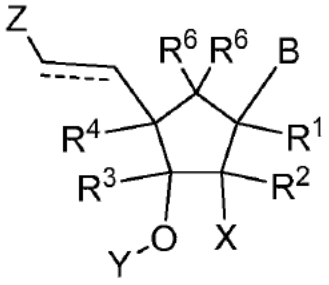
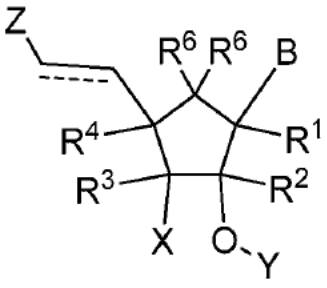
CLAIM

1. A compound of Formula (I) or (II):



(I) or



(II);

or a pharmaceutically acceptable salt thereof, wherein:

B is H or a nucleobase moiety;

X is halogen or $-OR^X$;

R^X is H, C_1-C_6 alkyl, or -(C_1-C_6 alkyl)-(C_6-C_{10} aryl), wherein the C_1-C_6 alkyl or -(C_1-C_6 alkyl)-(C_6-C_{10} aryl) is optionally substituted with one or more R^{Xa};

each R^{Xa} independently is halogen, C_1-C_6 alkyl, or -O-(C_1-C_6 alkyl), wherein the C_1-C_6 alkyl or -O-(C_1-C_6 alkyl) is optionally substituted with one or more halogen;

Y is H, C_1-C_6 alkyl optionally substituted with one or more halogen, $-P(R^Y)_2$, $-P(OR^Y)(N(R^Y)_2)$, $-P(=O)(OR^Y)R^Y$, $-P(=S)(OR^Y)R^Y$, $-P(=O)(SR^Y)R^Y$, $-P(=S)(SR^Y)R^Y$, $-P(=O)(OR^Y)_2$, $-P(=S)(OR^Y)_2$, $-P(=O)(SR^Y)_2$, $-P(=S)(SR^Y)_2$, or a hydroxy protecting group;

each R^Y independently is H or C_1-C_6 alkyl optionally substituted with one or more halogen or cyano;

Z is $-P(R^Z)_2$, $-P(OR^Z)(N(R^Z)_2)$, $-P(=O)(OR^Z)R^Z$, $-P(=S)(OR^Z)R^Z$, $-P(=O)(SR^Z)R^Z$, $-P(=S)(SR^Z)R^Z$, $-P(=O)(OR^Z)_2$, $-P(=S)(OR^Z)_2$, $-P(=O)(SR^Z)_2$, or $-P(=S)(SR^Z)_2$;

each R^Z independently is H or C_1-C_6 alkyl optionally substituted with one or more halogen or cyano;

R^1 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

R^2 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

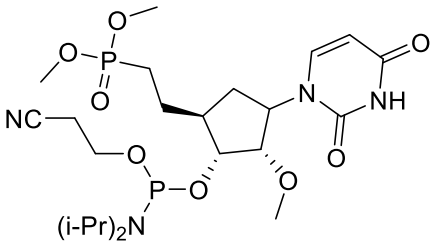
R^3 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

R^4 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

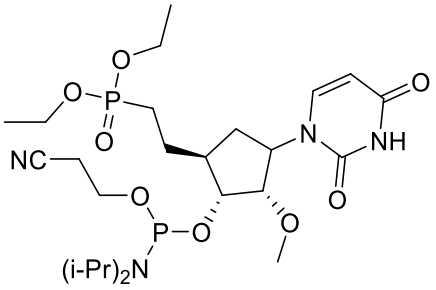
==== indicates a single bond; and

each R^6 independently is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen.

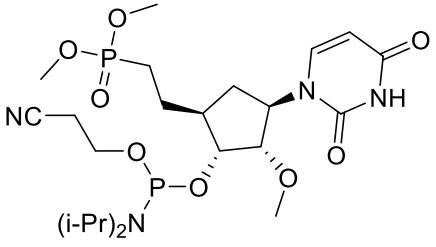
2. The compound of claim 1, wherein the compound is selected from:



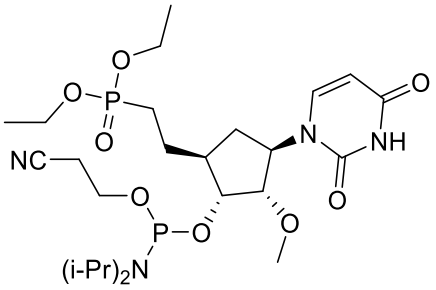
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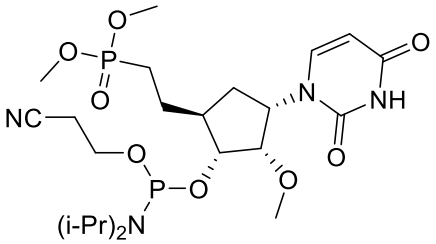
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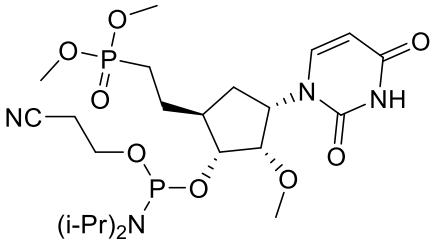


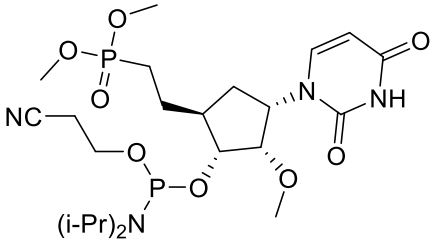
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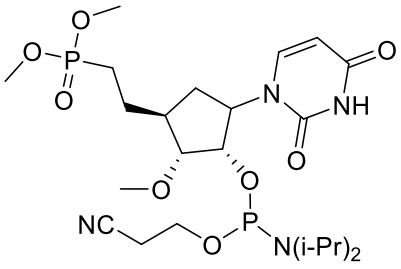


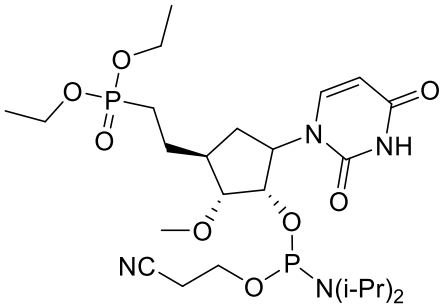
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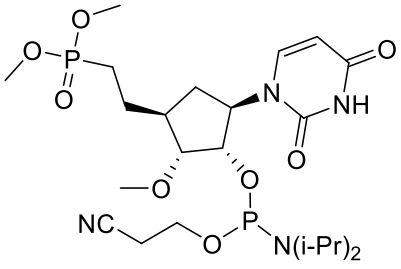

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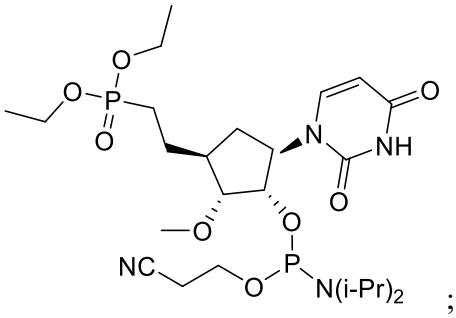

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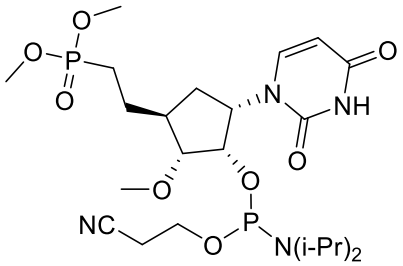

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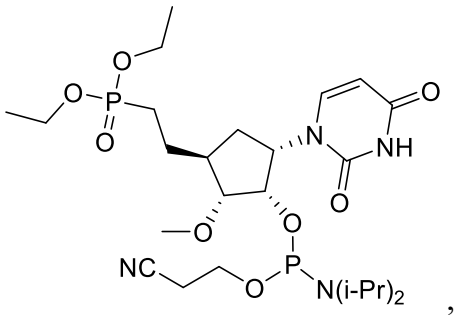

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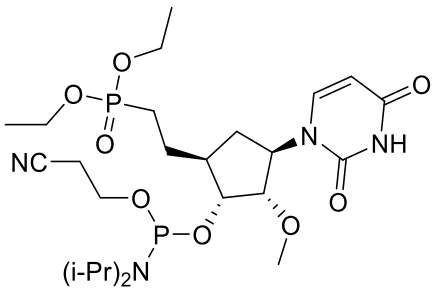
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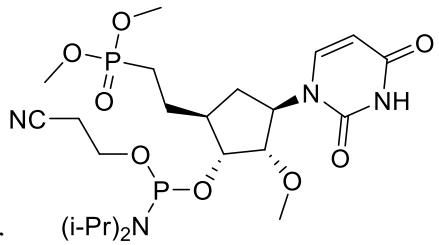


,

and pharmaceutically acceptable salts thereof.

3. The compound of claim 1 or claim 2, wherein the compound is

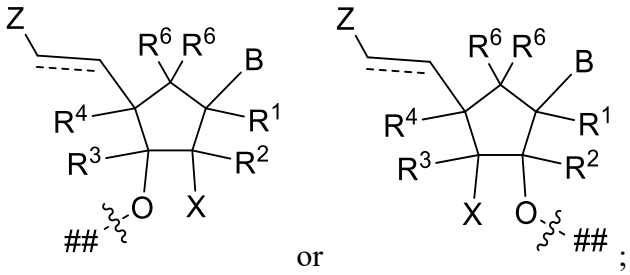


or


, or a pharmaceutically acceptable salt thereof.

4. A Nucleic Acid Agent, or a pharmaceutically acceptable salt thereof, comprising:

an oligonucleotide comprising one or two 5’-End Unit, wherein each 5’-End Unit independently is:



;

wherein:

B is H or a nucleobase moiety;

X is H, halogen, or -OR^X;

R^X is H, C_1-C_6 alkyl, or -(C_1-C_6 alkyl)-(C_6-C_{10} aryl), wherein the C_1-C_6 alkyl or -(C_1-C_6 alkyl)-(C_6-C_{10} aryl) is optionally substituted with one or more R^{Xa};

each R^{Xa} independently is halogen, C_1-C_6 alkyl, or -O-(C_1-C_6 alkyl), wherein the C_1-C_6 alkyl or -O-(C_1-C_6 alkyl) is optionally substituted with one or more halogen;

Z is -$P(R^Z)_2$, -$P(OR^Z)(N(R^Z)_2)$, -$P(=O)(OR^Z)R^Z$, -$P(=S)(OR^Z)R^Z$, -$P(=O)(SR^Z)R^Z$, -$P(=S)(SR^Z)R^Z$, -$P(=O)(OR^Z)_2$, -$P(=S)(OR^Z)_2$, -$P(=O)(SR^Z)_2$, or -$P(=S)(SR^Z)_2$;

each R^Z independently is H or C_1-C_6 alkyl optionally substituted with one or more halogen or cyano;

R^1 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

R^2 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

R^3 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

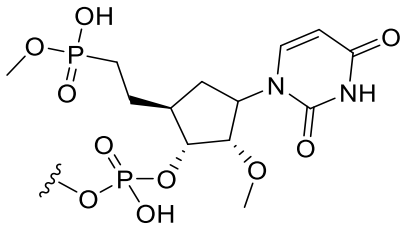
R^4 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

⁼⁼⁼⁼ indicates a single bond;

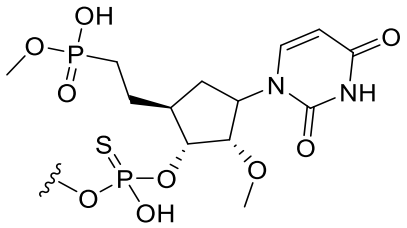
each R^6 independently is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen; and

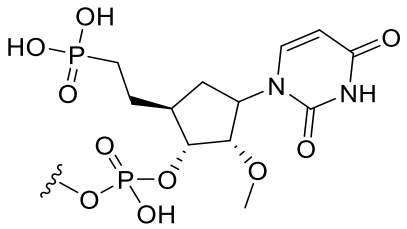
indicates attachment to the rest of the oligonucleotide.

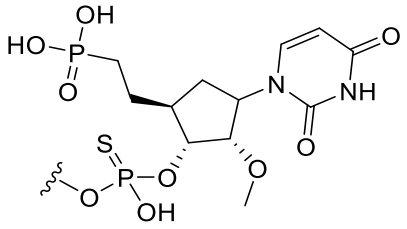
5. The Nucleic Acid Agent of claim 4, comprising one or two of:

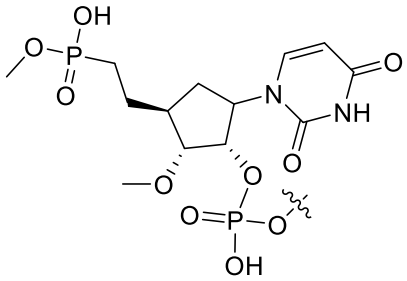


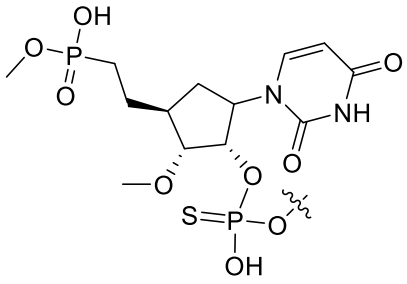
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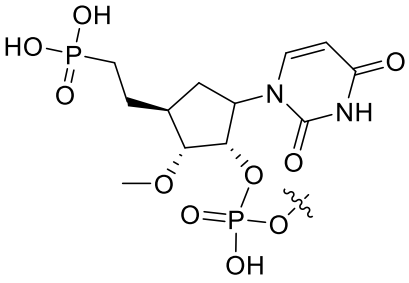

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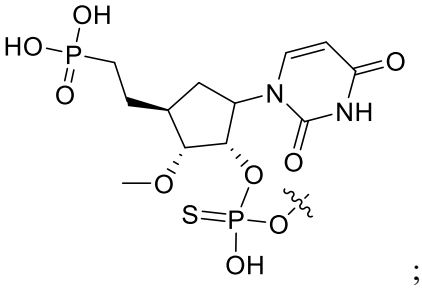

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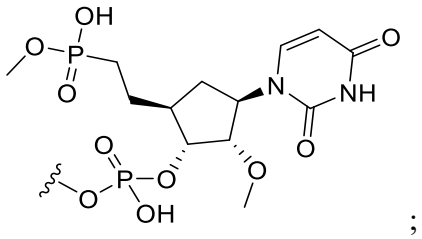

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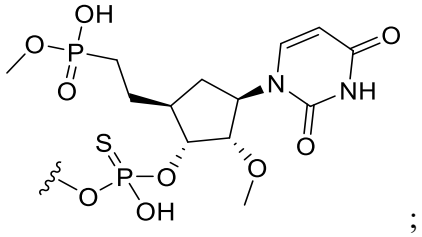

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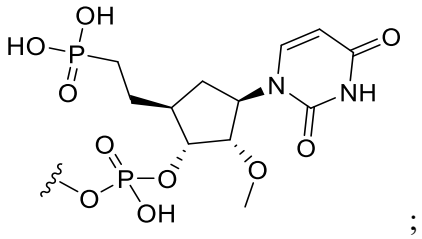

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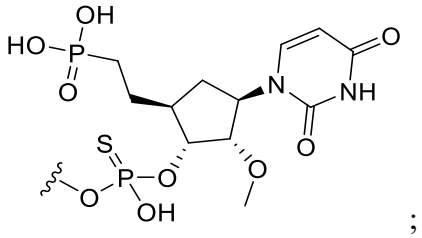

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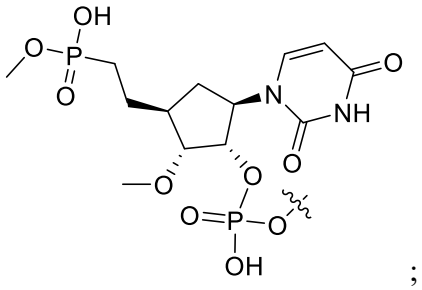

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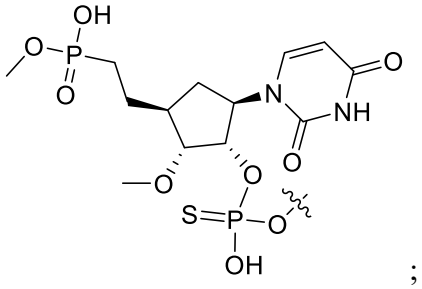

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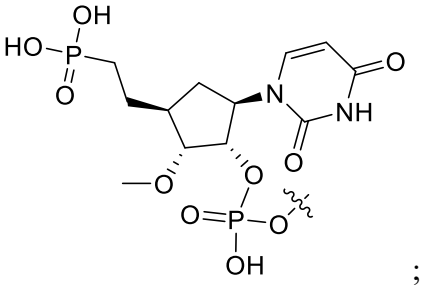

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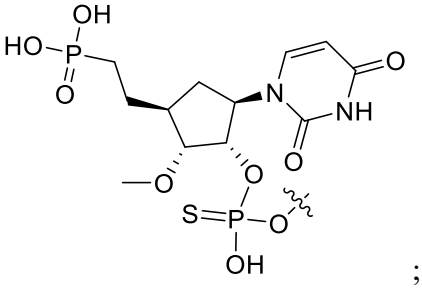

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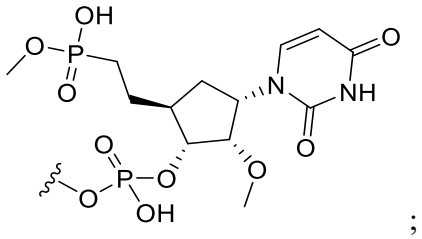

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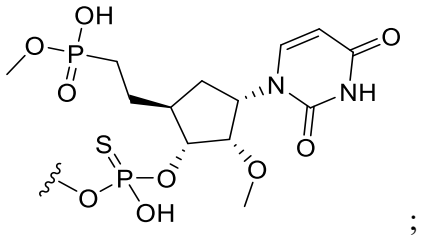

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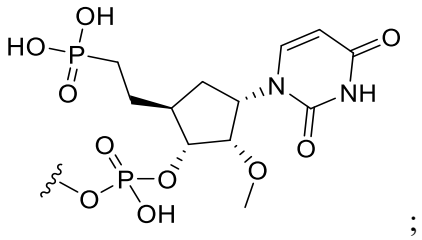

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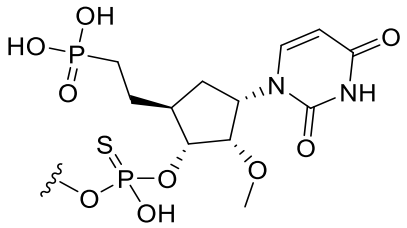

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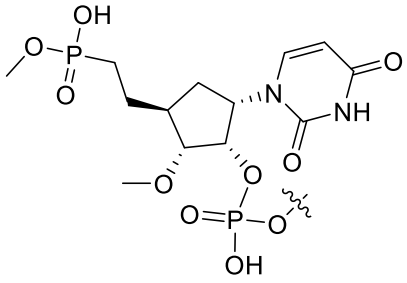

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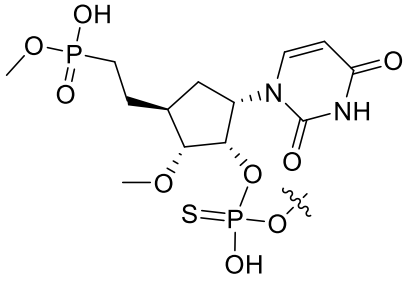

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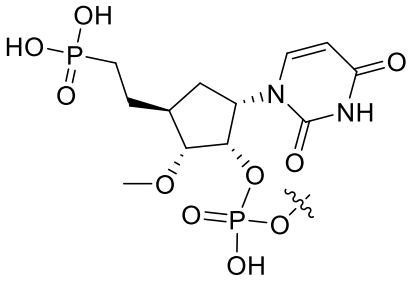

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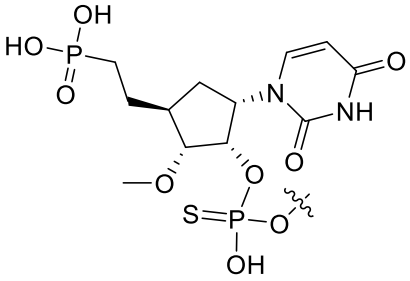

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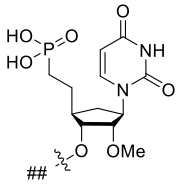
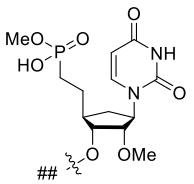

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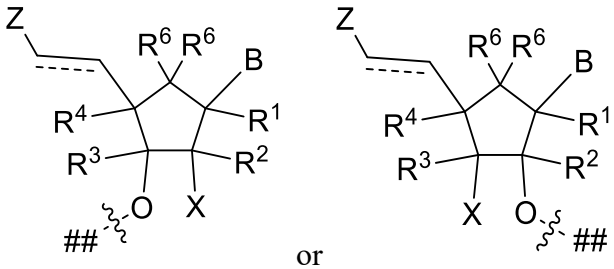
6. The Nucleic Acid Agent of claim 4 or claim 5, wherein the 5'-End Unit is


or

.

7. A conjugate, or a pharmaceutically acceptable salt thereof, comprising:

(i) one or more Nucleic Acid Agent, wherein each Nucleic Acid Agent comprises:

an oligonucleotide comprising one or two 5'-End Unit being covalently attached to the oligonucleotide, wherein each 5'-End Unit independently is:



; and

(ii) one or more Ligand being covalently attached to the one or more Nucleic Acid Agent, wherein:

B is H or a nucleobase moiety;

X is H, halogen, or $-OR^X$;

R^X is H, C_1-C_6 alkyl, or -(C_1-C_6 alkyl)-(C_6-C_{10} aryl), wherein the C_1-C_6 alkyl or -(C_1-C_6 alkyl)-(C_6-C_{10} aryl) is optionally substituted with one or more R^{Xa};

each R^{Xa} independently is halogen, C_1-C_6 alkyl, or -O-(C_1-C_6 alkyl), wherein the C_1-C_6 alkyl or -O-(C_1-C_6 alkyl) is optionally substituted with one or more halogen;

Z is $-P(R^Z)_2$, $-P(OR^Z)(N(R^Z)_2)$, $-P(=O)(OR^Z)R^Z$, $-P(=S)(OR^Z)R^Z$, $-P(=O)(SR^Z)R^Z$, $-P(=S)(SR^Z)R^Z$, $-P(=O)(OR^Z)_2$, $-P(=S)(OR^Z)_2$, $-P(=O)(SR^Z)_2$, or $-P(=S)(SR^Z)_2$;

each R^Z independently is H or C_1-C_6 alkyl optionally substituted with one or more halogen or cyano;

R^1 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

R^2 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

R^3 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

R^4 is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen;

 indicates a single bond;

each R^6 independently is H, halogen, or C_1-C_6 alkyl optionally substituted with one or more halogen; and

indicates an attachment to the rest of the oligonucleotide.

8. The conjugate of claim 7, wherein B is H.

9. The conjugate of claim 7, wherein B is a nucleobase moiety.

10. The conjugate of claim 7 or claim 9, wherein the nucleobase moiety is adenine (A), cytosine (C), guanine (G), thymine (T), or uracil (U).

11. The conjugate of any one of claims 7-10, wherein X is $-OR^X$.

12. The conjugate of any one of claims 7-11, wherein X is -OH.

13. The conjugate of any one of claims 7-10, wherein X is -O-(C_1-C_6 alkyl).

14. The conjugate of any one of claims 7-10, wherein X is -O-(C_1-C_6 alkyl)-O-(C_1-C_6 alkyl).

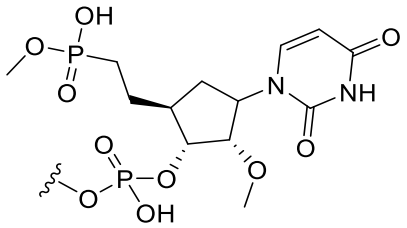
15. The conjugate of any one of claims 7-10, wherein X is -O-(C_1-C_6 alkyl)-(C_6-C_{10} aryl) optionally substituted with one or more R^{Xa}.

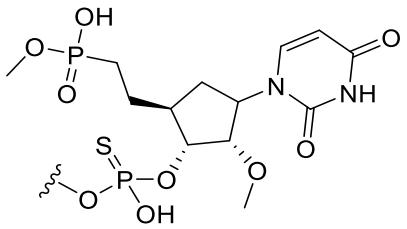
16. The conjugate of any one of claims 7-10 and 15, wherein X is -O-(C_1-C_6 alkyl)-(C_6-C_{10} aryl).

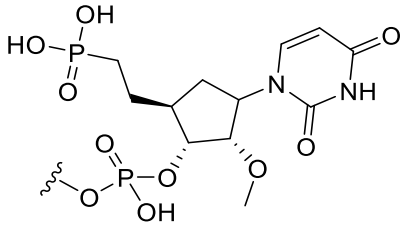
17. The conjugate of any one of claims 7-16, wherein Z is $-P(R^Z)_2$, $-PH_2$, or $-P(OR^Z)(N(R^Z)_2)$.

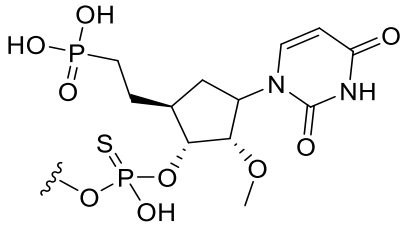
18. The conjugate of any one of claims 7-16, wherein Z is $-P(=O)(OR^Z)R^Z$, $-P(=S)(OR^Z)R^Z$, $-P(=O)(SR^Z)R^Z$, $-P(=S)(SR^Z)R^Z$, $-P(=O)(OR^Z)_2$, $-P(=S)(OR^Z)_2$, $-P(=O)(SR^Z)_2$, or $-P(=S)(SR^Z)_2$.

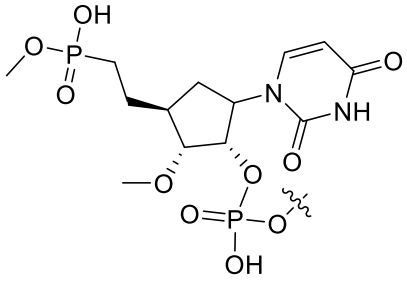
19. The conjugate of claim 7, comprising one or two of:

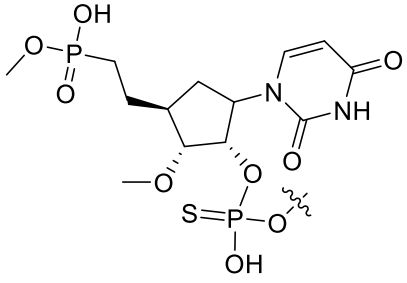

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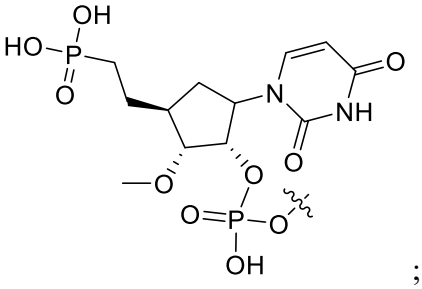

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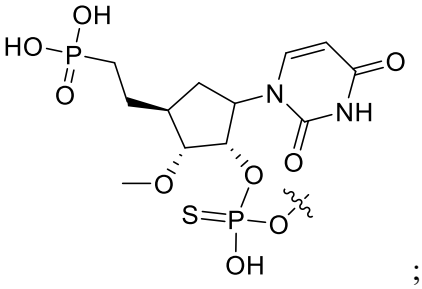

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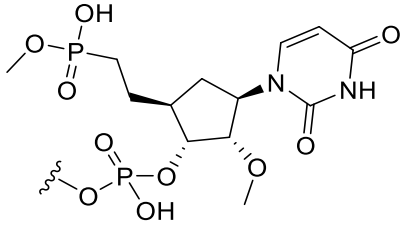

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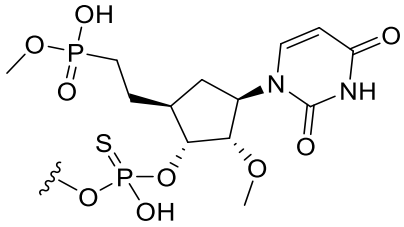

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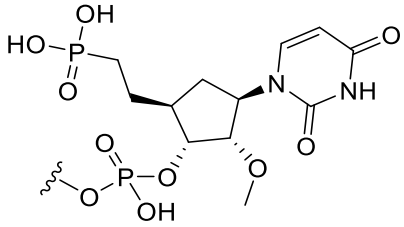

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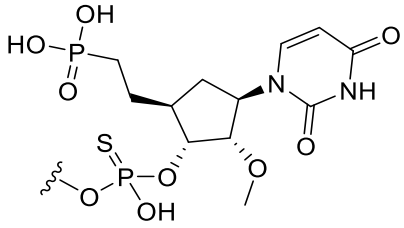

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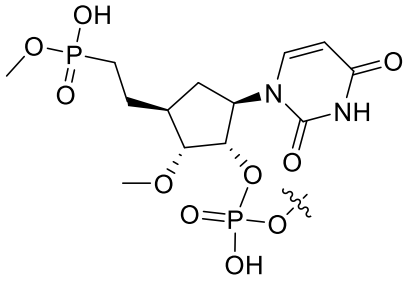

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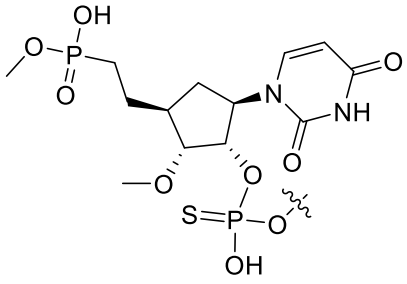

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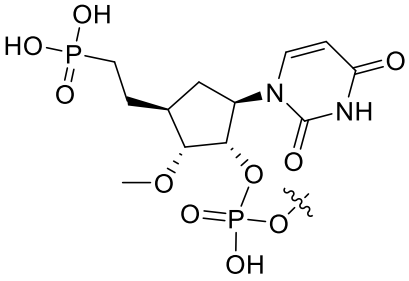

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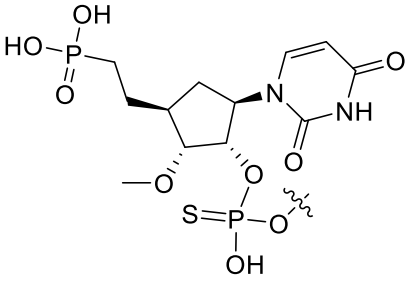

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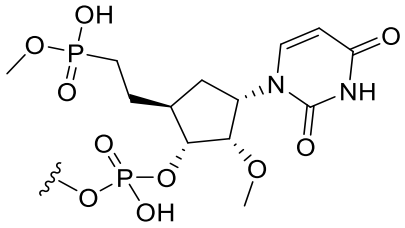

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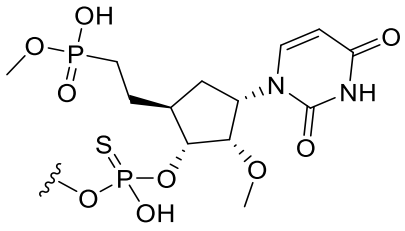

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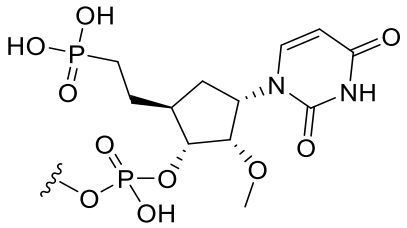

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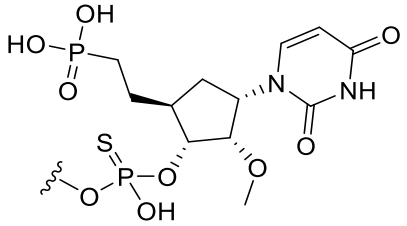

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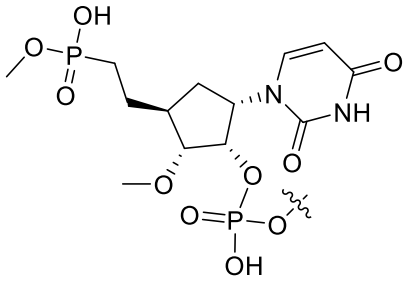

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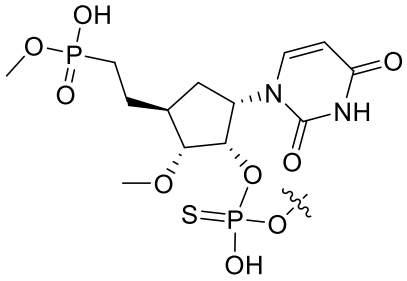

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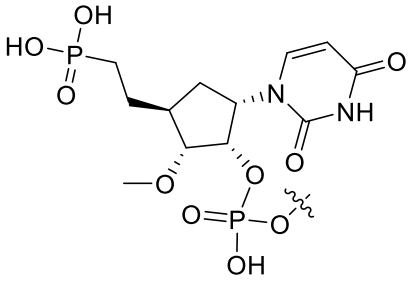

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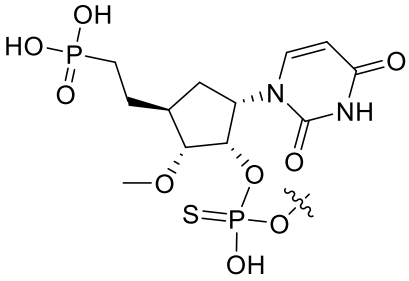

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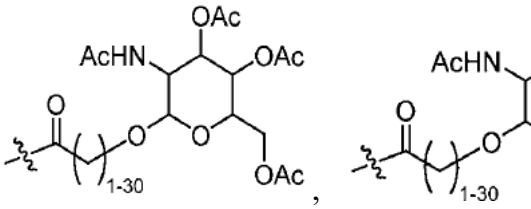

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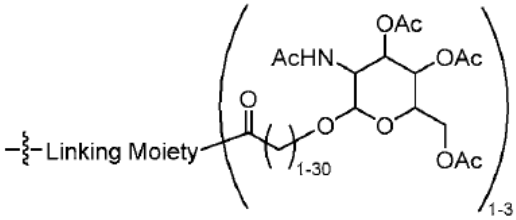

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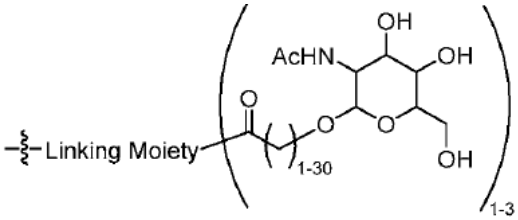
20. The conjugate of any one of claims 7-19, wherein the one or more Ligand comprises



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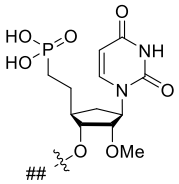
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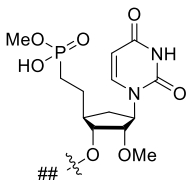


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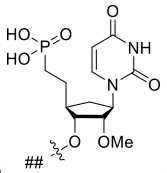
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21. The conjugate of any one of claims 7-19, wherein the one or more Ligand comprises a lipid moiety, a peptide moiety, or an antibody moiety.

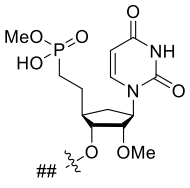
22. The conjugate of claim 7, wherein the 5'-End Unit is 

or 

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23. The conjugate of claim 7 or claim 22, wherein the 5'-End Unit is 

.

24. The conjugate of claim 7 or claim 22, wherein the 5'-End Unit is 

.

25. A pharmaceutical composition comprising the conjugate of any one of claims 7-24, and at least one pharmaceutically acceptable excipient or carrier.