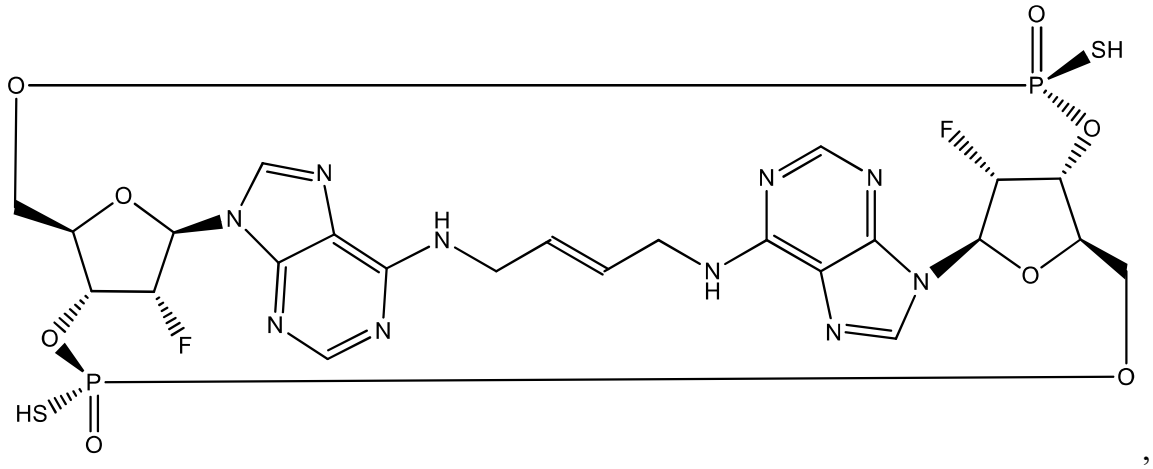
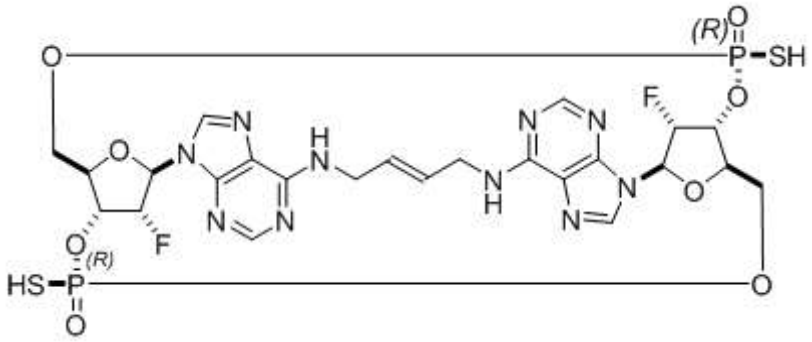
provides a compound having the following structure:



,

or a pharmaceutically acceptable salt thereof.

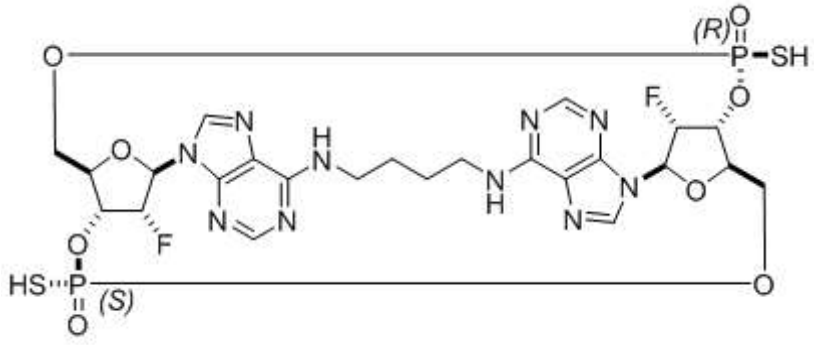
In another aspect, the present disclosure refers to a compound or pharmaceutically acceptable salt, wherein the compound is:



,

or a pharmaceutically acceptable salt thereof.

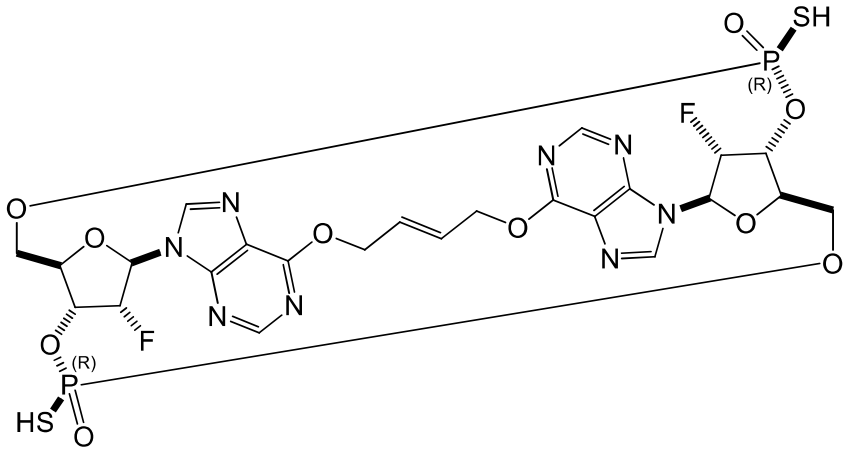
In another aspect, the present disclosure refers to a compound or pharmaceutically acceptable salt, wherein the compound is:



,

or a pharmaceutically acceptable salt thereof.

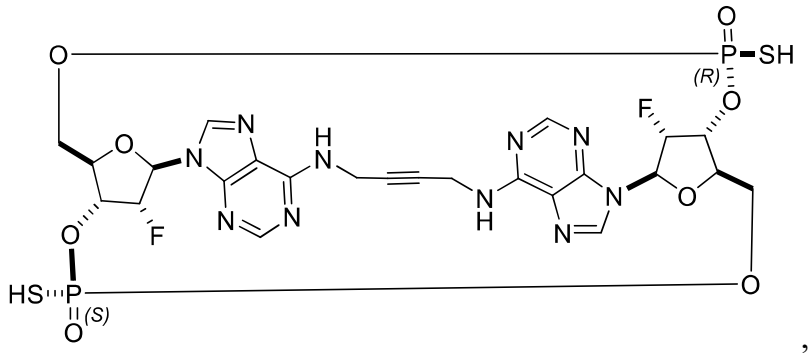
In another aspect, the present disclosure refers to a compound or pharmaceutically acceptable salt, wherein the compound is:



,

or a pharmaceutically acceptable salt thereof.

In another aspect, the present disclosure refers to a compound or pharmaceutically acceptable salt, wherein the compound is:



,

or a pharmaceutically acceptable salt thereof.

In yet another aspect, the present disclosure refers to a pharmaceutical composition comprising a compound as described herein or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient. In yet another aspect, the present disclosure refers to a compound or pharmaceutically acceptable salt as described herein, or pharmaceutical composition as described herein for use in therapy. In yet another aspect, the present disclosure refers to use of a compound or pharmaceutically acceptable salt as described herein in the preparation of a pharmaceutical composition for treating cancer.

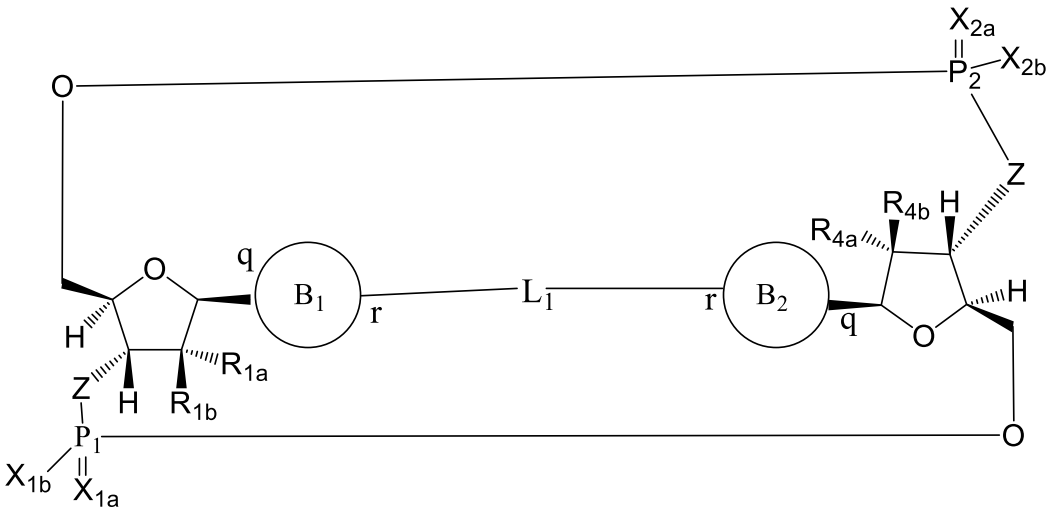
In yet another aspect, the present disclosure refers to use of a compound, a pharmaceutically acceptable salt, or a pharmaceutical composition as described herein in the manufacture of a medicament for treating cancer, the use comprising that the compound, pharmaceutically acceptable salt or pharmaceutical composition is to be administered to an

individual identified as having a cancer treatable by the compound, pharmaceutically acceptable salt or pharmaceutical composition.

In yet another aspect, the present disclosure refers to use of a compound, pharmaceutically acceptable salt or pharmaceutical composition as described herein in the manufacture of a medicament for treating cancer in a patient having REF STING allele. In yet another aspect, the present disclosure refers to use of a compound, pharmaceutically acceptable salt or pharmaceutical composition as described herein in the manufacture of a medicament for treating cancer in a patient having WT STING allele. In yet another aspect, the present disclosure refers to use of a compound, pharmaceutically acceptable salt or

We claim:

1. A compound of Formula (III):



(III)

or a pharmaceutically acceptable salt thereof, wherein

R_{1a} is selected from the group consisting of –H, -OH, and -F;

R_{1b} is selected from the group consisting of –H, -OH, and –F, wherein at least one of R_{1a} and R_{1b} is -H;

R_{4a} is selected from the group consisting of –H, –OH, and –F;

R_{4b} is selected from the group consisting of –H, –OH, and –F, wherein at least one of R_{4a} and R_{4b} is -H;

P_1 and P_2 each independently has an S or R stereochemical configuration;

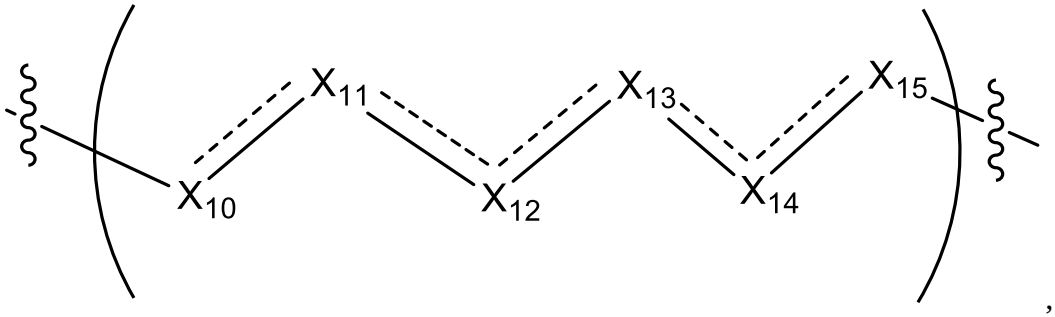
Z is –O– or –NH–;

X_{1a} and X_{2a} are the same or different and are independently selected from =O or =S;

X_{1b} and X_{2b} are the same or different and are independently selected from -OR_5 and -SR_5;

wherein R_5 is selected from the group consisting of –H, -$C_{1\text{-}6}$alkyl, -C(O)$C_{1\text{-}6}$alkyl, and -CH_2OC(O)$OC_{1\text{-}6}$alkyl;

L_1 in formula (III) is four, five, or six carbons in length, and is

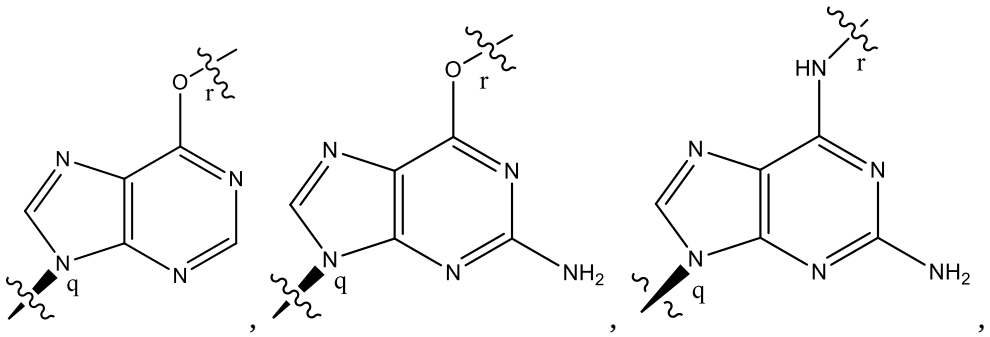


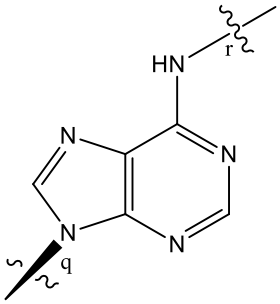
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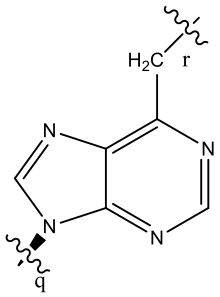
wherein ------ indicates a single bond, a double bond, or a triple bond and wherein (i) either 0 or 1 occurrence of ------ in L_1 indicates a triple bond; or (ii) 0, 1, or 2 occurrences of ------ in L_1 indicates a double bond, wherein geometry about each double bond is cis or trans; and (iii) wherein when 1 occurrence of ------ in L_1 indicates a triple bond, 0 occurrences of ------ in L_1 indicates a double bond; and (iv) wherein, when 2 occurrences of ------ in L_1 indicate a double bond, those double bonds are either adjacent bonds or alternating bonds;

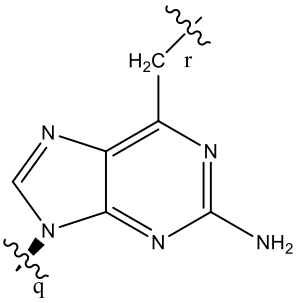
wherein X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, and X_{15} are independently selected from a bond, –CH_2–, or –CH–, wherein the –CH_2– or –CH– is unsubstituted or substituted by (i) –OH, (ii) –F, (iii) –Cl, (iv) –NH_2, or (v) -D, and when X_{10} or X_{15} is a bond, that bond is not a double bond or triple bond;

and wherein any two adjacent members of the group including X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, and X_{15} may optionally form, with additional atoms, a C_3 cycloalkyl or a C_3 heterocycloalkyl, said C_3 heterocycloalkyl including an N or O atom;
wherein B_1 and B_2 are independently selected from:





, 

, and 

where the bonds at points q and r on B_1 and B_2 are attached at points q and r on Formula (III).

2. A compound or pharmaceutically acceptable salt of claim 1, wherein:

R_{1a} is selected from the group consisting of –H and -F;

R_{1b} is selected from the group consisting of –H and –F, wherein R_{1a} and R_{1b} may not both be -F;

R_{4a} is selected from the group consisting of –H and -F;

R_{4b} is selected from the group consisting of –H and –F, wherein R_{4a} and R_{4b} may not both be –F;

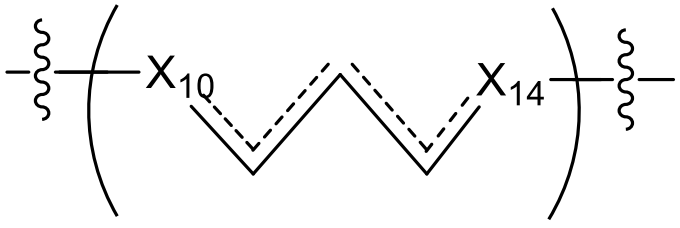
P_1 and P_2 each independently has an S or R stereochemical configuration;

X_{1a} and X_{2a} are the same or different and are independently selected from =O or =S;

X_{1b} and X_{2b} are the same or different and are independently selected from -OR_5 and -SR_5;

wherein R_5 is selected from the group consisting of –H, $C_{1\text{-}6}$alkyl, and -C(O)$C_{1\text{-}6}$alkyl;

L_1 in formula (III) is four or five carbons in length, and is

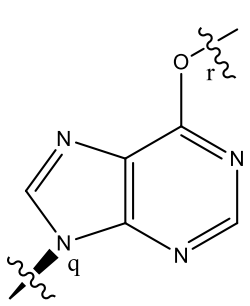


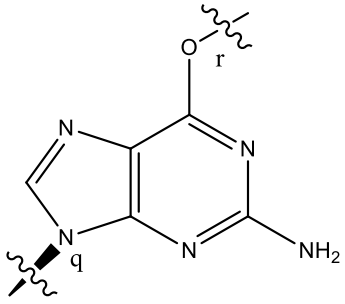
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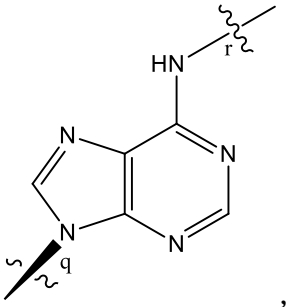
wherein ------ indicates a single bond or a double bond, and wherein either 0 or 1 occurrence of ------ in L_1 indicates a double bond, wherein geometry about the double bond is cis or trans;

wherein X_{10} and X_{14} are independently selected from a bond, -CH-, or –CH_2- , and wherein, when X_{10} or X_{14} is a bond, that bond is not a double bond;

wherein B_1 and B_2 are independently selected from:

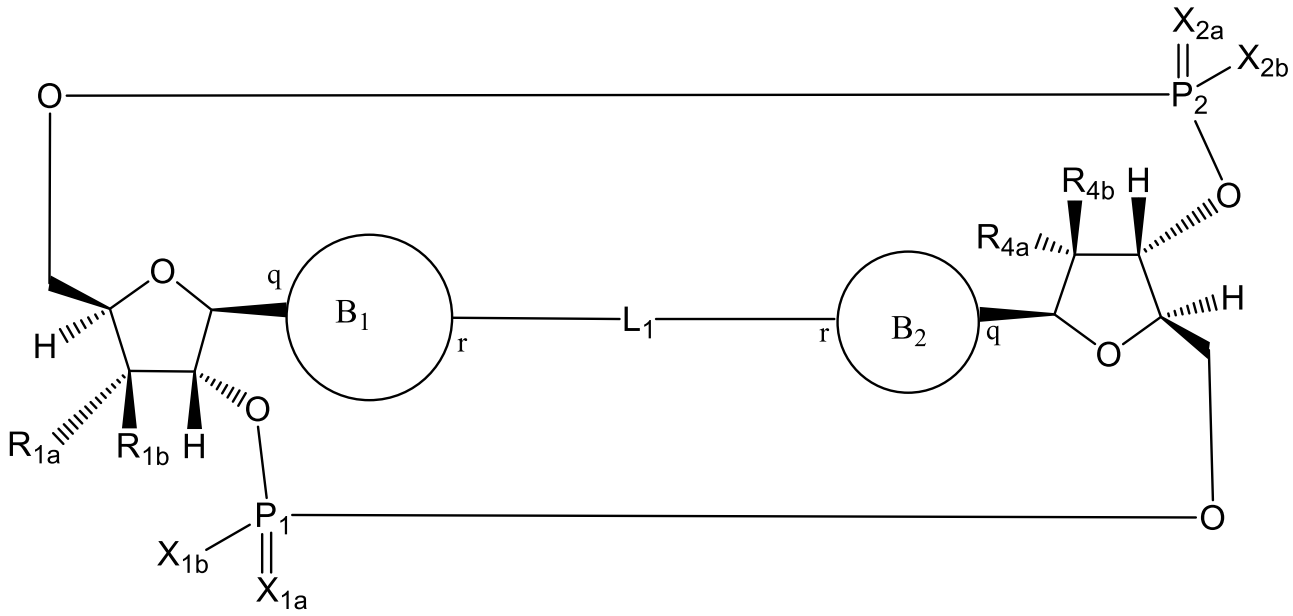


, 

, and 

, where the bonds at points q and r on B_1 and B_2 are attached at points q and r on Formula (III).

3. A compound of Formula (IV):



(IV)

or a pharmaceutically acceptable salt thereof, wherein

R_{1a} is selected from the group consisting of –H, -OH, and -F;

R_{1b} is selected from the group consisting of –H, -OH, and –F, wherein at least one of R_{1a} and R_{1b} is -H;

R_{4a} is selected from the group consisting of –H, -OH, and -F;

R_{4b} is selected from the group consisting of –H, -OH, and –F, wherein at least one of R_{4a} and R_{4b} is –H;

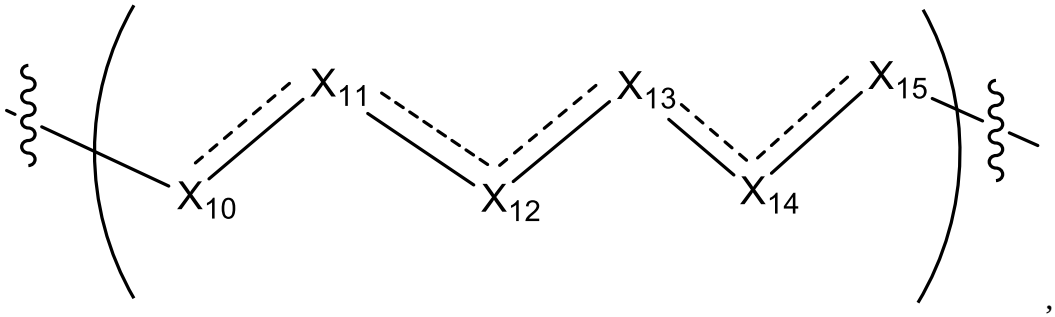
P_1 and P_2 each independently has an S or R stereochemical configuration;

X_{1a} and X_{2a} are the same or different and are independently selected from =O or =S;

X_{1b} and X_{2b} are the same or different and are independently selected from -OR_5 and -SR_5;

wherein R_5 is selected from the group consisting of –H, $C_{1\text{-}6}$alkyl, -C(O)$C_{1\text{-}6}$alkyl, and -$CH_2OC(O)OC_{1\text{-}6}$alkyl;

L_1 in formula (IV) is four, five, or six carbons in length, and is



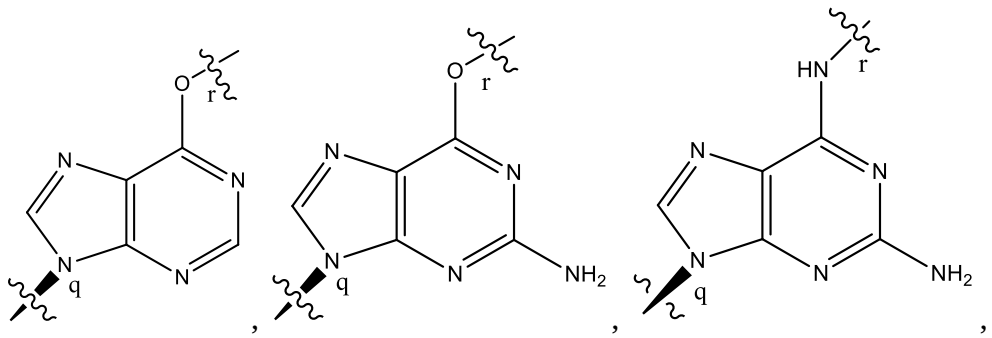
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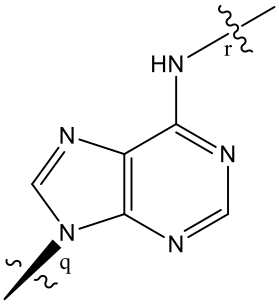
wherein ------ indicates a single bond, a double bond, or a triple bond and wherein (i) either 0 or 1 occurrence of ------ in L_1 indicates a triple bond; or (ii) 0, 1, or 2 occurrences of ------ in L_1 indicates a double bond, wherein geometry about each double bond is cis or trans; and (iii) wherein when 1 occurrence of ------ in L_1 indicates a triple bond, 0 occurrences of ------ in L_1 indicates a double bond; and (iv) wherein, when 2 occurrences of ------ in L_1 indicate a double bond, those double bonds are either adjacent bonds or alternating bonds;

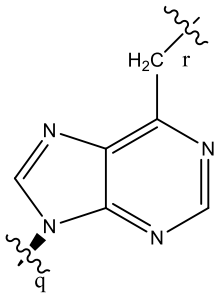
wherein X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, and X_{15} are independently selected from a bond, –CH_2–, or –CH–, wherein the –CH_2– or –CH– is unsubstituted or substituted by (i) –OH, (ii) –F, (iii) –Cl, (iv) –NH_2, or (v) -D, and when X_{10} or X_{15} is a bond, that bond is not a double bond or triple bond;

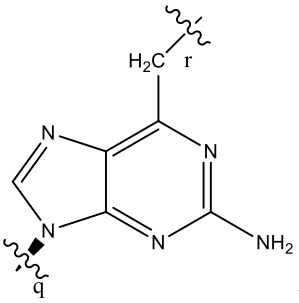
and wherein any two adjacent members of the group including X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, and X_{15} may optionally form, with additional atoms, a C_3 cycloalkyl or a C_3 heterocycloalkyl, said C_3 heterocycloalkyl including an N or O atom;

wherein B_1 and B_2 are independently selected from:



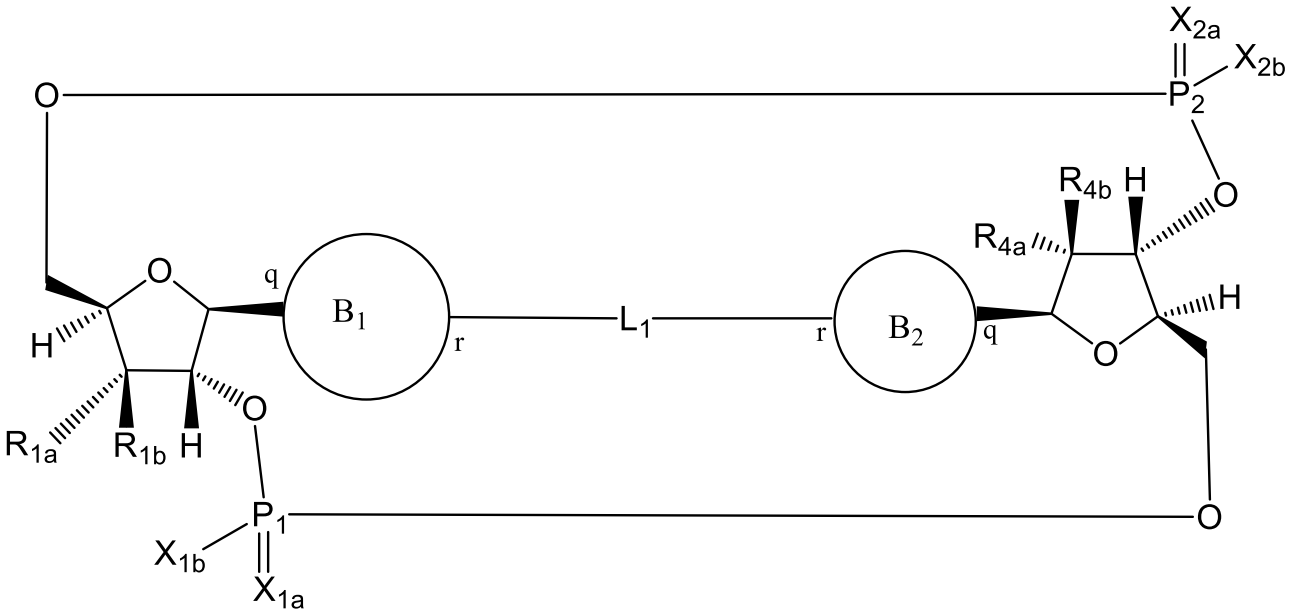


, 

, and 

where the bonds at points q and r on B_1 and B_2 are attached at points q and r on Formula (IV).

4. A compound of Formula (IV):



(IV)

or a pharmaceutically acceptable salt thereof, wherein

R_{1a} is selected from the group consisting of –H and -F;

R_{1b} is selected from the group consisting of –H and –F, wherein R_{1a} and R_{1b} may not both be -F;

R_{4a} is selected from the group consisting of –H and -F;

R_{4b} is selected from the group consisting of –H and –F, wherein R_{4a} and R_{4b} may not both be –F;

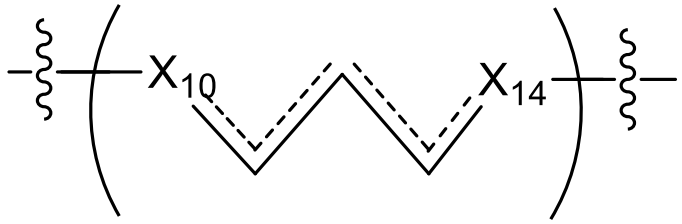
P_1 and P_2 each independently has an S or R stereochemical configuration;

X_{1a} and X_{2a} are the same or different and are independently selected from =O or =S;

X_{1b} and X_{2b} are the same or different and are independently selected from -OR_5 and -SR_5;

wherein R_5 is selected from the group consisting of –H, $C_{1\text{-}6}$alkyl, and -C(O)$C_{1\text{-}6}$alkyl;

L_1 in formula (IV) is four or five carbons in length, and is

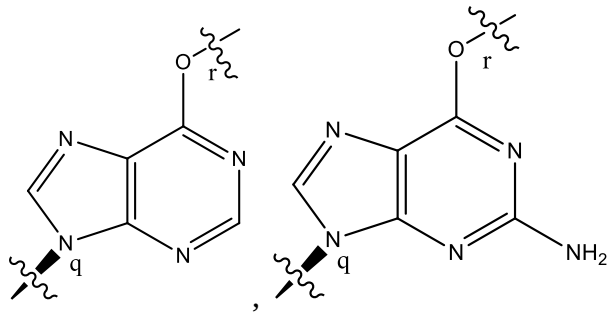


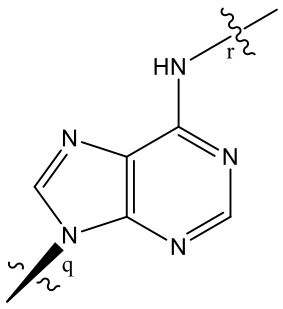
,

wherein ------ indicates a single bond or a double bond, and wherein either 0 or 1 occurrence of ------ in L_1 indicates a double bond, wherein geometry about the double bond is cis or trans;

wherein X_{10} and X_{14} are independently selected from a bond, -CH-, or $–CH_2-$, and wherein, when X_{10} or X_{14} is a bond, that bond is not a double bond;

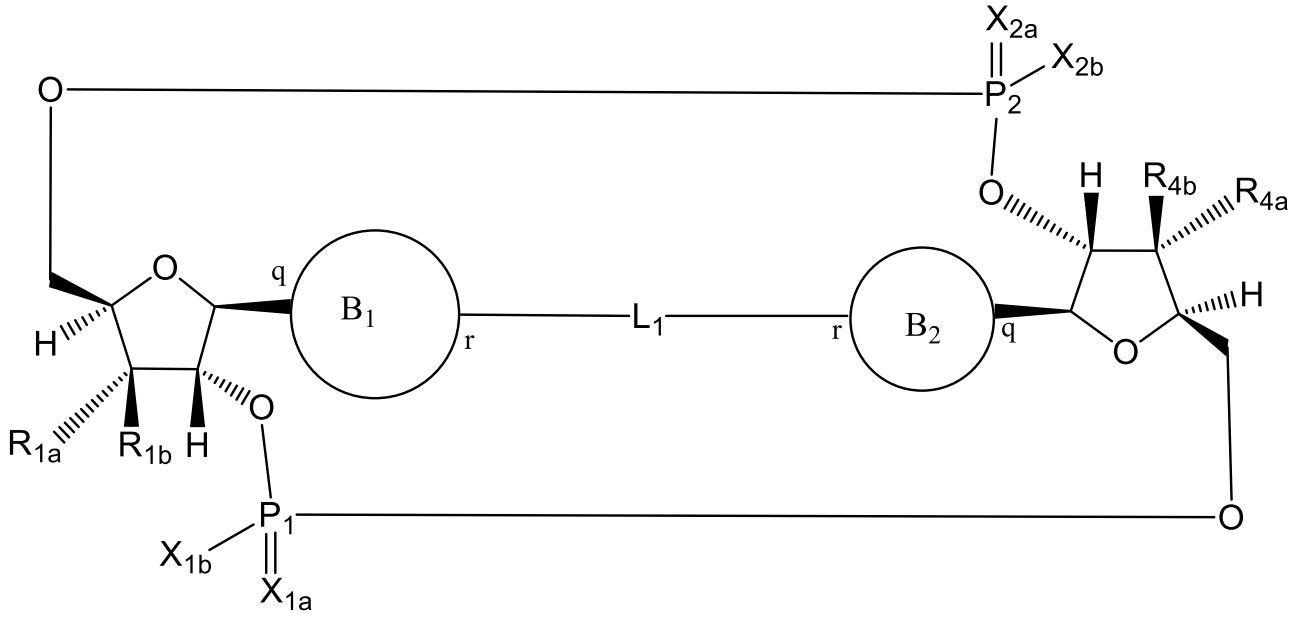
wherein B_1 and B_2 are independently selected from:



, 

, and ,where the bonds at points q and r on B_1 and B_2 are attached at points q and r on Formula (IV).

5. A compound of Formula (V):



(V)

or a pharmaceutically acceptable salt thereof, wherein

R_{1a} is selected from the group consisting of –H, -OH, and -F;

R_{1b} is selected from the group consisting of –H, -OH, and –F, wherein at least one of R_{1a} and R_{1b} is -H;

R_{4a} is selected from the group consisting of –H, -OH and -F;

R_{4b} is selected from the group consisting of –H, -OH, and –F, and wherein at least one of R_{4a} and R_{4b} is –H;

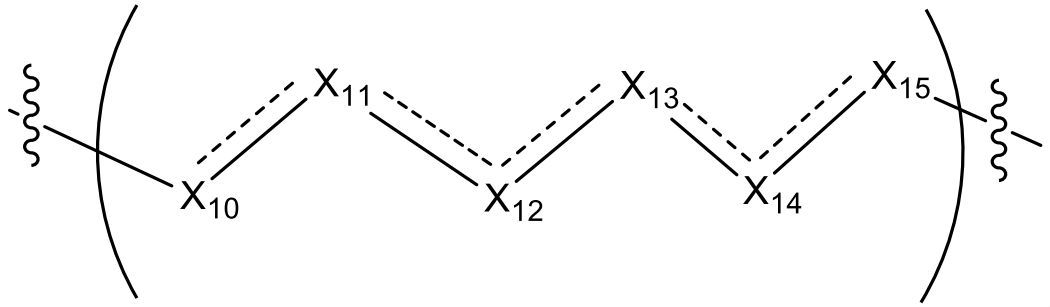
P_1 and P_2 each independently has an S or R stereochemical configuration;

X_{1a} and X_{2a} are the same or different and are independently selected from =O or =S;

X_{1b} and X_{2b} are the same or different and are independently selected from -OR_5 and -SR_5;

wherein R_5 is selected from the group consisting of –H, $C_{1\text{-}6}$alkyl, -C(O)$C_{1\text{-}6}$alkyl, and -$CH_2OC(O)OC_{1\text{-}6}$alkyl;

L_1 in formula (V) is four, five, or six carbons in length, and is

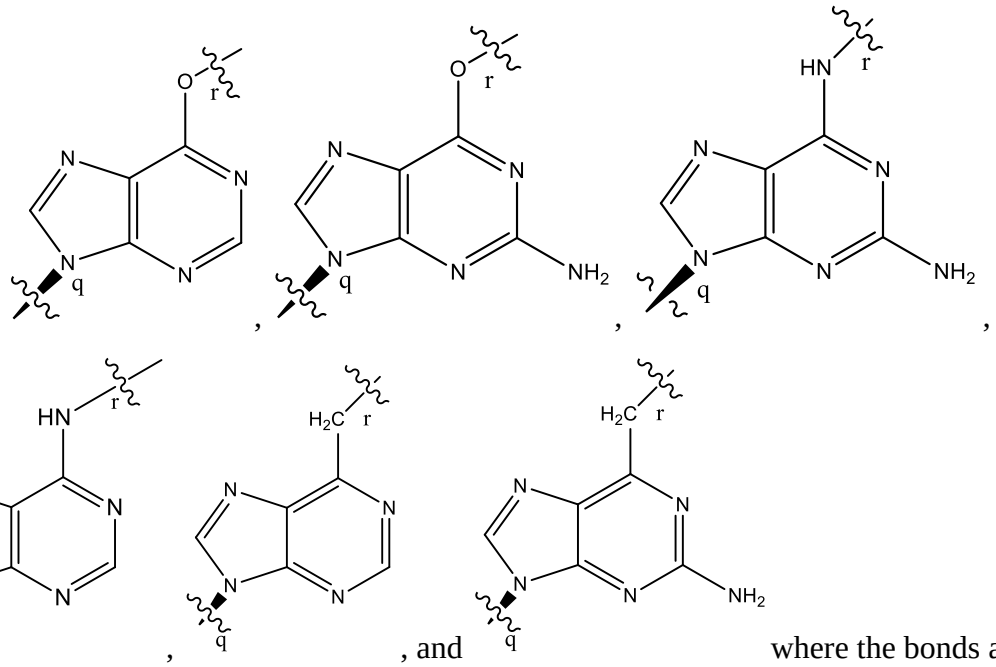


,

wherein ------ indicates a single bond, a double bond, or a triple bond and wherein (i) either 0 or 1 occurrence of ------ in L_1 indicates a triple bond; or (ii) 0, 1, or 2 occurrences of ------ in L_1 indicates a double bond, wherein geometry about each double bond is cis or trans; and (iii) wherein when 1 occurrence of ------ in L_1 indicates a triple bond, 0 occurrences of ------ in L_1 indicates a double bond; and (iv) wherein, when 2 occurrences of ------ in L_1 indicate a double bond, those double bonds are either adjacent bonds or alternating bonds;

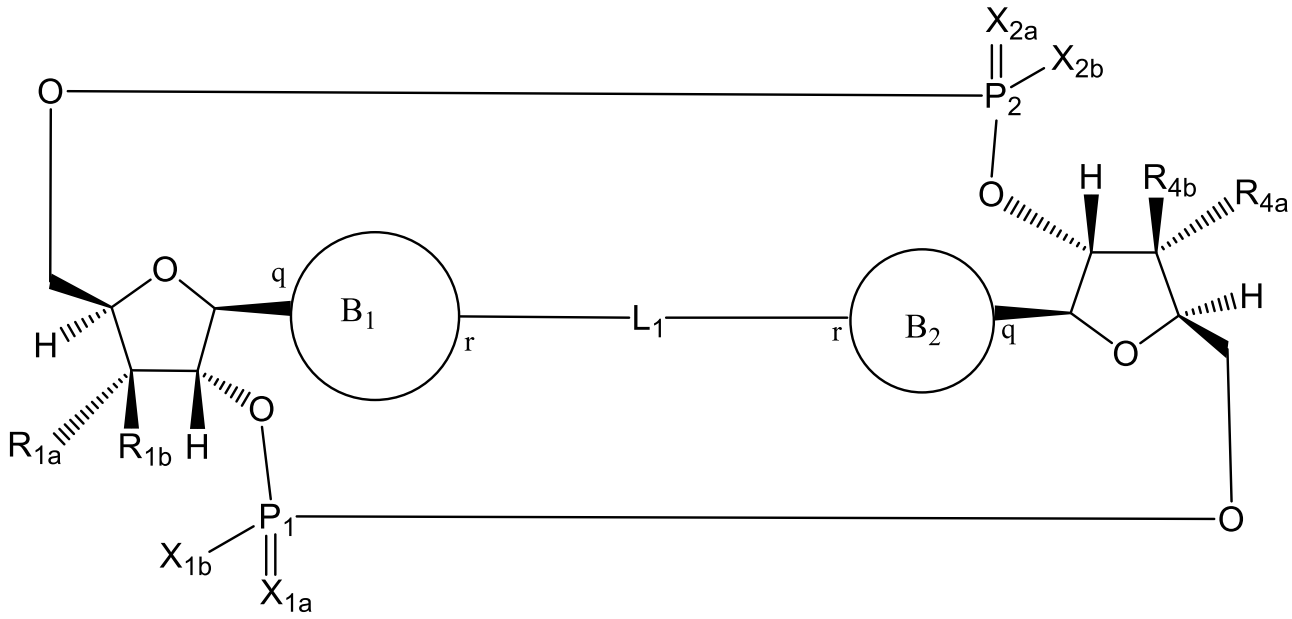
wherein X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, and X_{15} are independently selected from a bond, –CH_2–, or –CH–, wherein the –CH_2– or –CH– is unsubstituted or substituted by (i) –OH, (ii) –F, (iii) –Cl, (iv) –NH_2, or (v) -D, and when X_{10} or X_{15} is a bond, that bond is not a double bond or triple bond;

and wherein any two adjacent members of the group including X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, and X_{15} may optionally form, with additional atoms, a C_3 cycloalkyl or a C_3 heterocycloalkyl, said C_3 heterocycloalkyl including an N or O atom;
wherein B_1 and B_2 are independently selected from:



, , , , and where the bonds at points q and r on B_1 and B_2 are attached at points q and r on Formula (V).

6. A compound of Formula (V):



(V)

or a pharmaceutically acceptable salt thereof, wherein

R_{1a} is selected from the group consisting of –H and -F;

R_{1b} is selected from the group consisting of –H and –F, wherein R_{1a} and R_{1b} may not both be -F;

R_{4a} is selected from the group consisting of –H and -F;

R_{4b} is selected from the group consisting of –H and –F, wherein R_{4a} and R_{4b} may not both be –F;

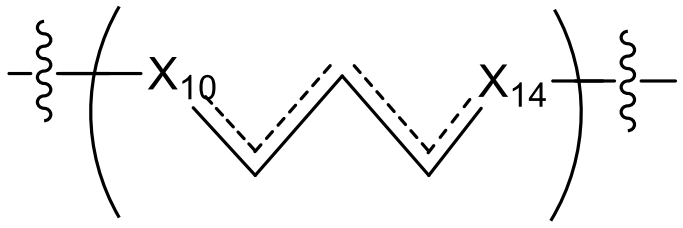
P_1 and P_2 each independently has an S or R stereochemical configuration;

X_{1a} and X_{2a} are the same or different and are independently selected from =O or =S;

X_{1b} and X_{2b} are the same or different and are independently selected from -OR_5 and -SR_5;

wherein R_5 is selected from the group consisting of –H, $C_{1\text{-}6}$alkyl, and -C(O)$C_{1\text{-}6}$alkyl;

L_1 in formula (V) is four or five carbons in length, and is

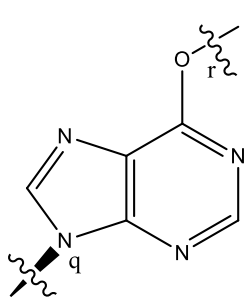


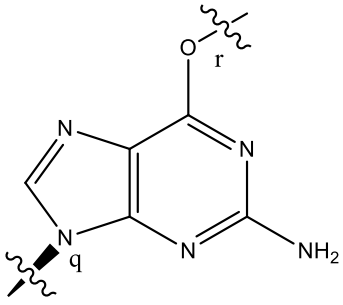
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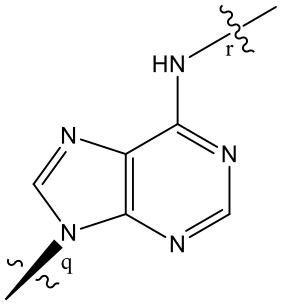
wherein ------ indicates a single bond or a double bond, and wherein either 0 or 1 occurrence of ------ in L_1 indicates a double bond, wherein geometry about the double bond is cis or trans;

wherein X_{10} and X_{14} are independently selected from a bond, -CH-, or $–CH_2-$, and wherein, when X_{10} or X_{14} is a bond, that bond is not a double bond;

wherein B_1 and B_2 are independently selected from:



,


, and


, where the bonds at points q and r on B_1 and B_2 are attached at points q and r on Formula (V).

7. A compound or pharmaceutically acceptable salt of any one of claims 1-6, wherein

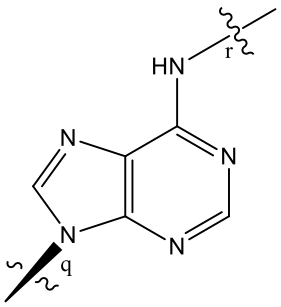
(i) stereochemical configuration of P_1 and P_2 are both R, stereochemical configuration of P_1 is R and and P_2 is S, or stereochemical configuration of P_1 is S and P_2 is R;

(ii) one occurrence of ------ in L_1 indicates a double bond, wherein geometry about the double bond is trans; and

(iii) Z is –O–.

8. A compound or pharmaceutically acceptable salt of any one of claims 1-7, wherein R_{1a} and R_{4a} are each –F.

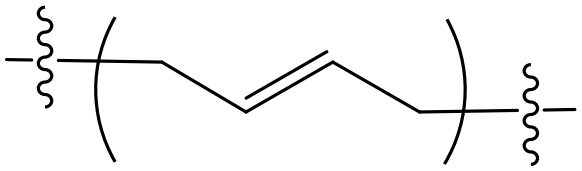
9. A compound or pharmaceutically acceptable salt of any one of claims 1-7, wherein R_{1b} and R_{4b} are each –F.

10. A compound or pharmaceutically acceptable salt of any one of claims 1-9, wherein B_1 and B_2 are each


.

11. A compound or pharmaceutically acceptable salt of any one of claims 1-10, wherein

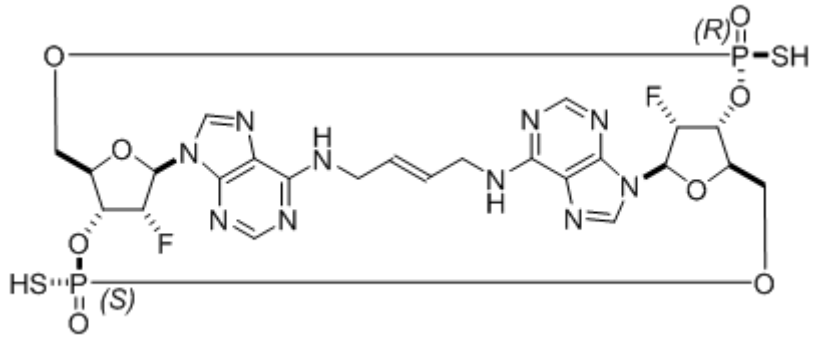
X_{1a} and X_{2a} are both =O, and wherein X_{1b} and X_{2b} are both –SH.

12. A compound or pharmaceutically acceptable salt of any one of claims 1-11, wherein L_1 is .

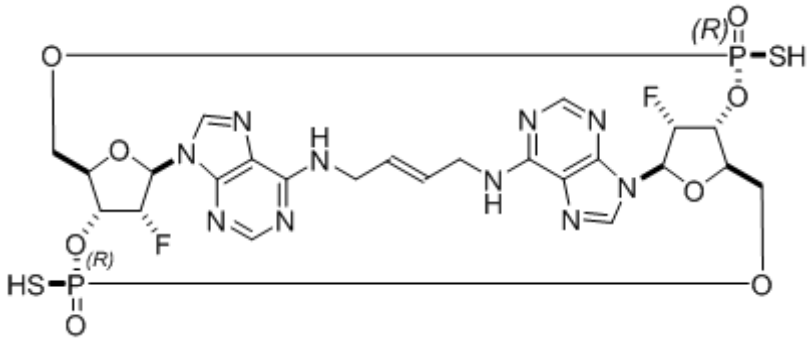
13. A compound or pharmaceutically acceptable salt of claim 1 or claim 2, wherein L_1 is five carbons in length.

14. A compound or pharmaceutically acceptable salt of any one of claims 1-11, wherein L_1 is four carbons in length.

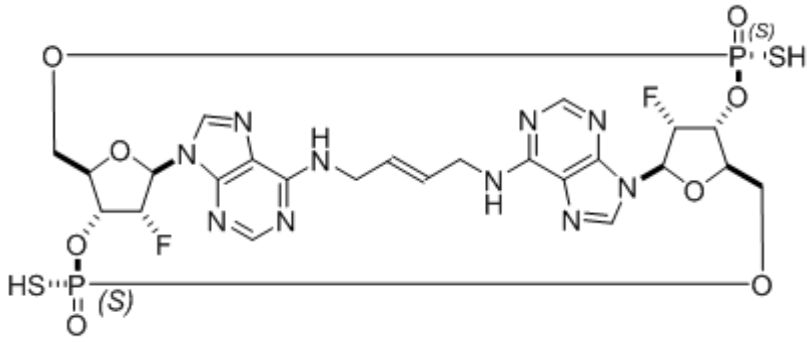
15. A compound or pharmaceutically acceptable salt thereof, selected from the group consisting of:



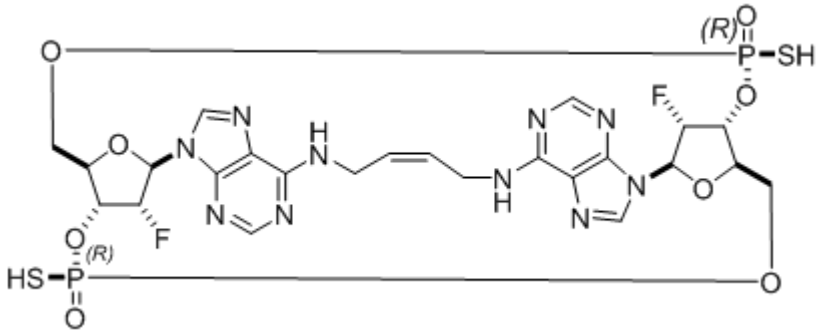
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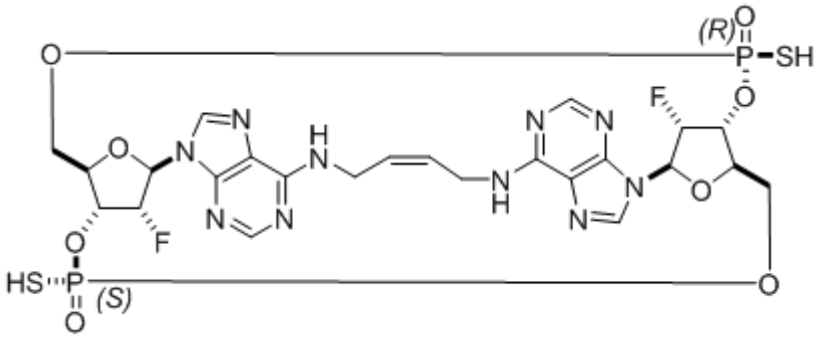
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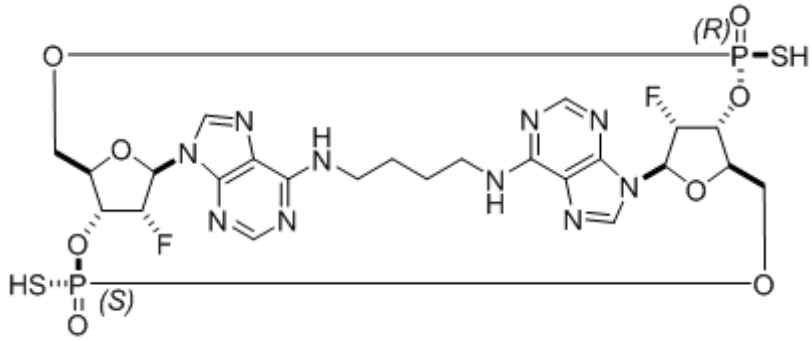
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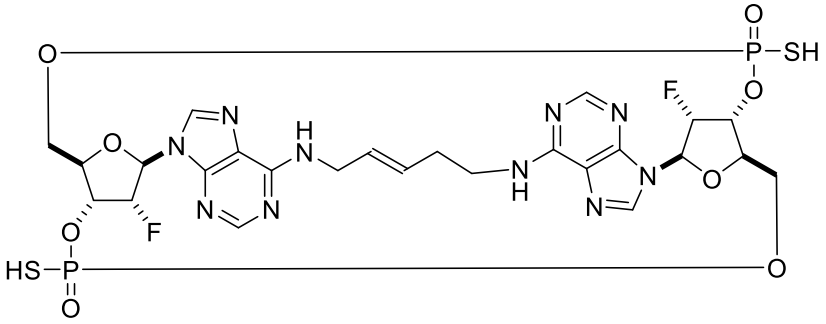
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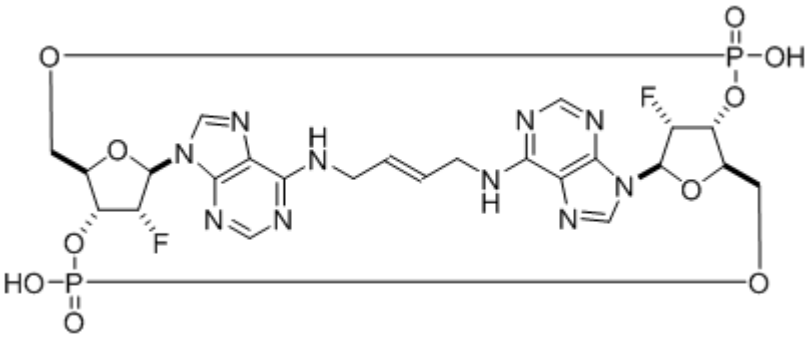
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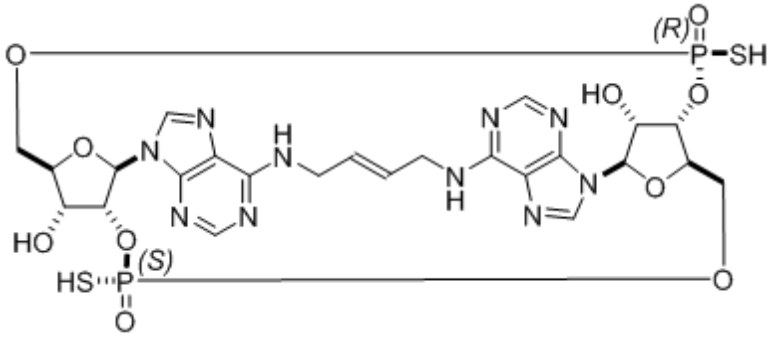
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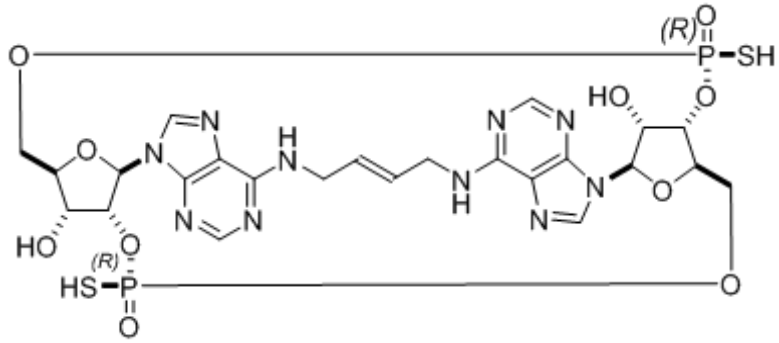
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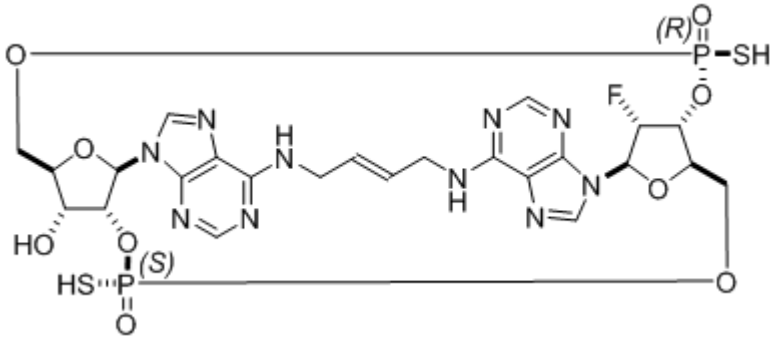
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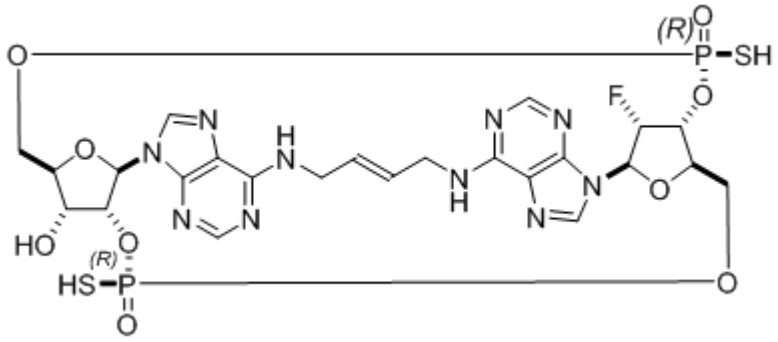
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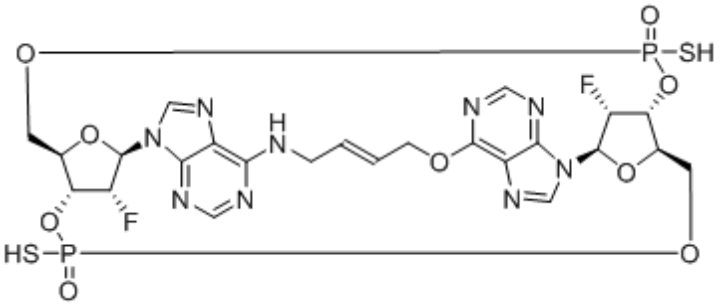
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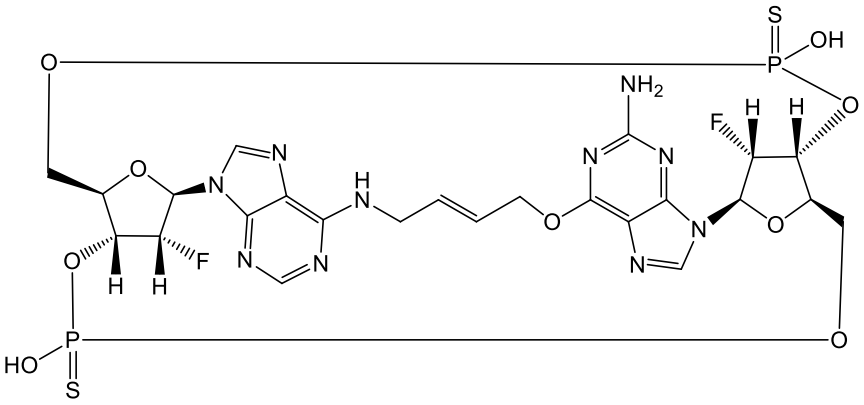
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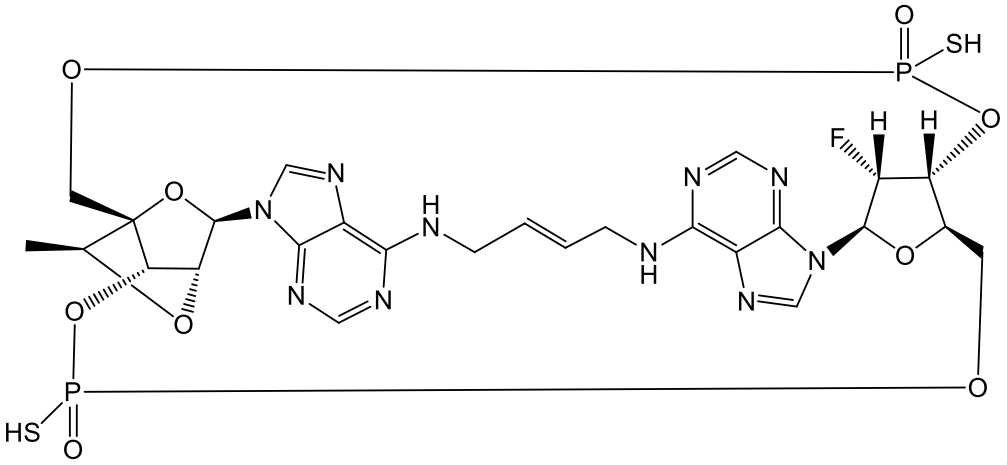
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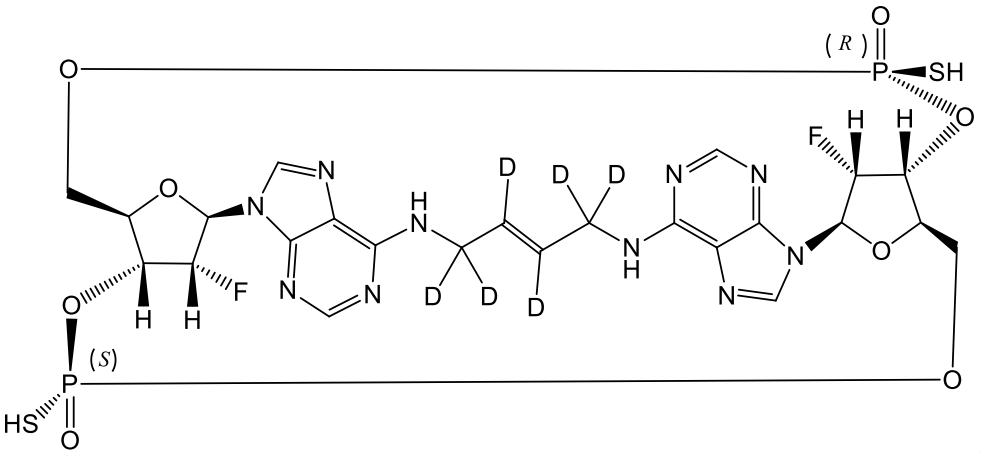
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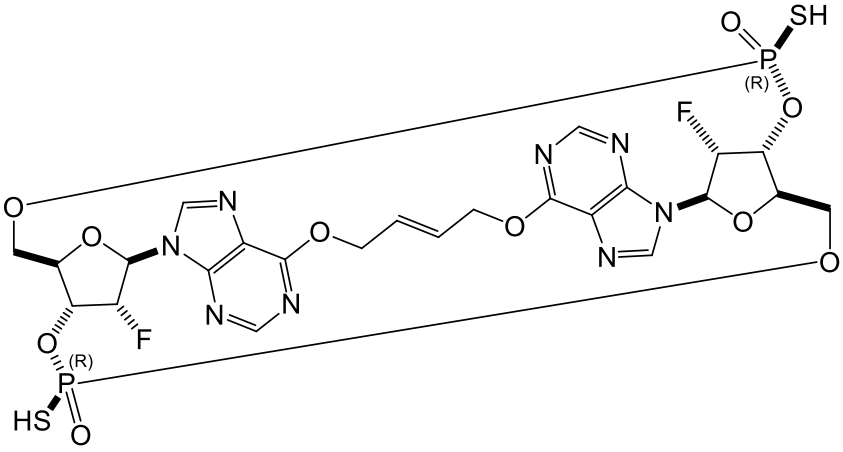
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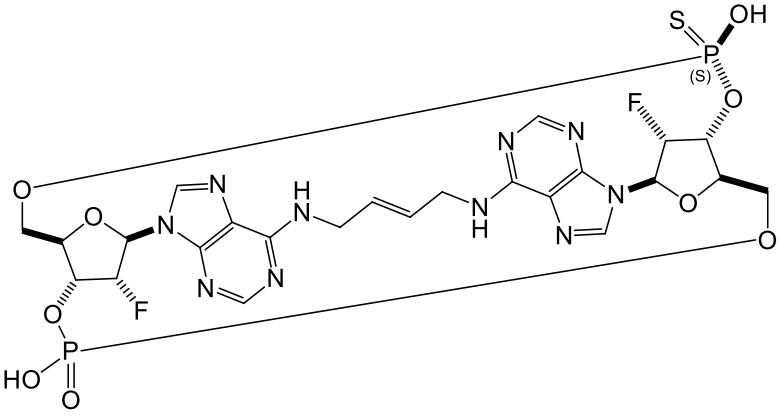
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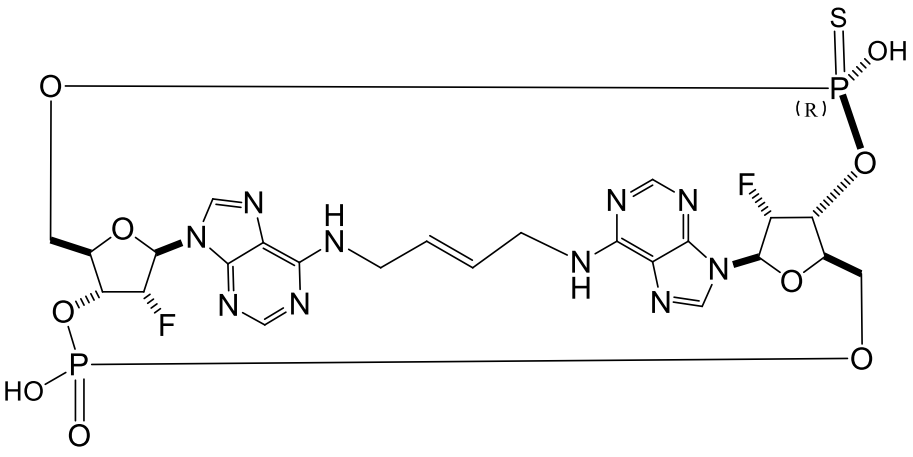
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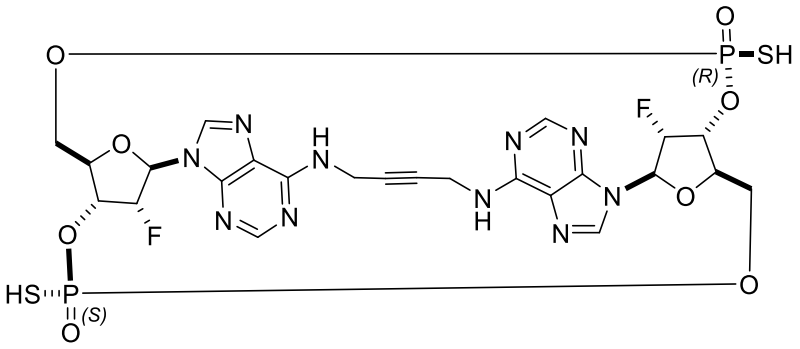
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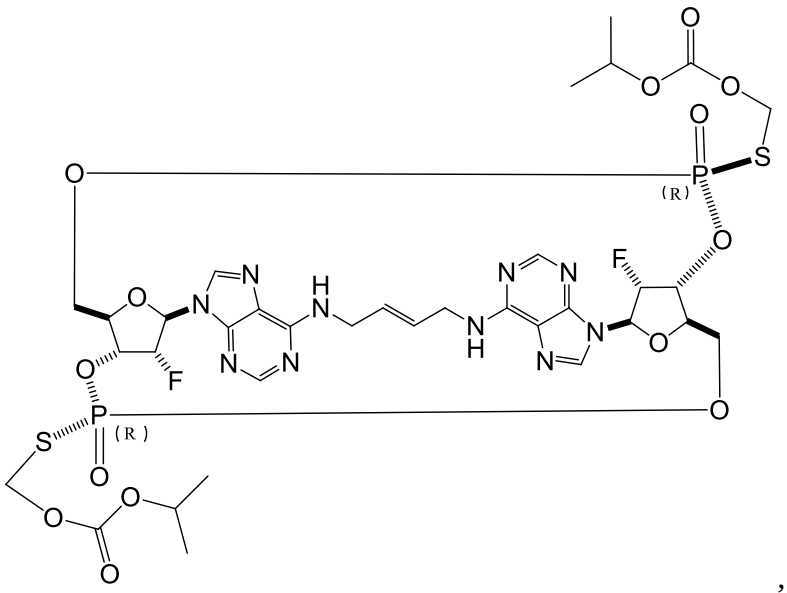
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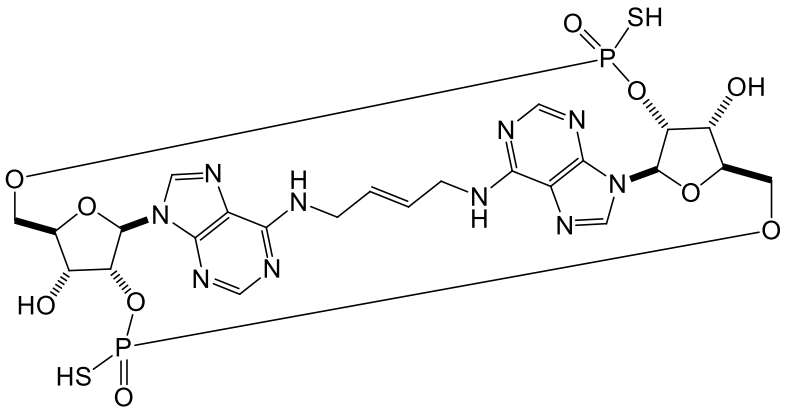
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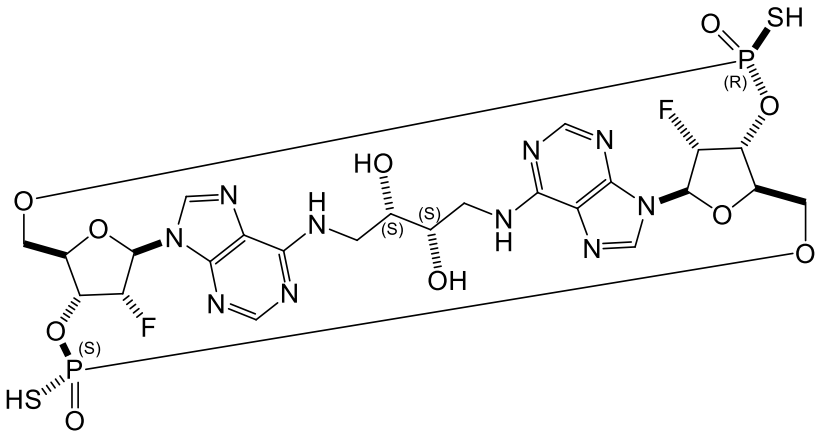
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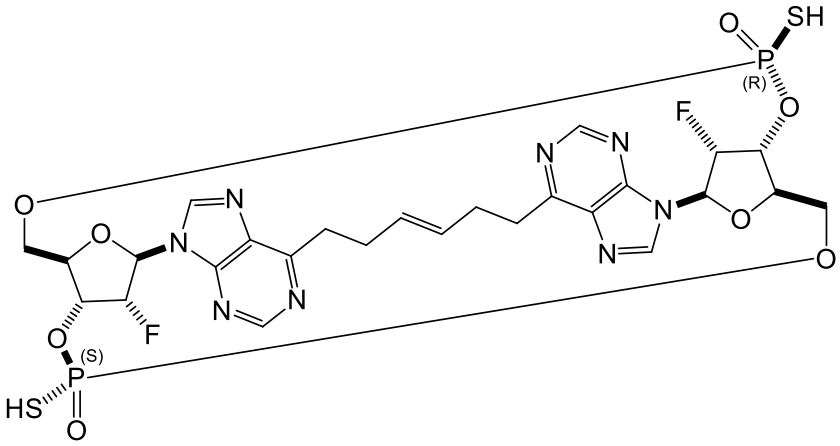
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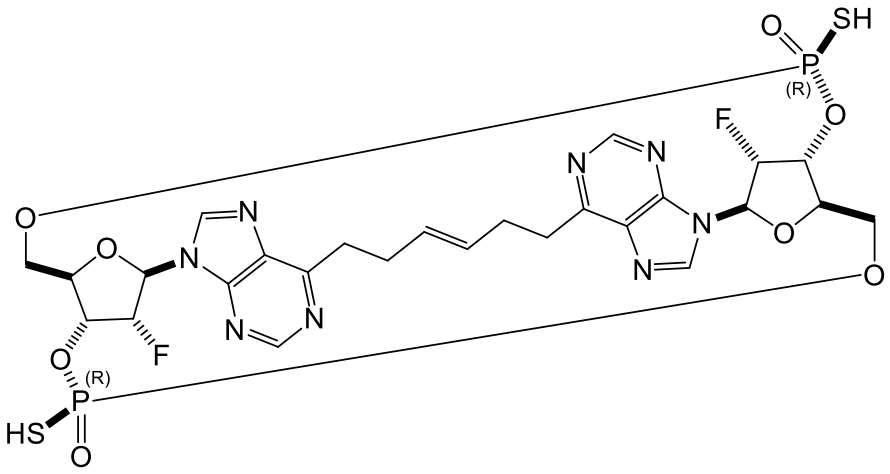
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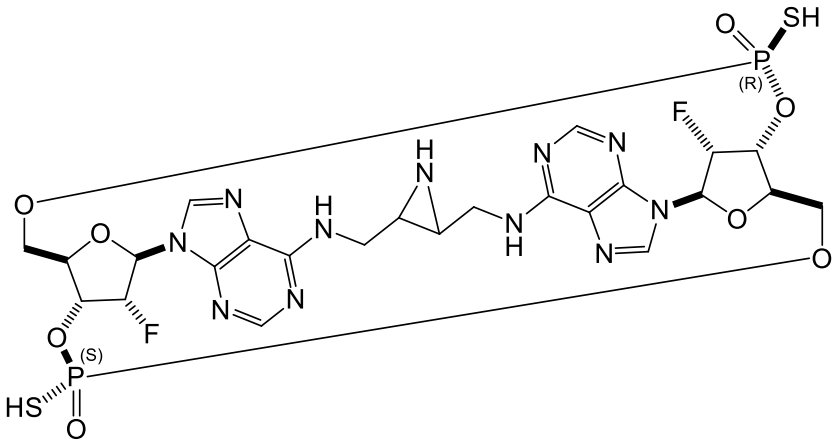
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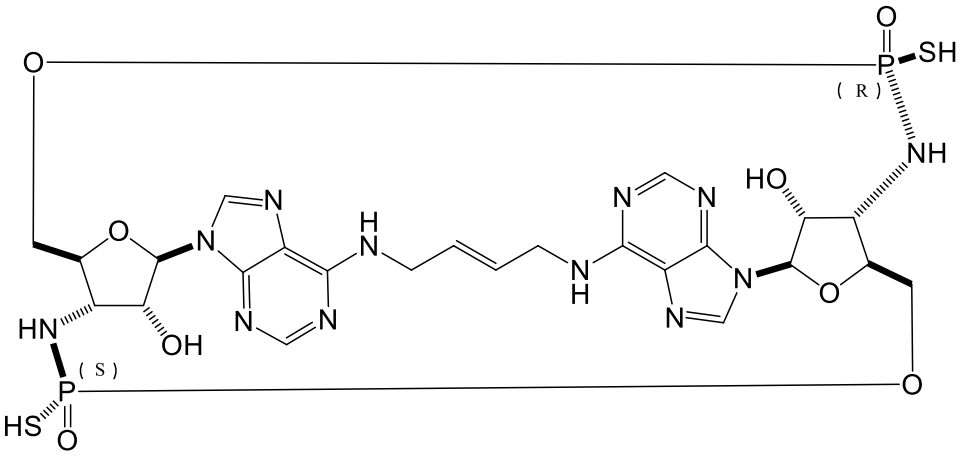
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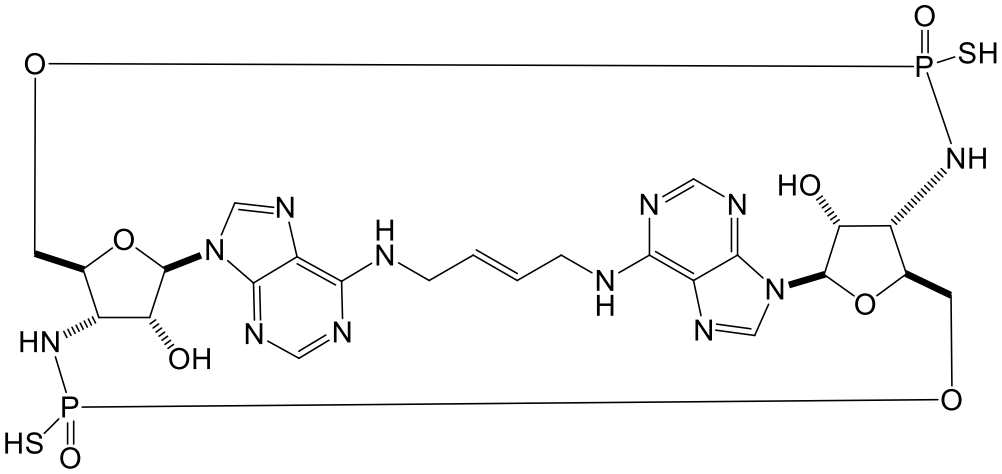
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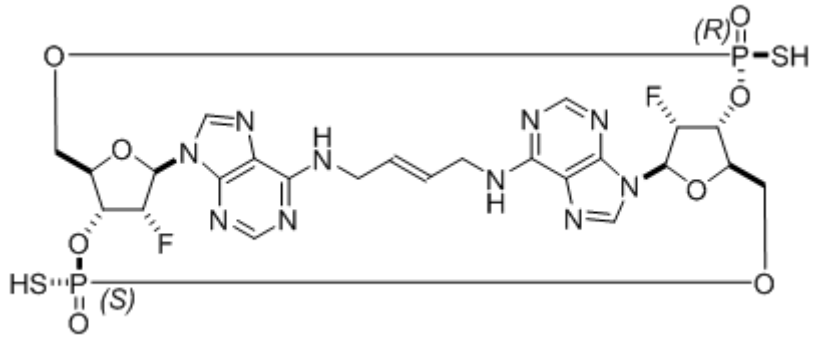
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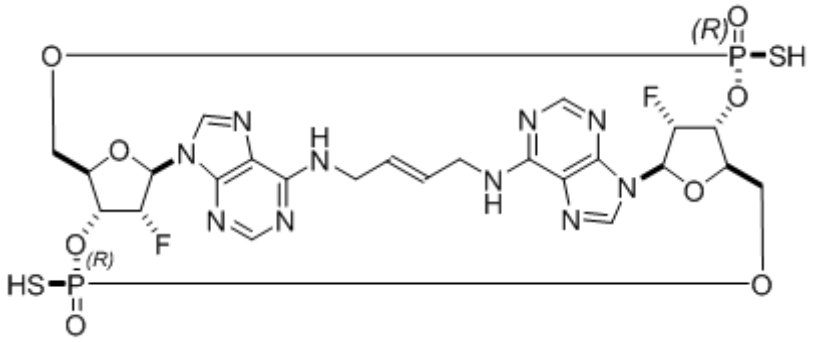
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or a pharmaceutically acceptable salt thereof.

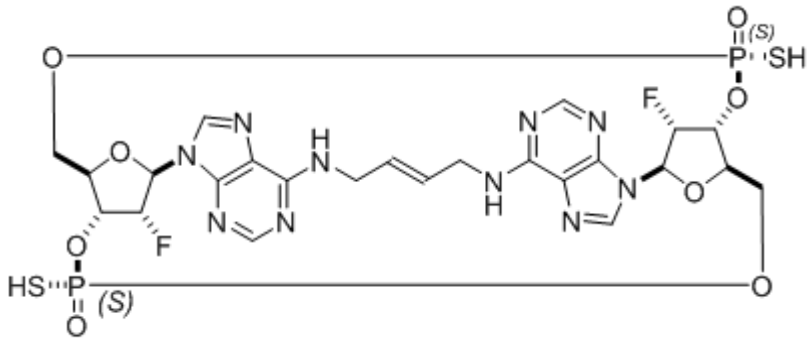
16. A compound or pharmaceutically acceptable salt thereof of claim 15, selected from the group consisting of:



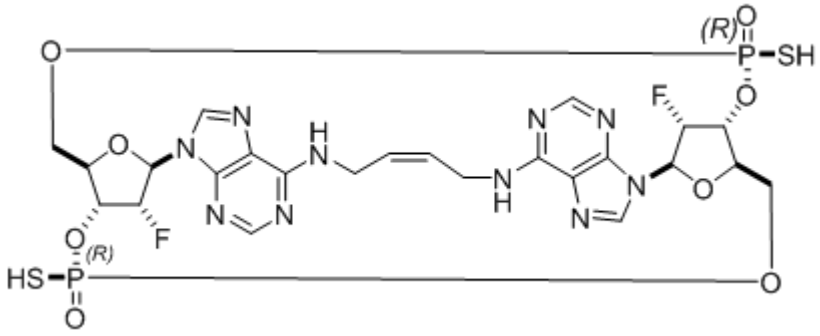
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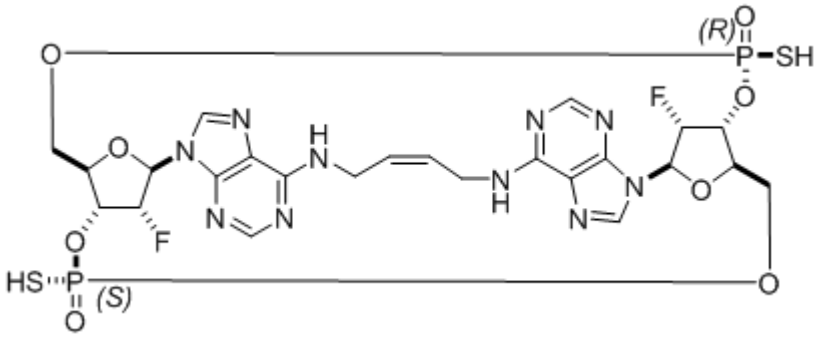
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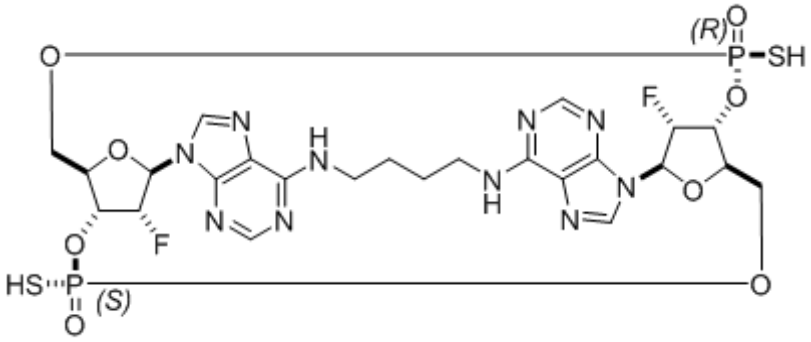
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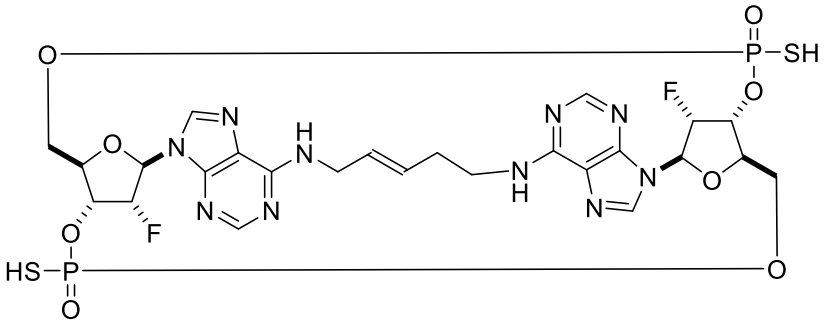
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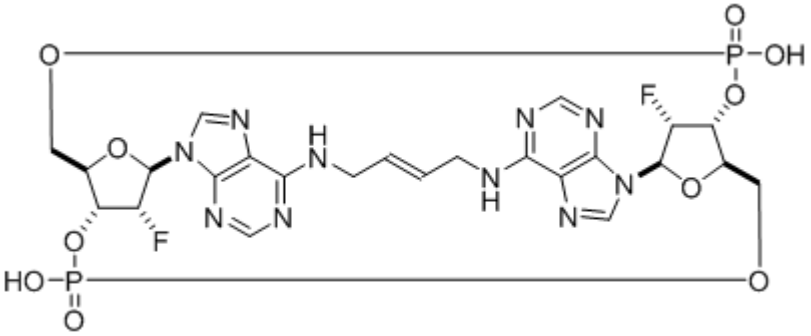
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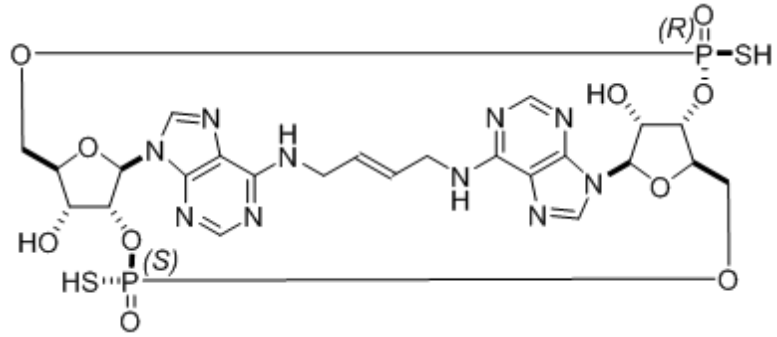
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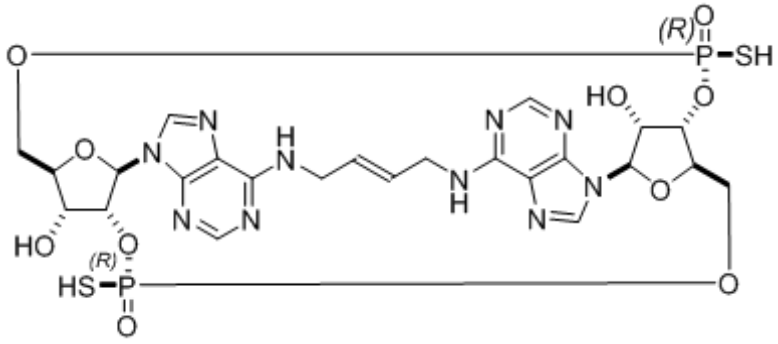
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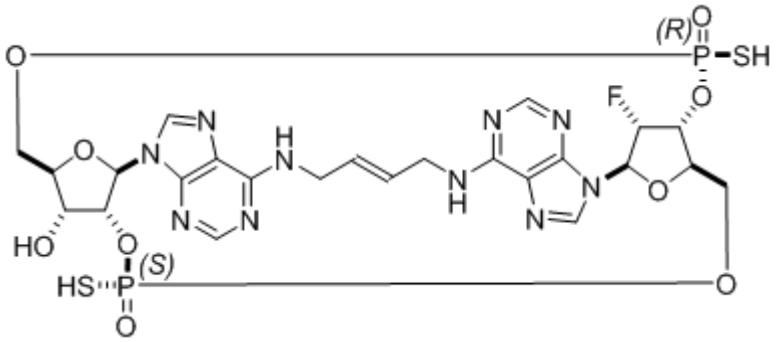
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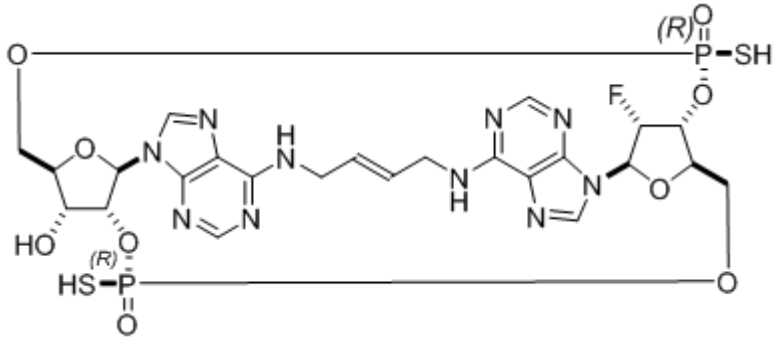
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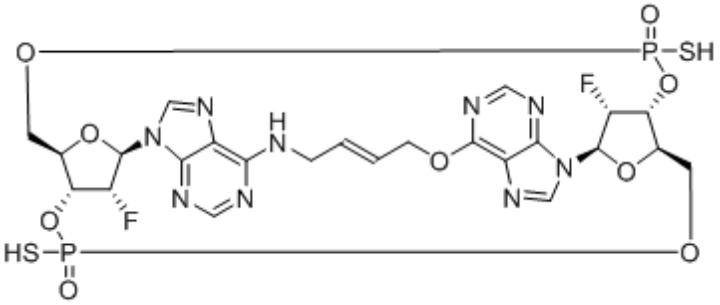
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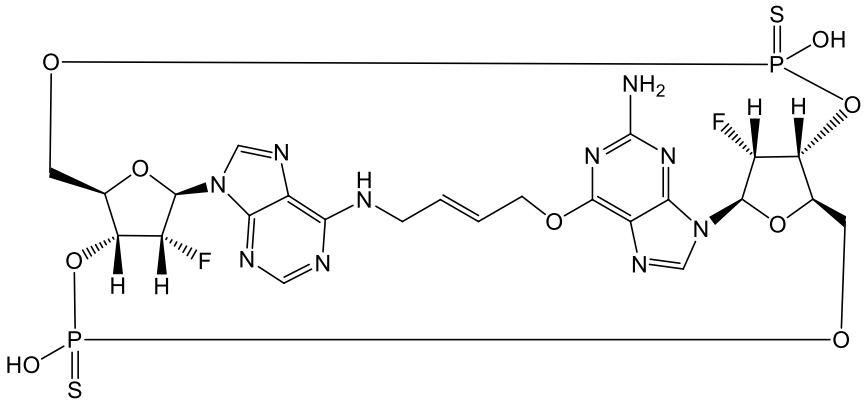
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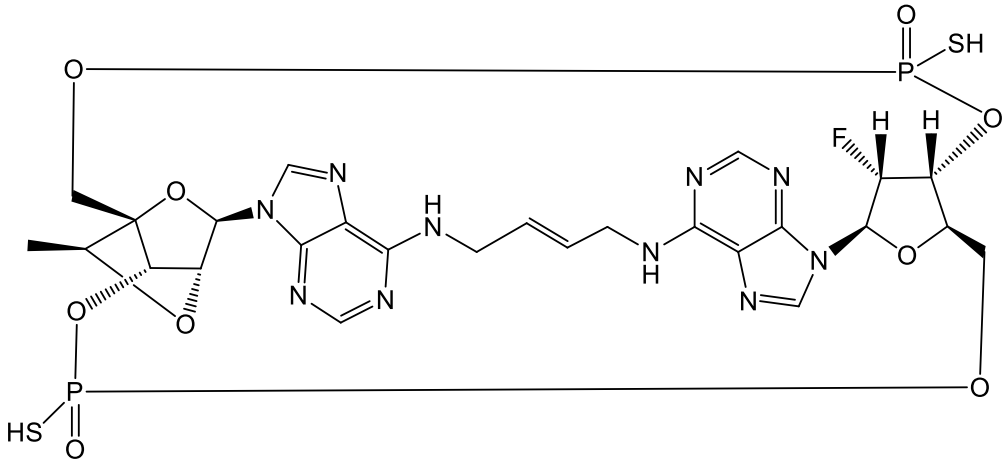
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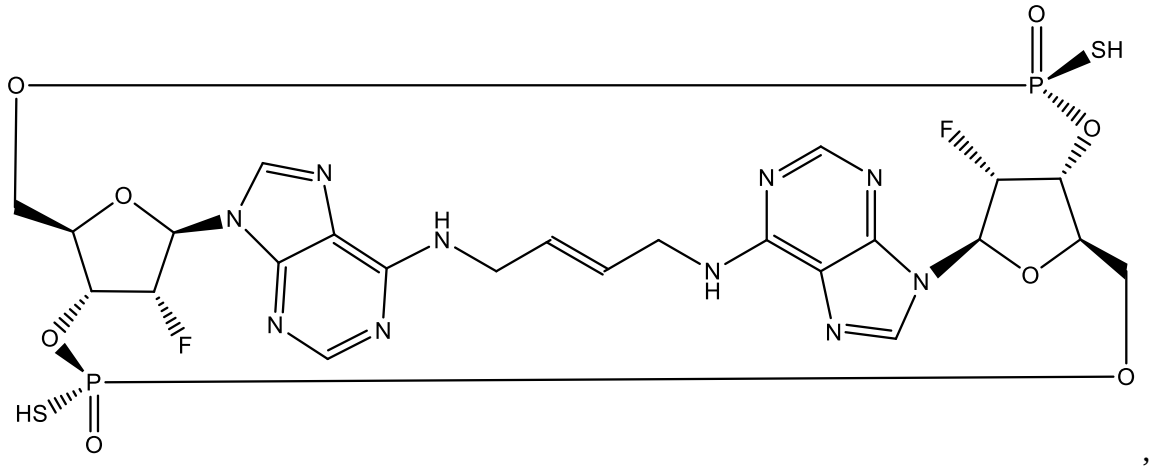
, and



or a pharmaceutically acceptable salt thereof.

17. A compound or pharmaceutically acceptable salt of any one of claims 1-16, wherein the compound or pharmaceutically acceptable salt has (i) an EC_{50} value below 100 micromolar in reporter cells expressing human STING HAQ variant; (ii) an EC_{50} value below 100 micromolar in reporter cells expressing human STING AQ variant; (iii) an EC_{50} value below 100 micromolar in reporter cells expressing human STING WT variant; or (iv) an EC_{50} value below 100 micromolar in reporter cells expressing human STING REF variant.

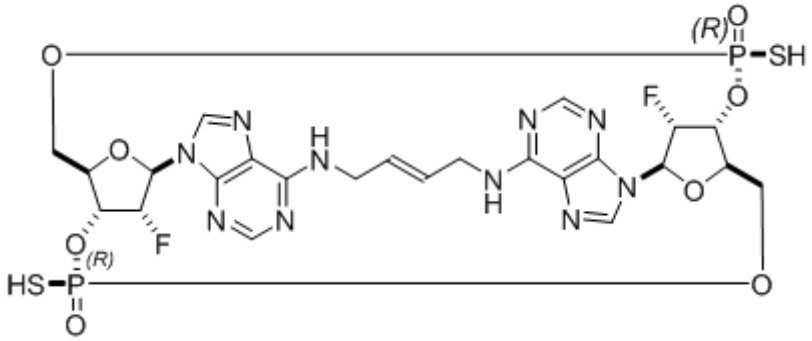
18. A compound or pharmaceutically acceptable salt wherein the compound is:



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or a pharmaceutically acceptable salt thereof.

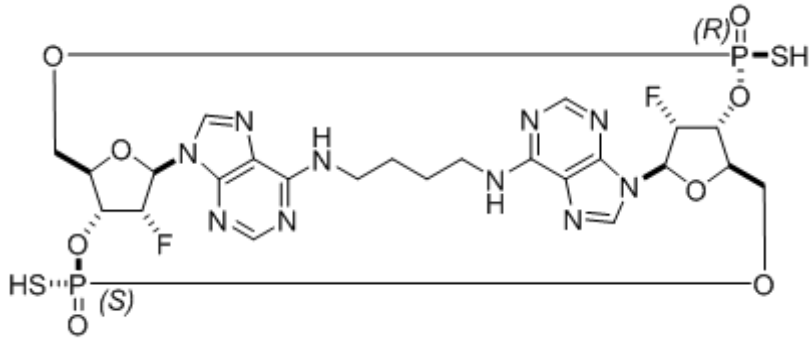
19. A compound or pharmaceutically acceptable salt, wherein the compound is:



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or a pharmaceutically acceptable salt thereof.

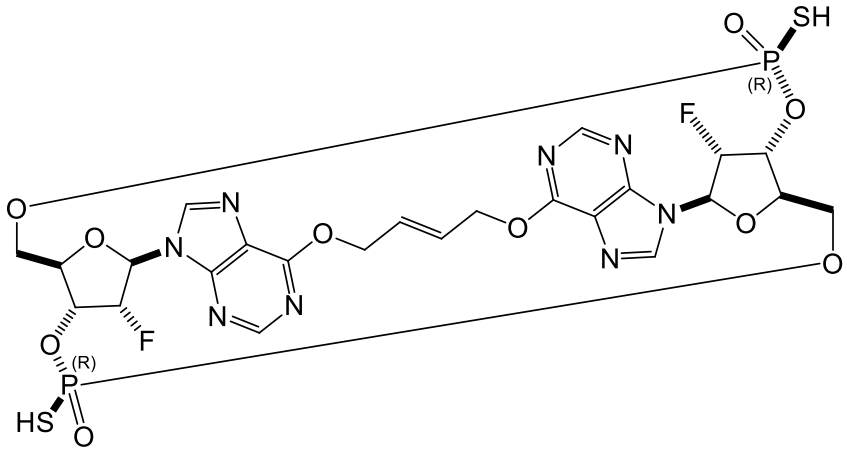
20. A compound or pharmaceutically acceptable salt, wherein the compound is:



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or a pharmaceutically acceptable salt thereof.

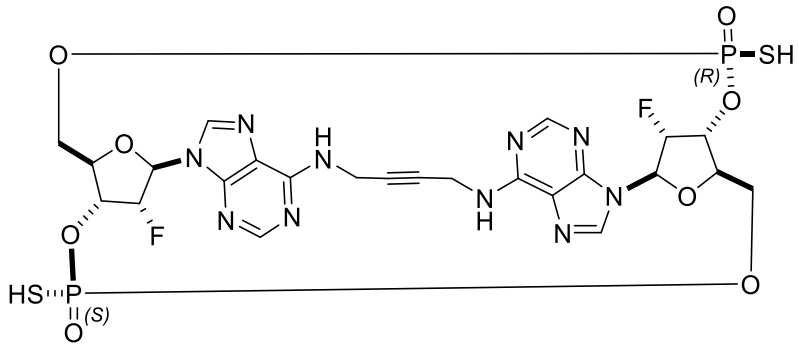
21. A compound or pharmaceutically acceptable salt, wherein the compound is:



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or a pharmaceutically acceptable salt thereof.

22. A compound or pharmaceutically acceptable salt, wherein the compound is:



,

or a pharmaceutically acceptable salt thereof.

23. A pharmaceutically acceptable salt of any one of claims 1-22, wherein the salt is a diammonium salt.

24. A pharmaceutical composition comprising a compound according to any one of claims 1-22 or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

25. A compound or pharmaceutically acceptable salt of any one of claims 1-23, or pharmaceutical composition according to claim 24 for use in therapy.

26. Use of a compound or pharmaceutically acceptable salt according to any one of claims 1-23 in the preparation of a pharmaceutical composition for treating cancer.

27. Use of a compound, a pharmaceutically acceptable salt, or a pharmaceutical composition of any one of claims 1-24 in the manufacture of a medicament for treating cancer, the use comprising that the compound, pharmaceutically acceptable salt or pharmaceutical composition is to be administered to an individual identified as having a cancer treatable by the compound, pharmaceutically acceptable salt or pharmaceutical composition.

28. The use of claim 27, wherein said individual is identified as having a cancer treatable by a compound, pharmaceutically acceptable salt or pharmaceutical composition of any one of claims 1-23 by a presence of a REF STING variant allele in the patient.

29. The compound or pharmaceutically acceptable salt or pharmaceutical composition of claim 25 or the use of claim 27, wherein the cancer is selected from the group consisting of lymphoma, melanoma, colorectal cancer, breast cancer, acute myeloid leukemia, colon cancer, liver cancer, prostate cancer, pancreatic cancer, renal cancer, and glioma.

30. Use of a compound, pharmaceutically acceptable salt or pharmaceutical composition of any one of claims 1-24 in the manufacture of a medicament for treating cancer in a patient having REF STING allele.

31. Use of a compound, pharmaceutically acceptable salt or pharmaceutical composition of any one of claims 1-24 in the manufacture of a medicament for treating cancer in a patient having WT STING allele.

32. Use of a compound, pharmaceutically acceptable salt or pharmaceutical composition of any one of claims 1-20 in the manufacture of a medicament for treating cancer in a patient having AQ STING allele.

33. Use of a compound, pharmaceutically acceptable salt or pharmaceutical composition of any one of claims 1-24 in the manufacture of a medicament for treating cancer in a patient having HAQ STING allele.

34. The use of any one of claims 29-32, wherein the cancer is selected from the group consisting of melanoma, colorectal cancer, breast cancer, acute myeloid leukemia, colon

cancer, liver cancer, and glioma.

35. The compound or pharmaceutically acceptable salt or pharmaceutical composition of claim 25 or 29 or the use of any one of claims 27-33, wherein said cancer is metastatic.