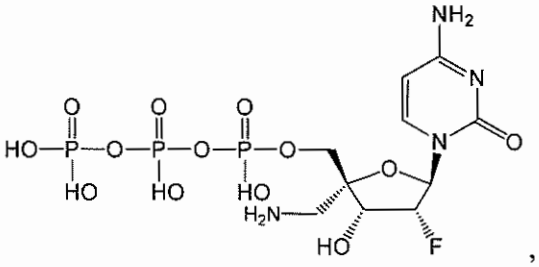
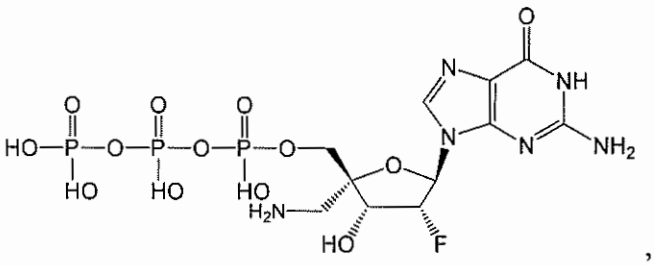
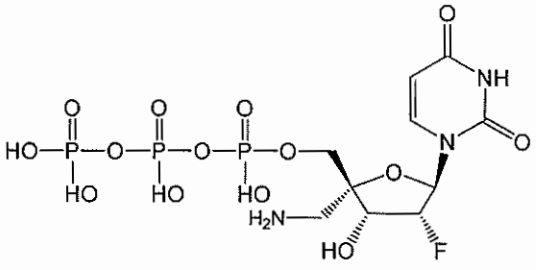
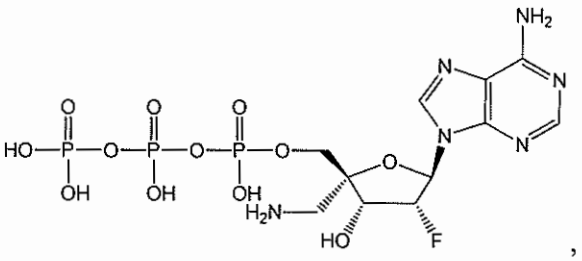

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, or a pharmaceutically acceptable salt of the foregoing.

66. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:


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and

, or

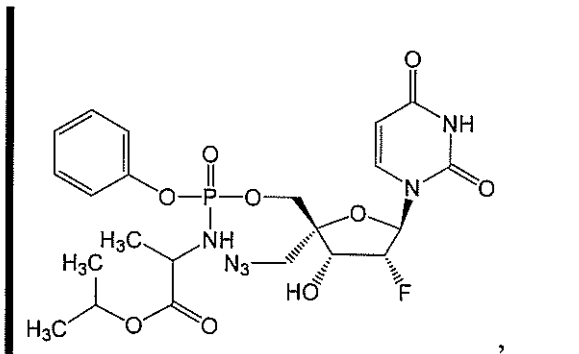
a pharmaceutically acceptable salt of the foregoing.

67. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

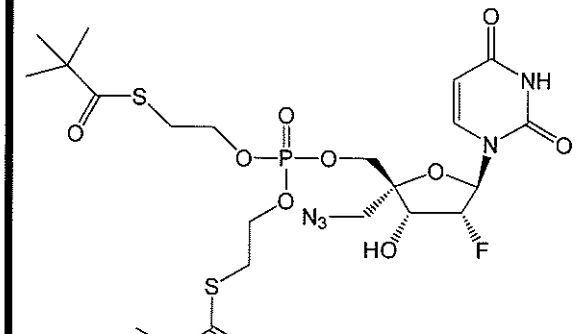

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and

, or

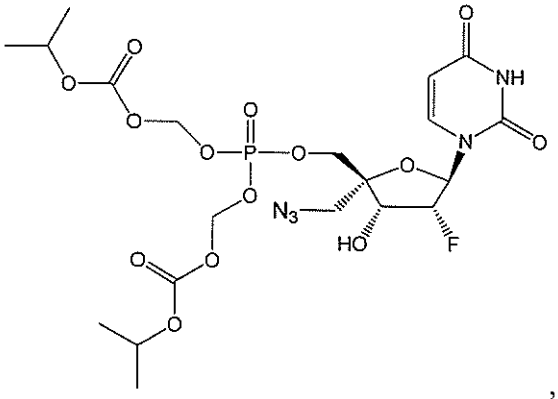
a pharmaceutically acceptable salt of the foregoing.

68. The compound of Claim 1, wherein the compound of Formula (I) is selected from the group consisting of:

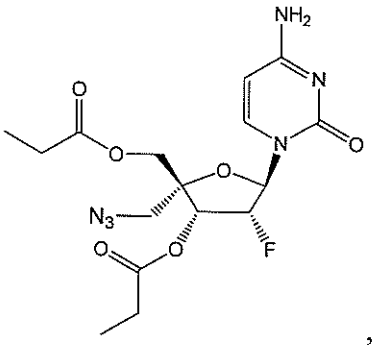

O
NH
O
O
P
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O
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NH
H_3C
H_3C
N_3
HO
F
H_3C
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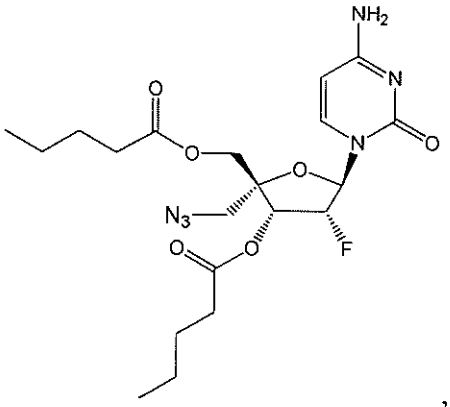

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NH
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P
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HO
F
S



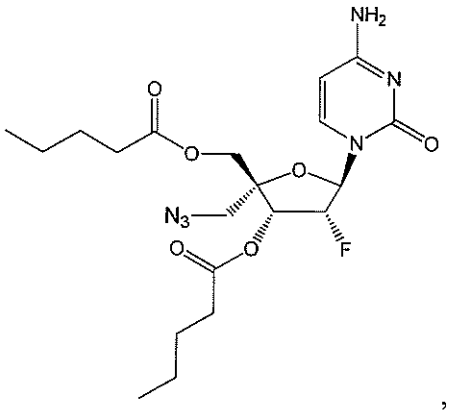
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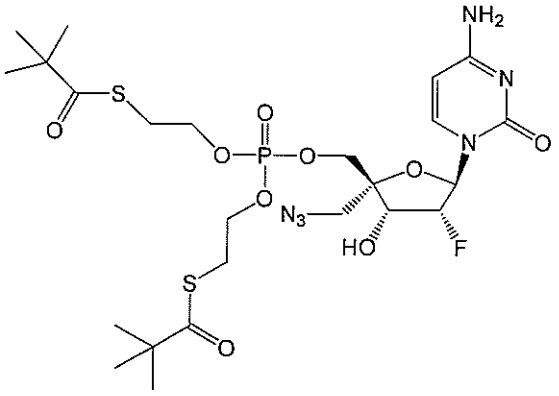
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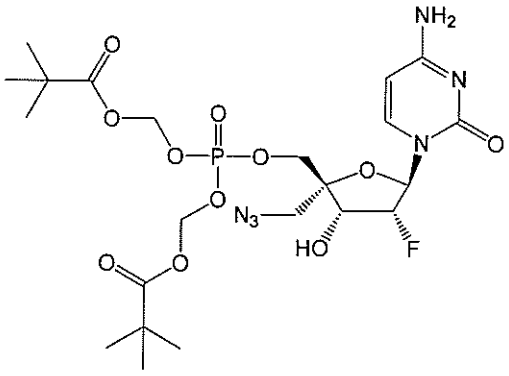
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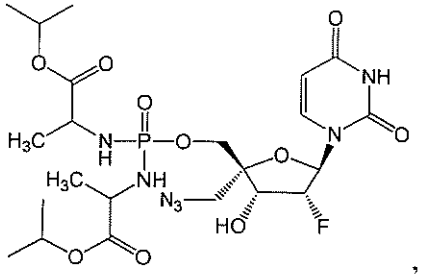
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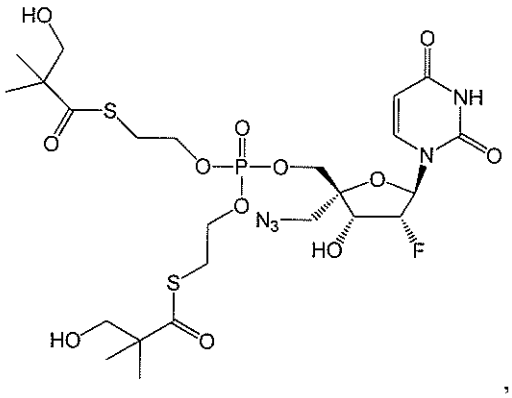
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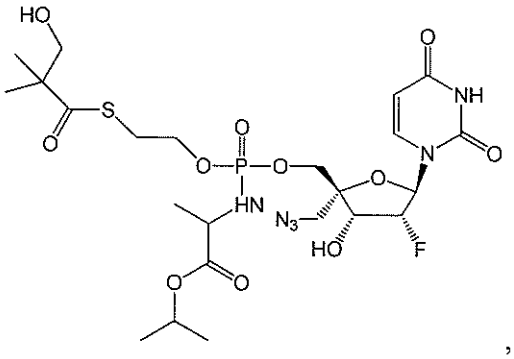
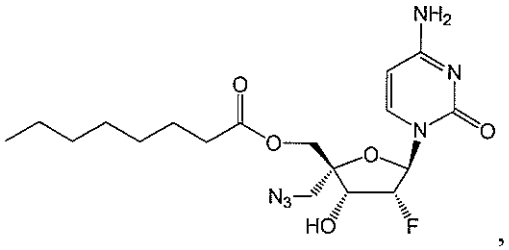
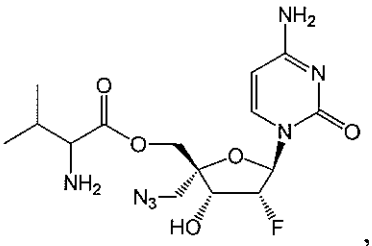
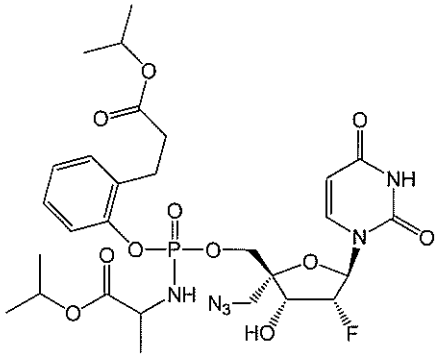
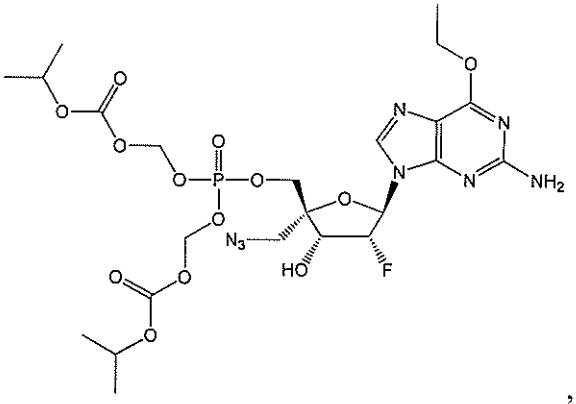
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and

, or a pharmaceutically acceptable salt of the foregoing.

69. A pharmaceutical composition comprising an effective amount of a compound of any one of Claims 1 to 68, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent, excipient, or combination thereof.

70. Use of an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69 in the preparation of a medicament for ameliorating or treating a paramyxovirus viral infection in a subject identified as suffering from the paramyxovirus viral infection.

71. Use of an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69 in the preparation of a medicament for inhibiting replication of a paramyxovirus.

72. Use of an effective amount of a compound of any one of Claims 1 to 68 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 69 in the preparation of a medicament for contacting a cell infected with a paramyxovirus.

73. The use of any one of Claims 70 to 72, further comprising the use of one or more agents.

74. The use of any one of Claims 70 to 73, wherein the paramyxovirus viral infection is a human respiratory syncytial virus infection.

75. The use of any one of Claims 73 to 74, wherein the paramyxovirus viral infection is a human respiratory syncytial virus infection; and wherein the one or more agents is selected from the group consisting of ribavirin, palivizumab, RSV-IGIV, ALN-RSV01, BMS-433771, RFI-641, RSV604, MDT-637, BTA9881, TMC-353121, MBX-300, YM-53403, RV568 and a RSV-F Particle Vaccine.

76. The use of any one of Claims 70 to 73, wherein the paramyxovirus viral infection is a human parainfluenza virus infection.

77. The use of Claim 76, wherein human parainfluenza virus infection is a human parainfluenza virus 3 infection.

78. The use of any one of Claims 70 to 73, wherein the paramyxovirus viral infection is a human metapneumovirus infection.