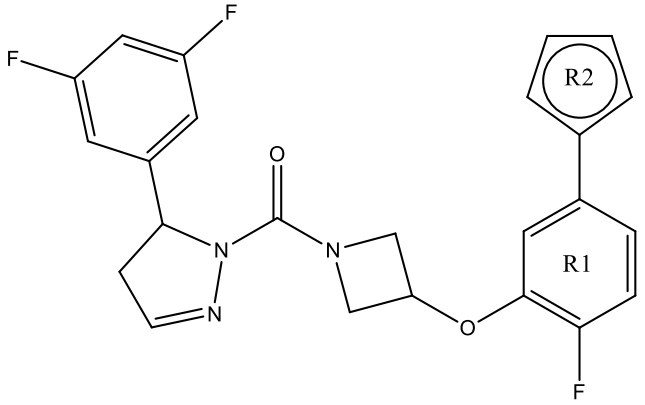
CLAIMS

1. A compound of formula I:



I

R1 is 1-F substituted C6 aryl comprising 0, 1 or 2 N heteroatoms; and

R2 is C5 aryl comprising 1, 2 or 3 N heteroatoms, or 1 or 2 N heteroatoms and an O or S heteroatom, substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl;

or a salt, hydrate or stereoisomer thereof.

2. The compound of claim 1 wherein:

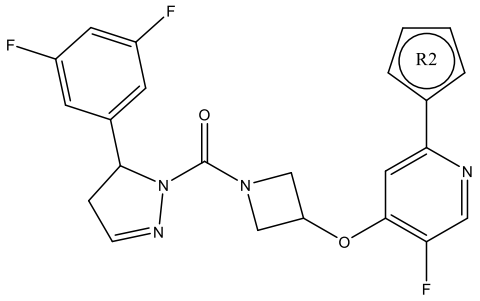
the R2 substituents are independently C0-C6: aldehyde, aldimine, alkanoyloxy, alkoxy, alkoxycarbonyl, alkyloxy, alkyl, alkenyl, alkynyl, amine, azo, halogens, carbamoyl, carbonyl, carboxamido, carboxyl, cyanyl, ester, haloformyl, hydroperoxyl, hydroxyl, imine, isocyanide, iscyante, N-tert-butoxycarbonyl, nitrate, nitrile, nitrite, nitro, nitroso, phosphate, phosphono, sulfide, sulfonyl, sulfo, sulfhydryl, thiol, thiocyanyl, trifluoromethyl or trifluromethyl ether (OCF3);

R1 comprises N2, N4 or N2/N4;

R2 comprises N1, N1/N2, N2/N3, N3/N4, N2/N5; N2/N4, S2/N4, N2/S4, S3/N4, N2/S3, N3/O4, N2/N3/S5, N2/N3/O5, N2/N3/N5 or N2/N3/N4; or

any combination of the foregoing substituents.

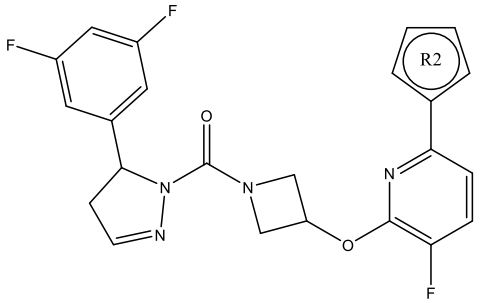
3. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formula II(1):



II(1)

wherein R2 is C5 aryl comprising 1, 2 or 3 N heteroatoms, or 1 or 2 N heteroatoms and an O or S heteroatom, substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

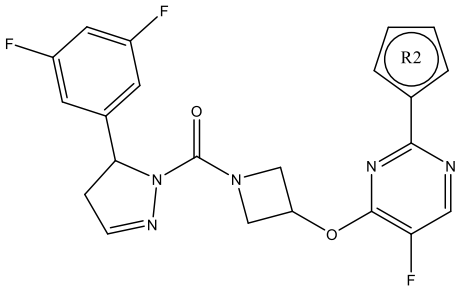
4. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formula II(2):



II(2)

wherein R2 is C5 aryl comprising 1, 2 or 3 N heteroatoms, or 1 or 2 N heteroatoms and an O or S heteroatom, substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

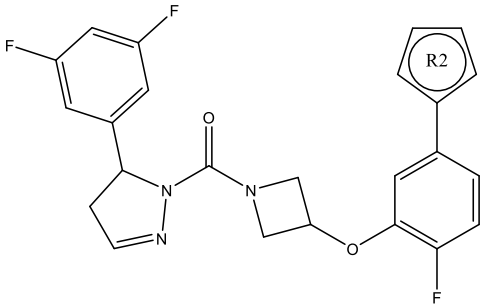
5. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formula II(3):



II(3)

wherein R2 is C5 aryl comprising 1, 2 or 3 N heteroatoms, or 1 or 2 N heteroatoms and an O or S heteroatom, substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

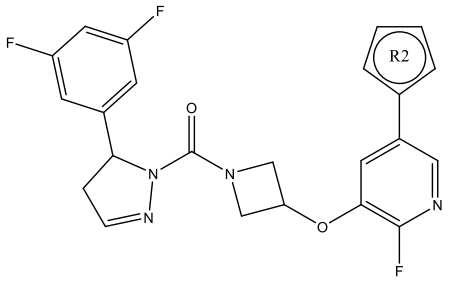
6. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formula II(4):



II(4)

wherein R2 is C5 aryl comprising 1, 2 or 3 N heteroatoms, or 1 or 2 N heteroatoms and an O or S heteroatom, substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

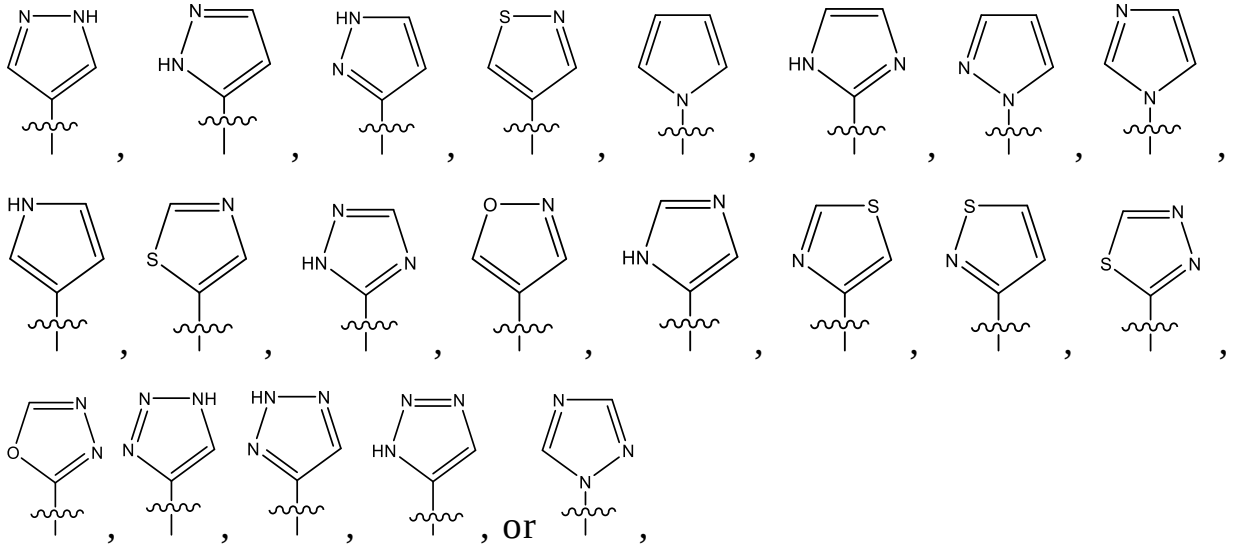
7. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formula II(5):



II(5)

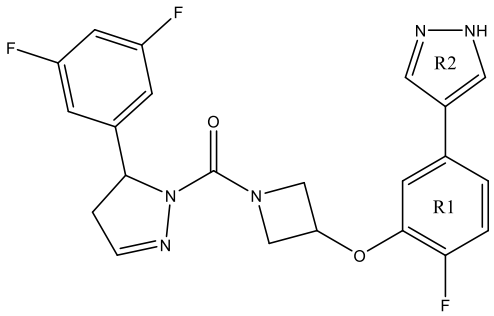
wherein R2 is C5 aryl comprising 1, 2 or 3 N heteroatoms, or 1 or 2 N heteroatoms and an O or S heteroatom, substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

8. The compound, salt, hydrate, or stereoisomer of any one of claims 1 and 3-7, wherein R2 is



substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

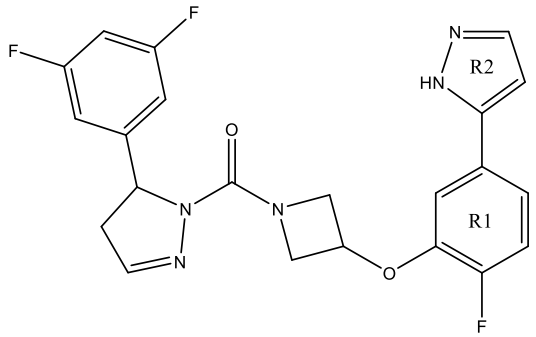
9. The compound, salt, hydrate, or stereoisomer of claims 1, wherein the compound has one of the following structural formula III(1):



III(1)

wherein R1 is 1-F substituted C6 aryl comprising 0, 1 or 2 N heteroatoms; and wherein R2 is a C5 aryl as set forth in structural formula III(1), substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

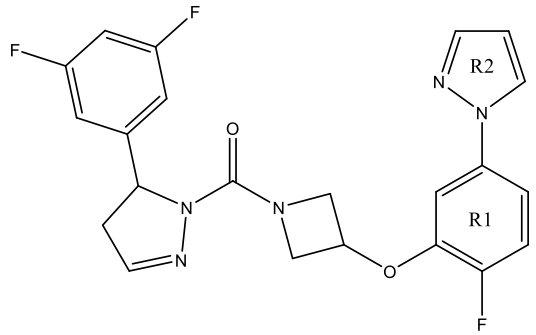
10. The compound, salt, hydrate, or stereoisomer of claims 1, wherein the compound has one of the following structural formula III(2):



III(2)

wherein R1 is 1-F substituted C6 aryl comprising 0, 1 or 2 N heteroatoms; and wherein R2 is a C5 aryl as set forth in structural formula III(2), substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

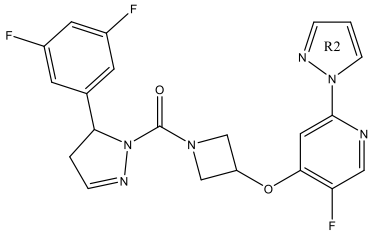
11. The compound, salt, hydrate, or stereoisomer of claims 1, wherein the compound has one of the following structural formula III(3):



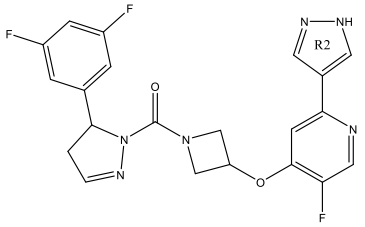
III(3)

wherein R1 is 1-F substituted C6 aryl comprising 0, 1 or 2 N heteroatoms; and wherein R2 is a C5 aryl as set forth in structural formula III(3), substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

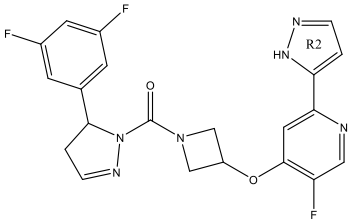
12. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formulae IV(1)-IV(5):



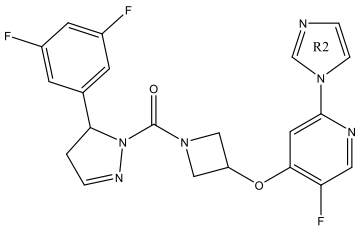
IV(1)



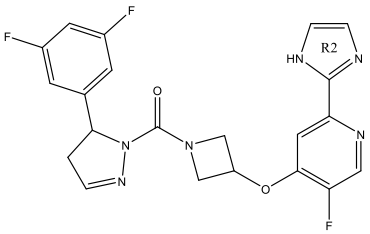
IV(2)



IV(3)



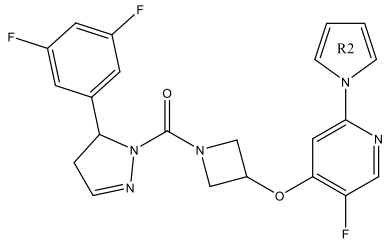
IV(4)



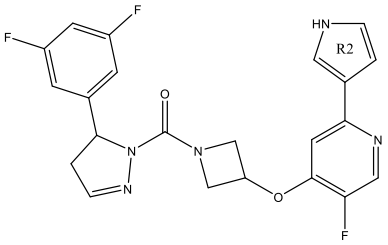
IV(5)

wherein R2 is a C5 aryl as set forth in structural formulae IV(1)-IV(5), substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

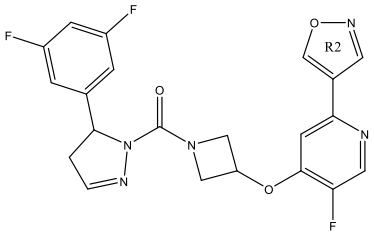
13. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formulae IV(6)-IV(10):



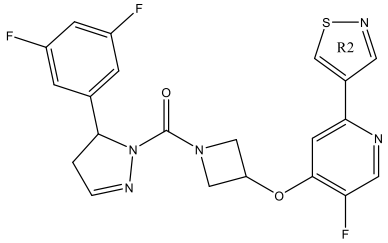
IV(6)



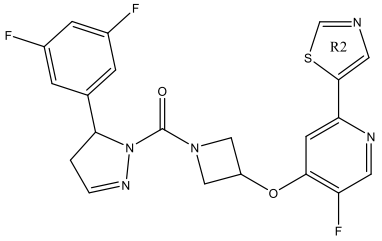
IV(7)



IV(8)



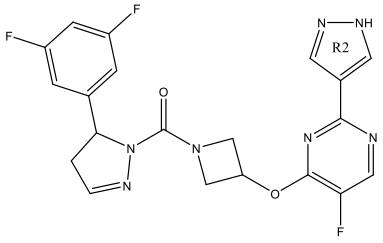
IV(9)



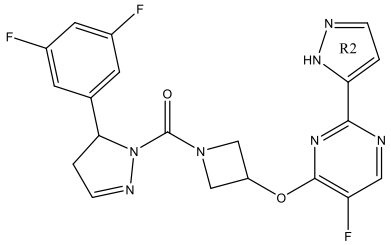
IV(10)

wherein R2 is a C5 aryl as set forth in structural formulae IV(6)-IV(10), substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

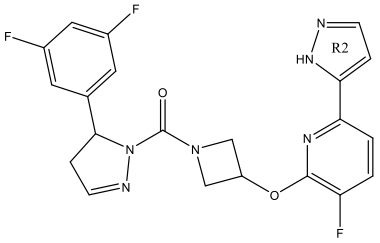
14. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has one of the following structural formulae IV(11)-IV(15):



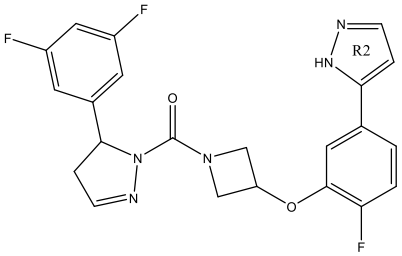
IV(11)



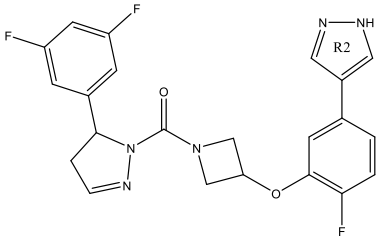
IV(12)



IV(13)



IV(14)



IV(15)

wherein R2 is a C5 aryl as set forth in structural formulae IV(11)-IV(15), substituted with 0-3 substituents selected from halide, optionally-substituted N, S or O, and optionally-substituted hydrocarbyl.

15. The compound, salt, hydrate, or stereoisomer of any one of claims 1 and 3-14, wherein R2 is substituted with 0-3 R^a, wherein R^a, for each occurrence, is independently selected from:

halogen, cyano, C_1-C_6 alkyl, C_3-C_6 cycloalkyl, 3- to 6-membered heterocyclyl, C_2-C_6 alkenyl, C_1-C_6 alkoxy, -C(=O)(C_1-C_6 alkyl), -C(=O)(C_3-C_6 cycloalkyl), -C(=O)(3- to 6-membered heterocyclyl), =O, -NO_2, -C(=O)OR^s, -C(=O)NR^pR^q, -NR^pR^q, -$NR^pC(=O)R^s$, -$NR^pC(=O)OR^s$, -$NR^pC(=O)NR^qR^r$, -$NR^pS(=O)_wR^s$, -OR^s, -$OC(=O)R^s$, -$OC(=O)OR^s$, -$OC(=O)NR^pR^q$, -$S(=O)_wR^s$, and -$S(=O)_wNR^pR^q$; wherein

the C_1-C_6 alkyl, C_3-C_6 cycloalkyl, 3- to 6-membered heterocyclyl, C_2-C_6 alkenyl, and C_1-C_6 alkoxy of R^a, the C_1-C_6 alkyl of -C(=O)(C_1-C_6 alkyl), the C_3-C_6 cycloalkyl of -C(=O)(C_3-C_6 cycloalkyl), and the 3- to 6-membered heterocyclyl of -C(=O)(3- to 6-membered heterocyclyl) are each optionally substituted with 1 to 3 groups selected from halogen,

cyano, =O, -C(=O)R^s, -C(=O)OR^s, -C(=O)N$R^p$$R^q$, -N$R^p$$R^q$, -N$R^p$C(=O)$R^s$, -N$R^p$C(=O)O$R^s$, -N$R^p$C(=O)N$R^q$$R^r$, -N$R^p$S(=O)$_w$$R^s$, -O$R^s$, -OC(=O)$R^s$, -OC(=O)O$R^s$, -OC(=O)N$R^p$$R^q$, -S(=O)$_w$$R^s$, -S(=O)$_wNR^p$$R^q$, C_3-C_6 cycloalkyl, and 3- to 6-membered heterocyclyl; wherein

R^p, R^q, R^r, and R^s, for each occurrence, are each independently selected from hydrogen, OH, NH_2, C_1-C_4 alkyl, C_3-C_6 cycloalkyl, and 3- to 6-membered heterocyclyl; wherein

the C_1-C_4 alkyl, C_3-C_6 cycloalkyl, and 3- to 6-membered heterocyclyl of any one of R^p, R^q, R^r, and R^s are optionally substituted with 1 to 3 groups selected from halogen, cyano, -OH, C_1-C_6 alkyl, -O(C_1-C_6 alkyl), -C(=O)N(C_1-C_6 alkyl)(C_1-C_6 alkyl), -C(=O)NH(C_1-C_6 alkyl), -C(=O)(3- to 6-membered heterocyclyl), -C(=O)(C_3-C_6 cycloalkyl), C_3-C_6 cycloalkyl, phenyl, and 3- to 6-membered heterocyclyl; and wherein

w is an integer selected from 0, 1, and 2.

16. The compound, salt, hydrate or stereoisomer of any one of claims 1 and 3-15, wherein R2 is substituted with 1-3 R^a, wherein R^a, for each occurrence, is independently selected from: halogen; cyano; 4- to 6-membered heterocyclyl optionally substituted with oxo; -C(=O)(C_1-C_6 alkyl); -C(=O)(C_3-C_6 cycloalkyl); -C(=O)(4- to 6-membered heterocyclyl); 3- to 4-membered cycloalkyl;

-C(=O)OR^s, wherein R^s is H or C_1-C_3 alkyl;

C_1-C_3 alkyl, optionally substituted with OH, NH_2, cyano, halogen, C_1-C_3 alkoxyl, 3- to 4-membered cycloalkyl, 4- to 6-membered heterocyclyl, -C(=O)OH, -C(=O)(4- to 6-membered heterocyclyl), -C(=O)NH$(CH_2)_2$OH, or -C(=O)NH_2;

-C(=O)N$R^p$$R^q$, wherein R^p and R^q each are independently selected from H; OH; CN; 4- to 6-membered heterocyclyl; C_1-C_3 alkyl optionally substituted with OH; and 3- to 4-membered cycloalkyl optionally substituted with OH;

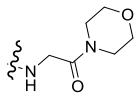
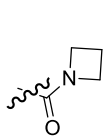
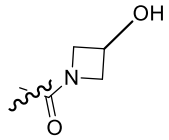
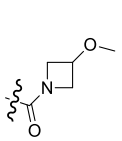
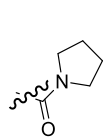
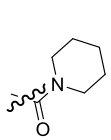
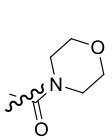
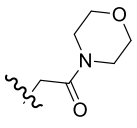
-NR^pR^q, wherein R^p and R^q each are independently selected from H, OH, -C(=O)CH_3, and C_1-C_3 alkyl optionally substituted with OH, 3- to 4-membered cycloalkyl, or 6-membered heterocyclyl;

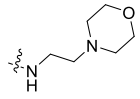
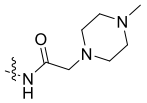
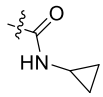
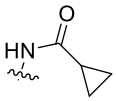
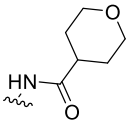
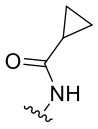
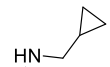
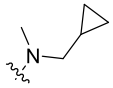
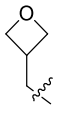
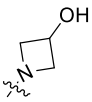
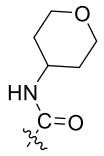
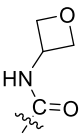
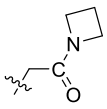
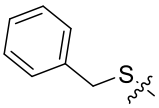
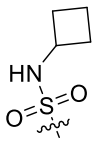
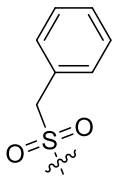
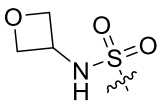
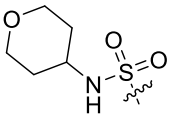
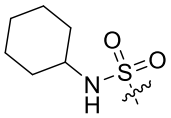
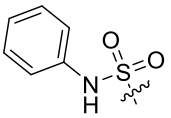
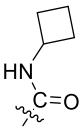
-$NR^pC(=O)NR^qR^r$, wherein R^p, R^q and R^r each are independently selected from H and C_1-C_3 alkyl;

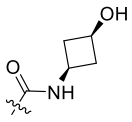
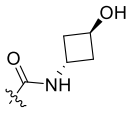
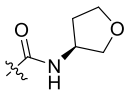
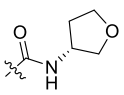
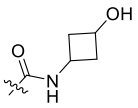
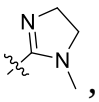
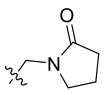
-$NR^pC(=O)R^s$, wherein R^p is selected from H and C_1-C_3 alkyl, and R^s is selected from C_1-C_3 alkyl and 3- to 4-membered cycloalkyl;

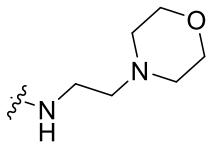
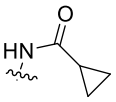
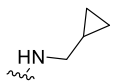
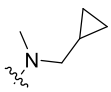
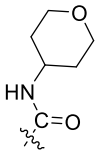
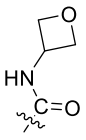
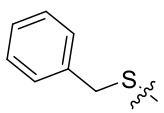
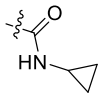
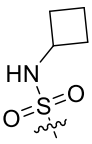
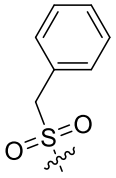
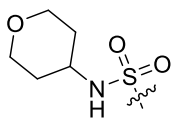
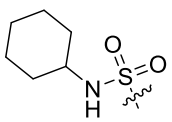
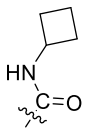
-$S(=O)_wR^s$, wherein R^s is selected from C_1-C_3 alkyl optionally substituted with phenyl or NH_2, and wherein w is 0 or 2; and

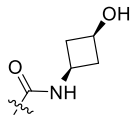
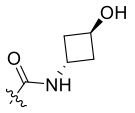
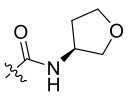
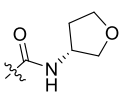
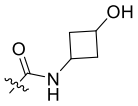
-$S(=O)_wNR^pR^q$, wherein R^p and R^q each are independently selected from H, 3- to 6- membered cycloalkyl, 4- to 6-membered heterocyclyl, and C_1-C_3 alkyl optionally substituted with OH, C_1-C_3 alkoxyl, or phenyl, and wherein w is 2.

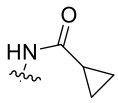
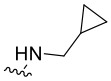
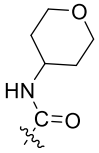
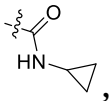
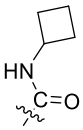
17. The compound, salt, hydrate, or stereoisomer of any one of claim 1 and 3-16, wherein R2 is substituted with 1-3 R^a, wherein R^a, for each occurrence, is independently selected from methyl, ethyl, -NH_2, -CN, -OCH_3, -$O(CH_2)_2N(CH_3)_2$, -$NHCH_3$, -$O(CH_2)_2OCH_3$, -$N(CH_3)_2$, -$NH(CH_2)OCH_3$, -$NHC(=O)CH_3$, -$NHC(=O)CH_2CH_3$, -$NHC(=O)CH(CH_3)_2$, -$NHC(=O)CH_2CH(CH_3)_2$, -$NHCH_2C(=O)NHCH_3$, -$NHCH_2C(=O)NHCH_3$, , -$NHCH_2C(=O)N(CH_3)_2$, -$C(=O)OCH_3$, -C(=O)OH, -$C(=O)CH_3$, -$C(=O)NH_2$, -$C(=O)NHCH_3$, -$C(=O)NH(CH_2)_2N(CH_3)_2$, -$C(=O)NHCH_2N(CH_3)_2$, -$C(=O)NHCH_2CH_3$, , , , , , , -CH_2OH, -$CH_2N(CH_3)_2$, -CH_2OCH_3, -F, -Cl, -$(CH_2)_2OCH_3$, -$CH_2C(=O)NH_2$, -$CH_2C(=O)N(CH_3)_2$, , -$CH_2C(=O)NHCH_3$, -NO_2, -$(CH_2)_2OH$, -

$CH_2C(=O)OCH_3$, $-NH(CH_2)_2N(CH_3)_2$, , $-NHC(=O)CH_2OCH_3$, $-NHC(=O)CH_2N(CH_3)_2$, , $-NHCH_3$, $-C(=O)OCH_2CH_3$, , , , $-C(=O)NHCH(CH_3)_2$, , $-N(C(=O)CH_3)_2$, , , , $-NHC(=O)NHCH(CH_3)_2$, $-NHC(=O)NHCH_3$, $-NHCH_2C(=O)NH_2$, $-CH_2CH_2OH$, , $-NH(CH_2)_2CH_3$, $-NHCH(CH_3)_2$, , , $-NH(CH_3)_2$, $-S(=O)_2CH_2CH_3$, $-CF_3$, , $-C(=O)N(CH_3)_2$,$-SCH_3$, $-S(=O)CH_3$, $-CHOHCH_3$, , $-S(=O)_2CH_3$, $-CH_2F$, $-CH_2NH_2$, $-NH(CH_2)_2OH$, , $-C(=O)NH(CH_2)_2OH$, , , $-S(=O)_2NH_2$, , $-CH_2C(=O)NH(CH_2)_2OH$, , $-S(=O)_2NHCH_3$, , , , , , , $-S(=O)_2NH(CH_2)_2OH$, $-S(=O)_2NHOCH_3$, , $-C(=O)NHOH$,-

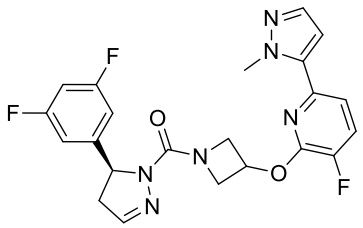
C(=O)NHCN, , , , , , , , , -CH_2CN, , -$CH_2C(=O)OH$, -$C(CH_3)_2C(=O)OH$, and -$C(CH_3)_2C(=O)NH_2$.

18. The compound of any one of claim 1 and 3-17, wherein R2 is substituted with 1-3 R^a, wherein R^a, for each occurrence, is independently selected from methyl, ethyl, -NH_2, -$NHCH_3$, -CN, -CH_2CH_2OH, , -$NHC(=O)CH_3$, -$C(=O)OCH_3$, , , , -$N(C=OCH_3)_2$, -$NHCH_2C(=O)NH_2$, , -$C(=O)OCH_2CH_3$, -$NHCH_3$, -CH_2OCH_3, -CH_2CH_2OH, , -NHCH2CH2OCH3, -$NHCH(CH_3)_2$, , , -$N(CH_3)_2$, -$C(=O)N(CH_3)_2$, -$C(=O)NH_2$, -Cl, -SCH_3, -$S(=O)_2CH_3$, CH_2OH, , -$C(=O)NHCH_3$, CH_2F, -$NHCH_2OH$, -$C(=O)NHCH_2CH_2OH$, , , -$S(=O)_2NH_2$, -$CH_2C(=O)NH_2$, ; -$C(=O)NHCH_2CH_3$, -$C(=O)OH$, , , , , , , -$C(=O)NHCH_3$, -$S(=O)_2NHOCH_3$, , -

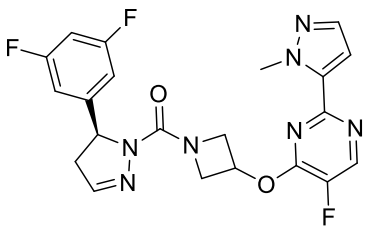
C(=O)NHOH, , , , , , -C(=O)NHCH$_2$CH$_2$OH, and -CH$_2$CN.

19. The compound, salt, hydrate, or stereoisomer of any one of claim 1 and 3-18, wherein R2 is substituted with 1-3 R^a, wherein R^a, for each occurrence, is independently selected from methyl, ethyl, -NH$_2$, -C(=O)NH$_2$, -NHCH$_3$, -CN, -CH$_2$CN, -NHCH$_2$OH, -CH$_2$NH$_2$, -SCH$_3$, CONHCH$_3$, -SO$_2$CH$_3$, -CH$_2$OH, -Cl, -N(CH$_3$)$_2$, -NHCH(CH$_3$)$_2$, -NHCH$_2$CH$_2$OCH$_3$, -CH$_2$CH$_2$OH, -C(=O)OCH$_2$CH$_3$, -C(=O)OCH$_3$, -C(=O)OH, -S(=O)$_2$NH$_2$, -CH$_2$C(=O)NH$_2$, -C(=O)NHCH$_2$CH$_2$OH, , , , , , , , , , and .

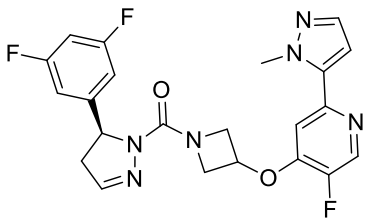
20. The compound, salt, hydrate, or stereoisomer of claim 1, wherein the compound has a structure selected from:



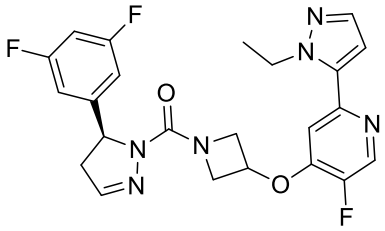
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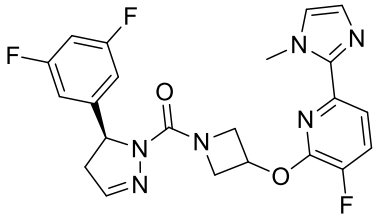
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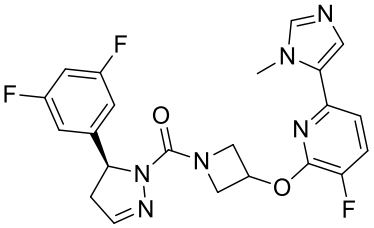
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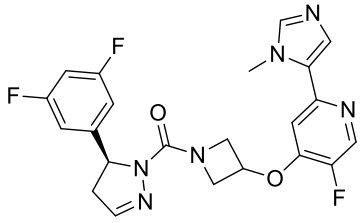
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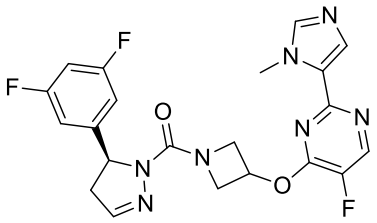


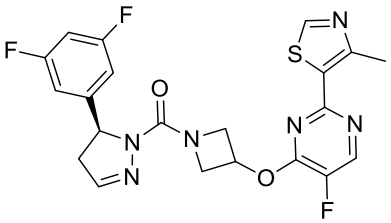
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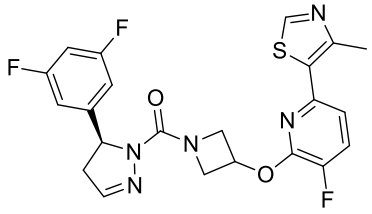
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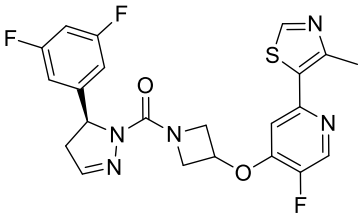




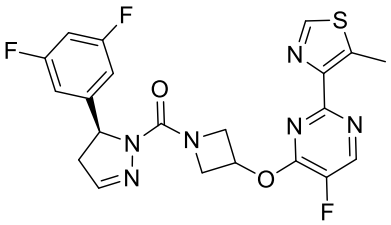
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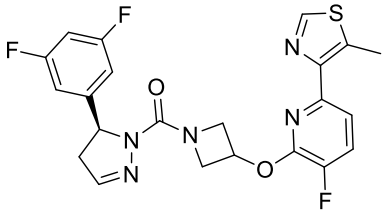
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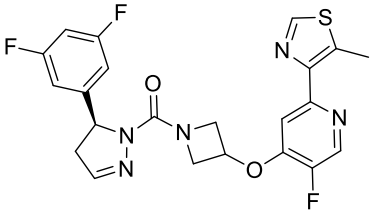
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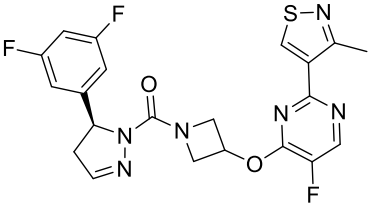
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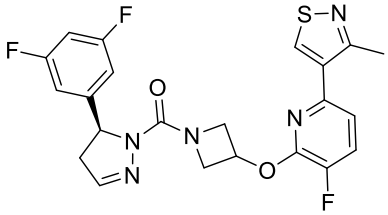


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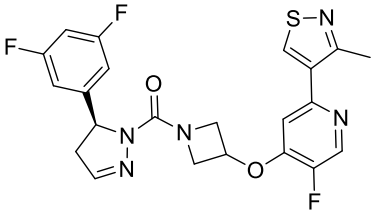
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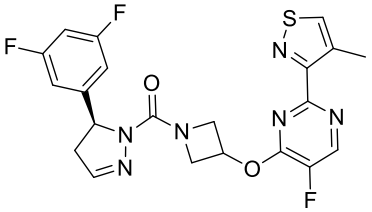
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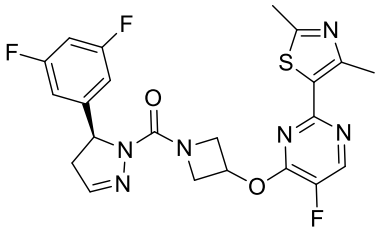
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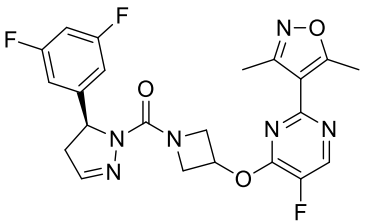
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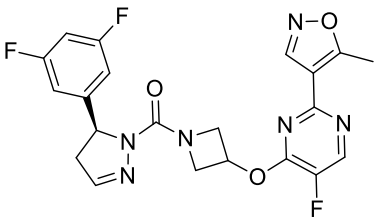
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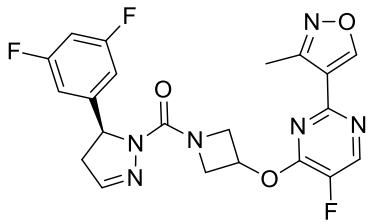
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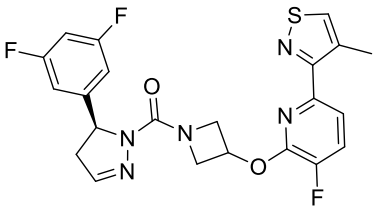
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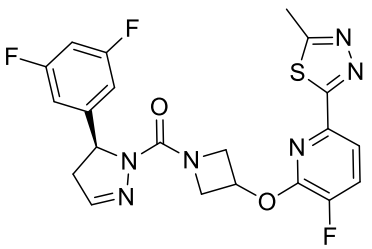
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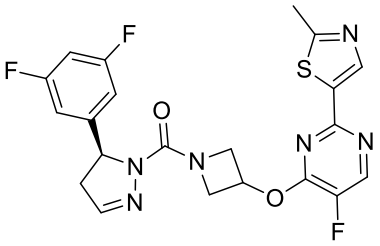


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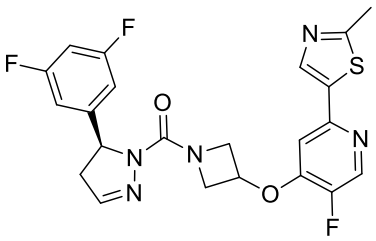


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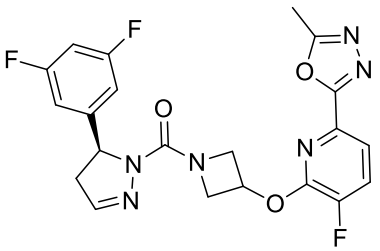




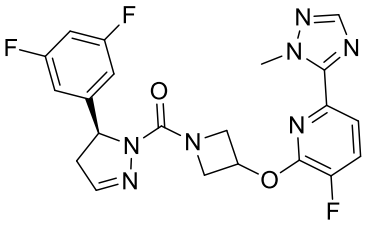
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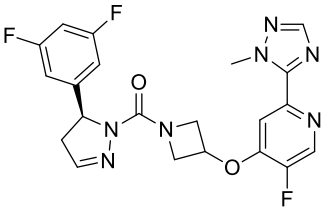
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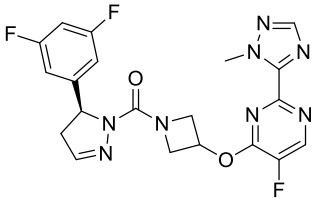
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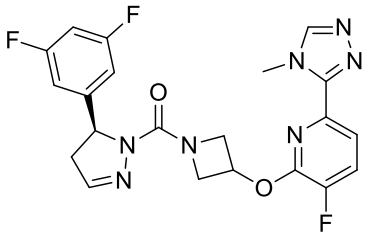
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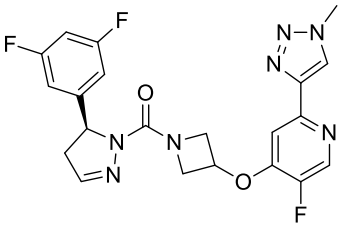
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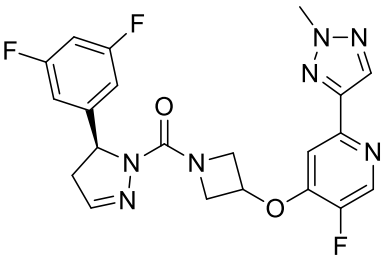
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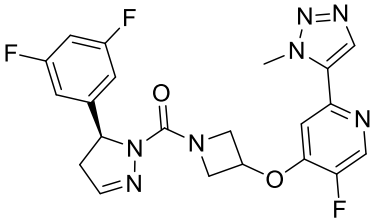
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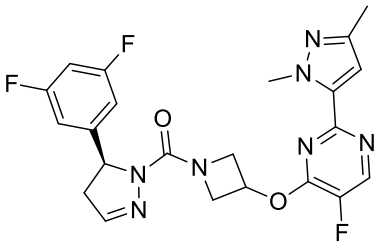
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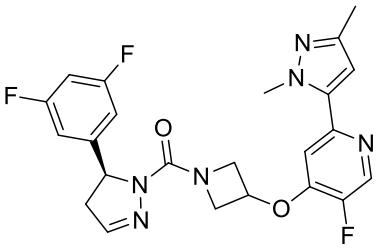
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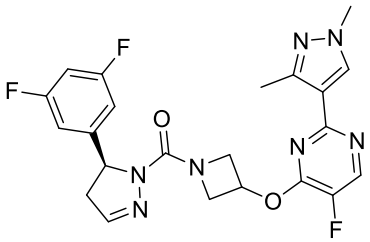
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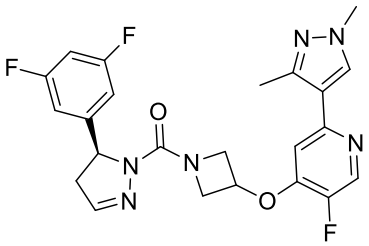
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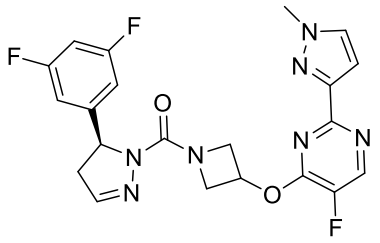
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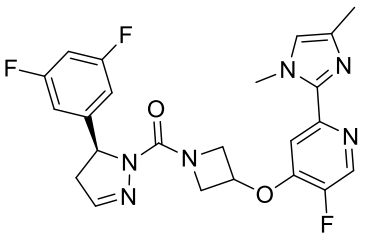
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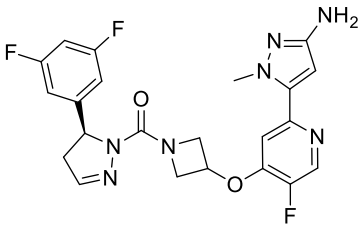
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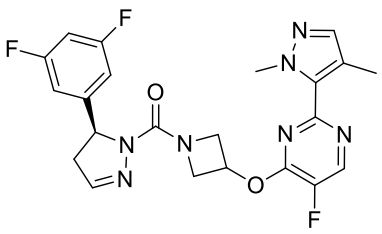
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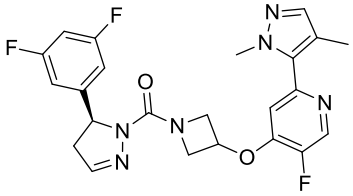
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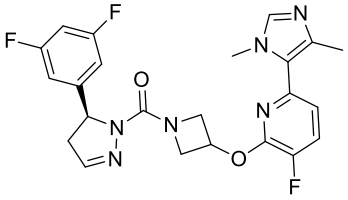
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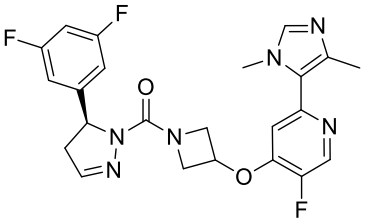
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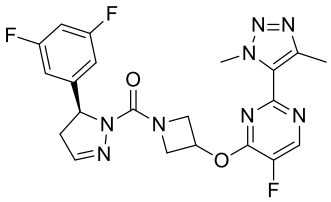
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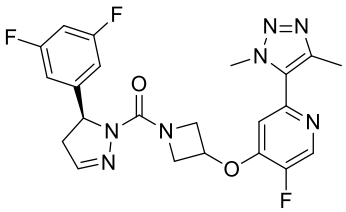
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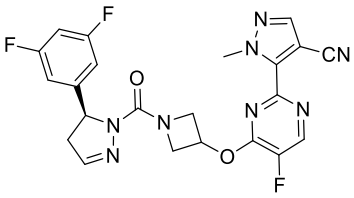
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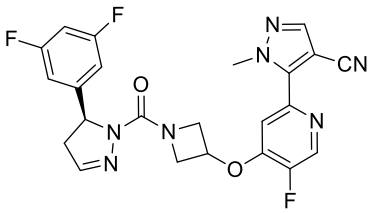
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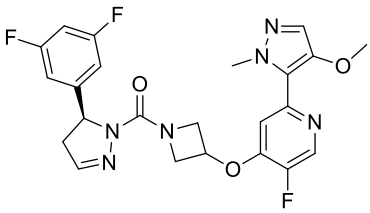
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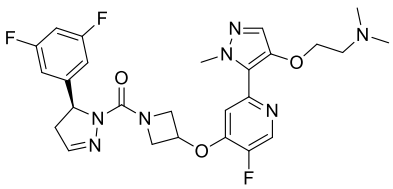
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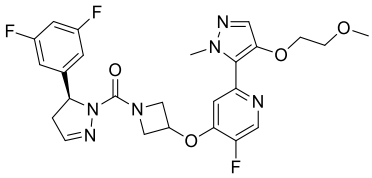
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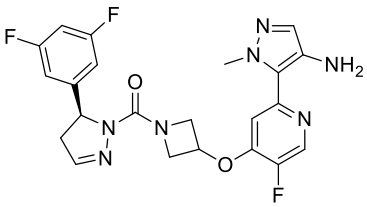
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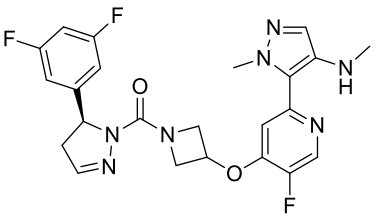
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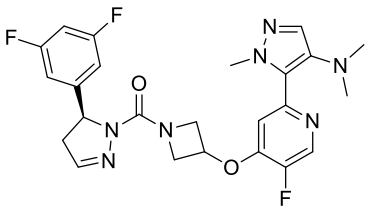
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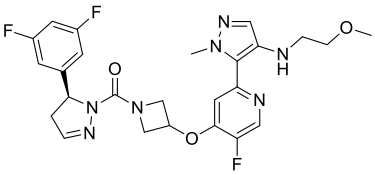
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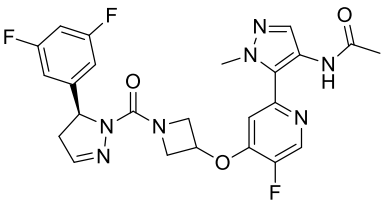
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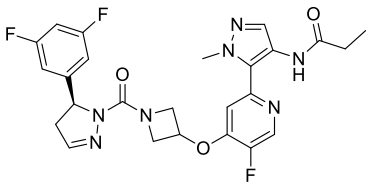
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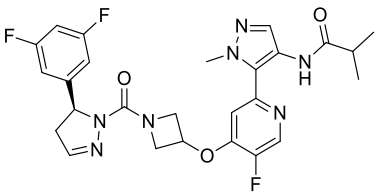
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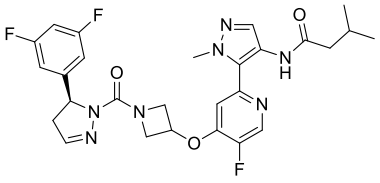
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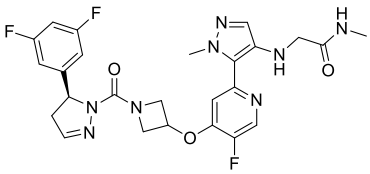
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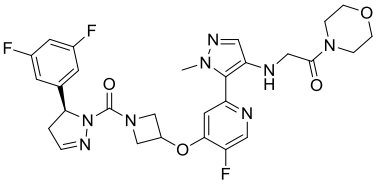
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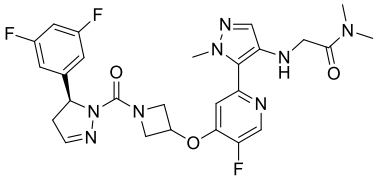
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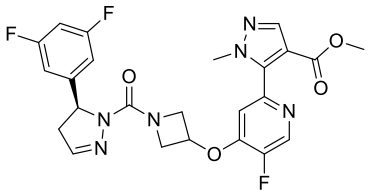
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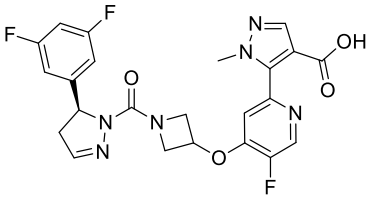
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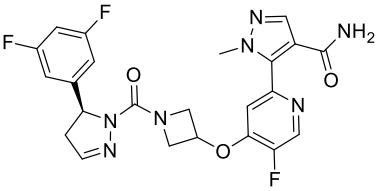
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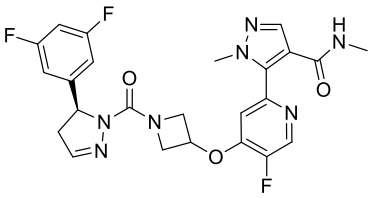
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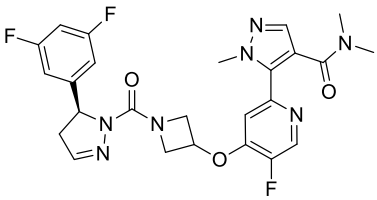
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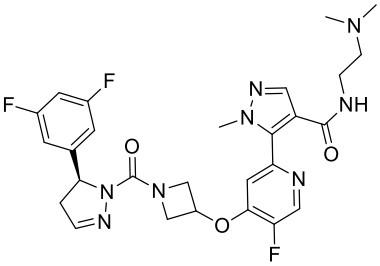
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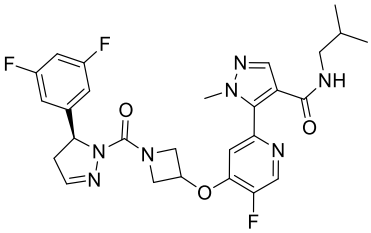
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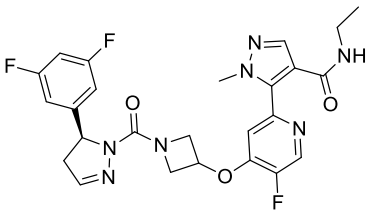
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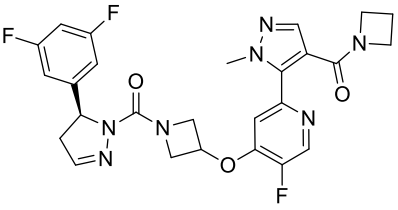
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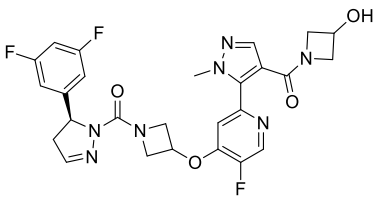
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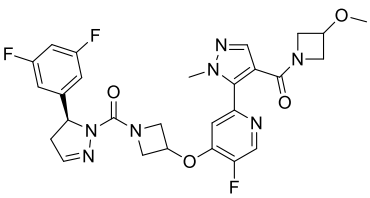
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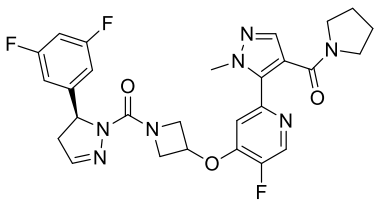
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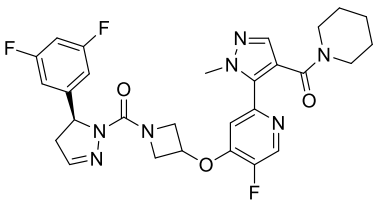
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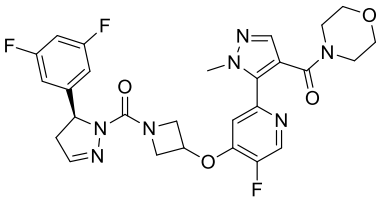
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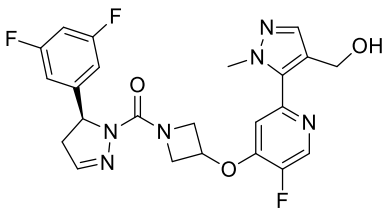
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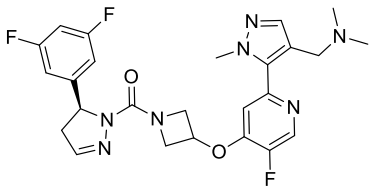
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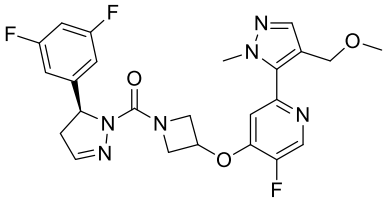
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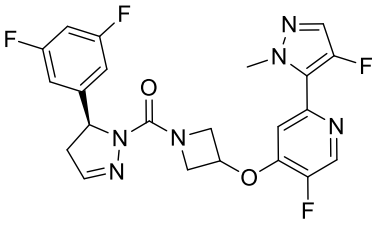
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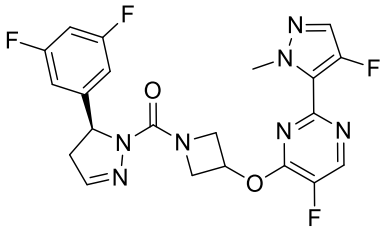
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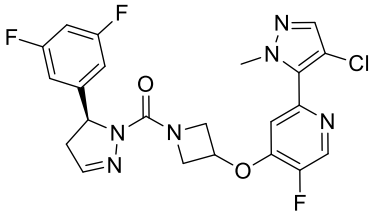
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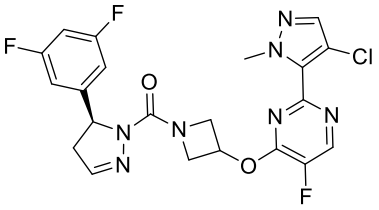
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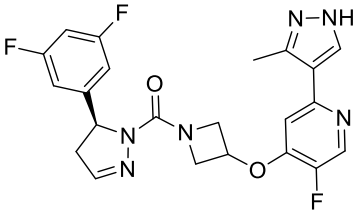
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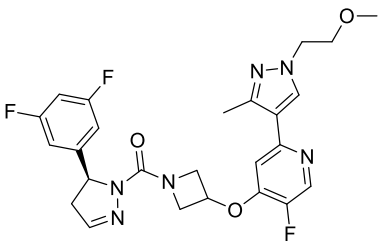
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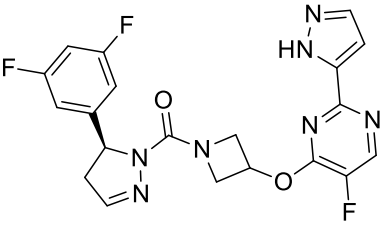
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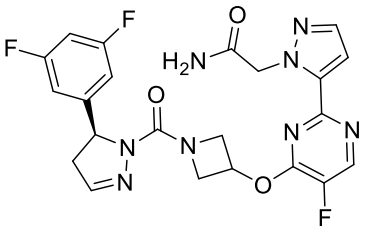
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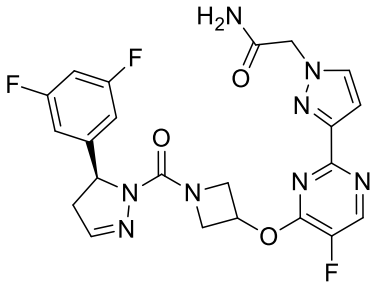
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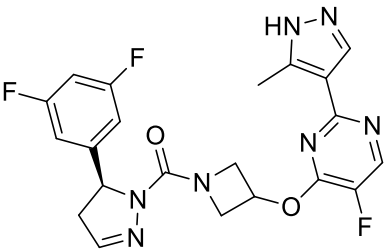
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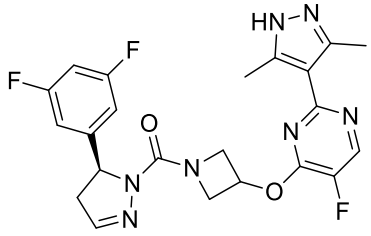
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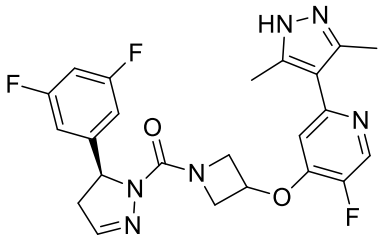


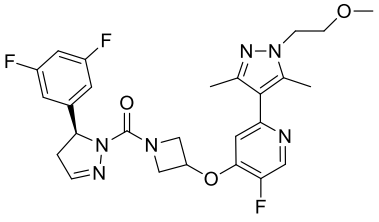
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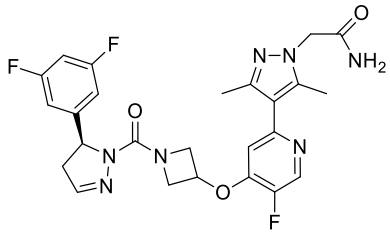
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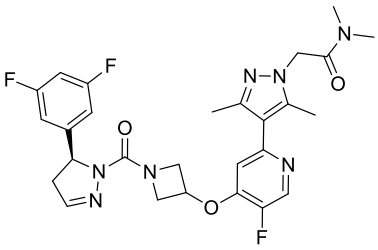




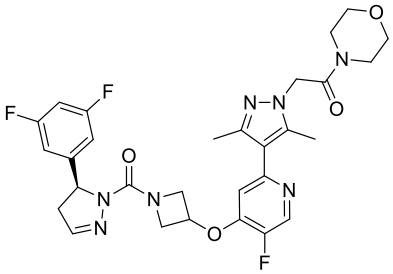
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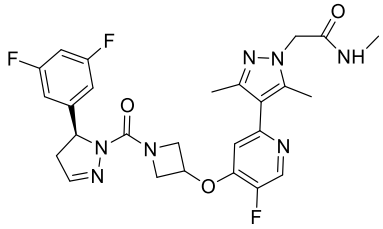
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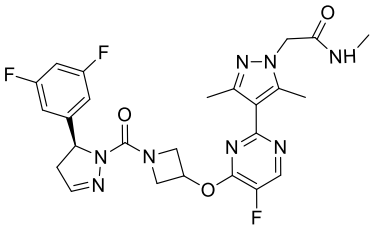
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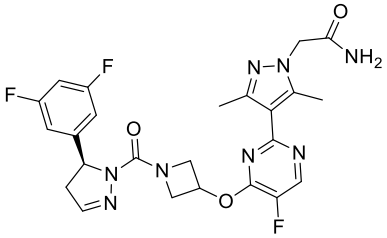
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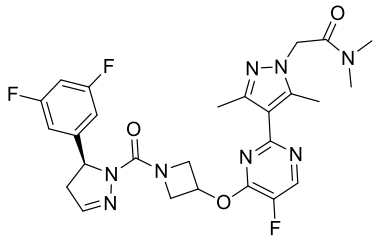
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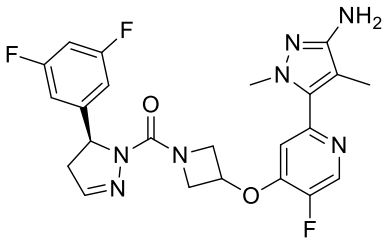
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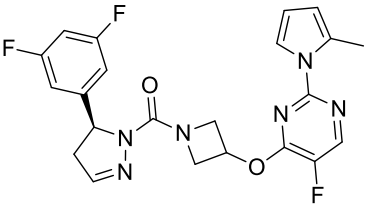
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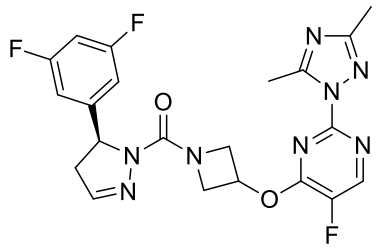
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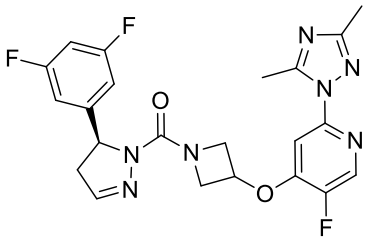
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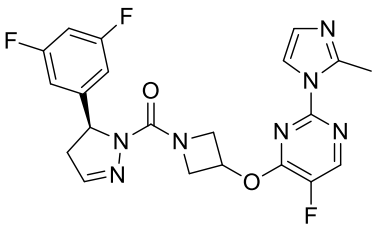
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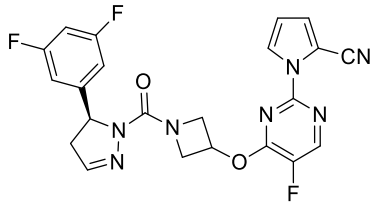
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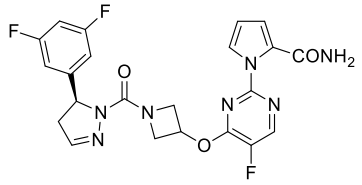
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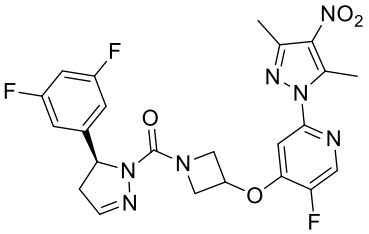
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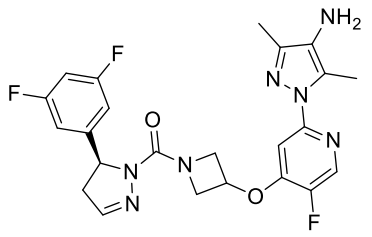
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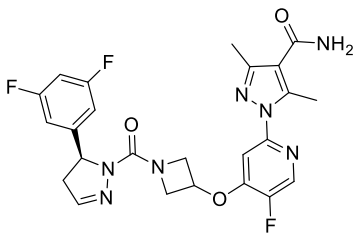
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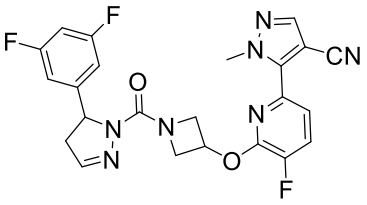
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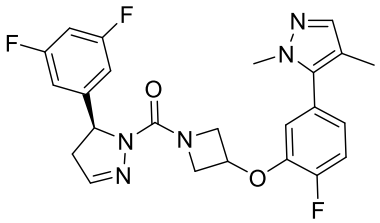
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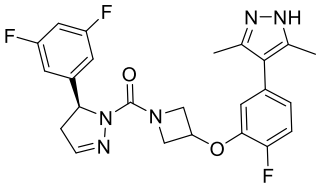
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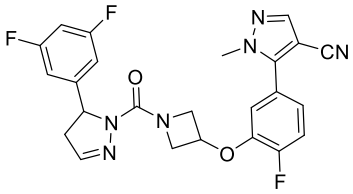
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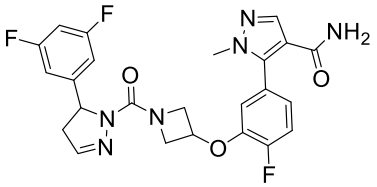
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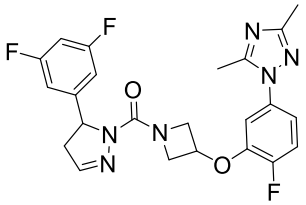
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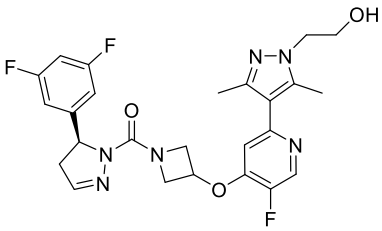
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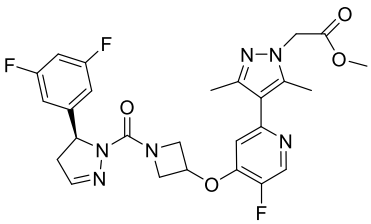
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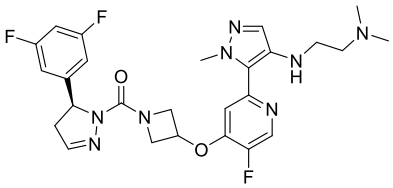
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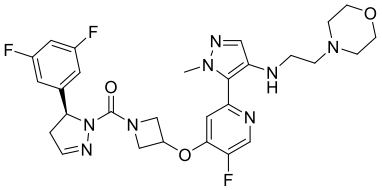
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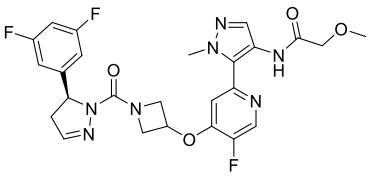
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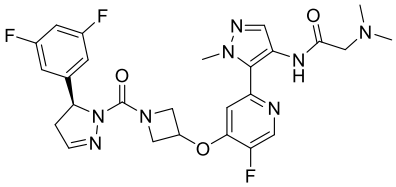
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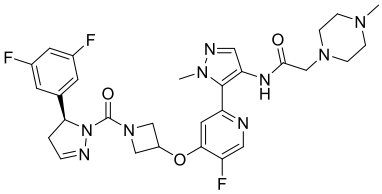
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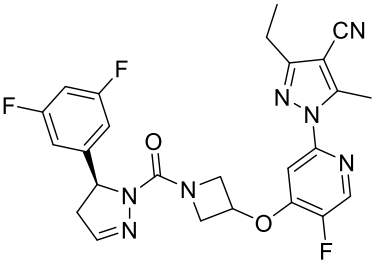
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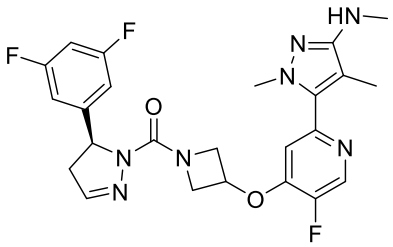
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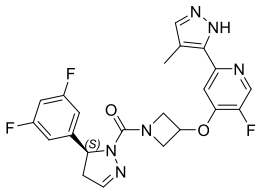
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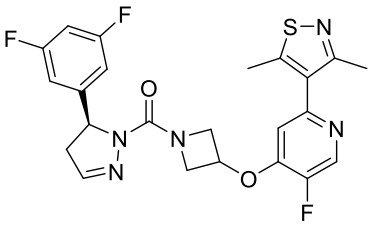
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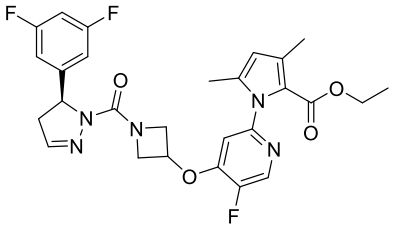
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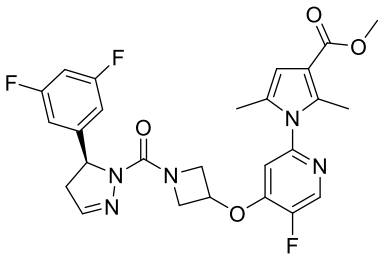
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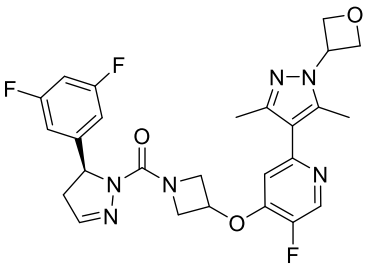
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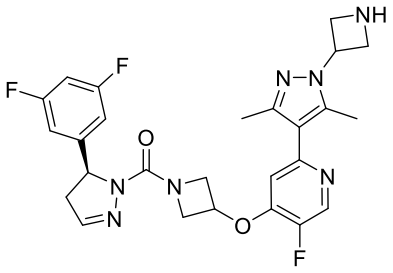
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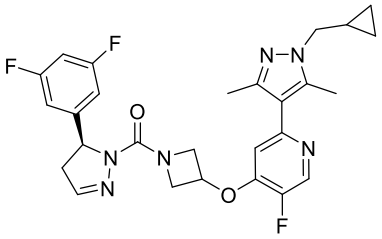
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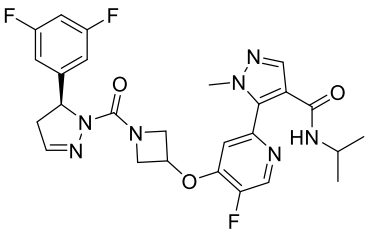
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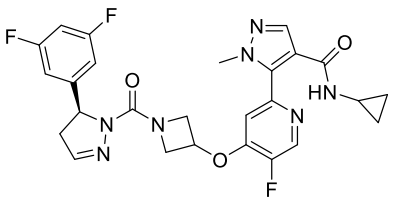
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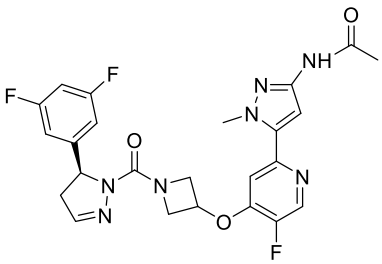
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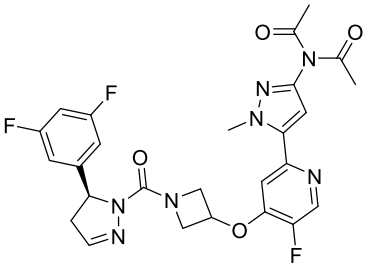
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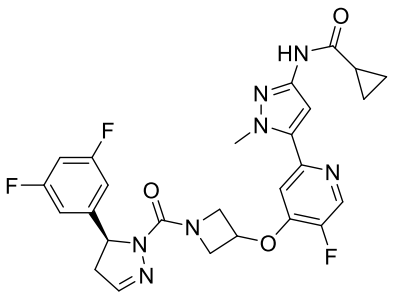
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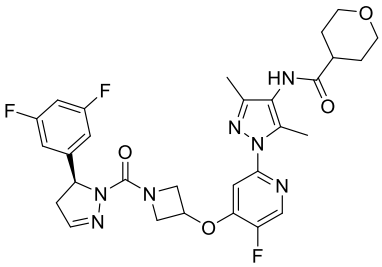
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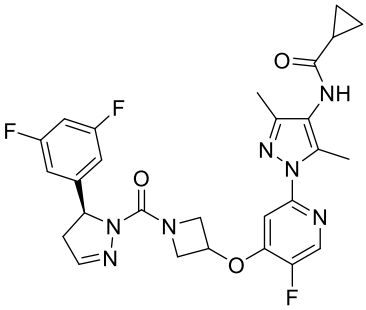
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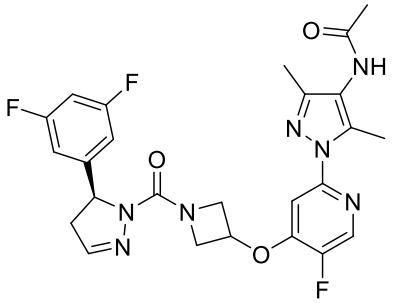
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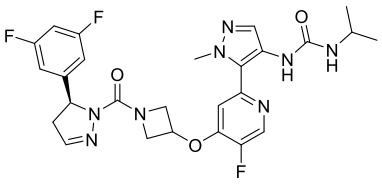
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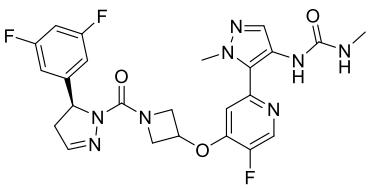
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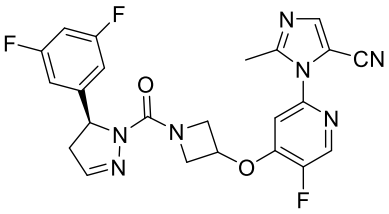
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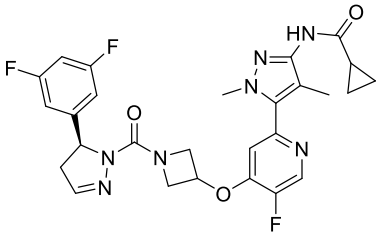
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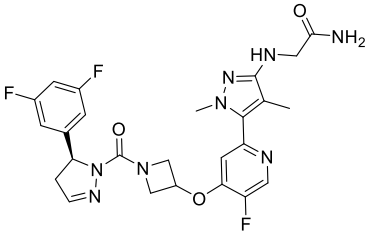
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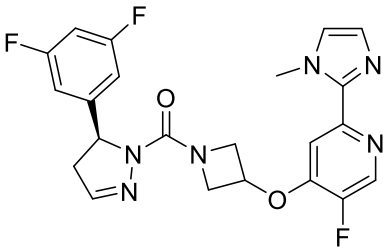
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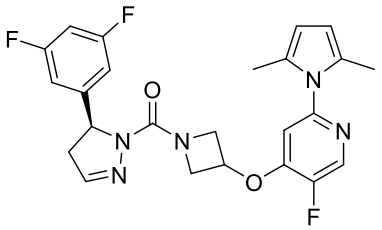
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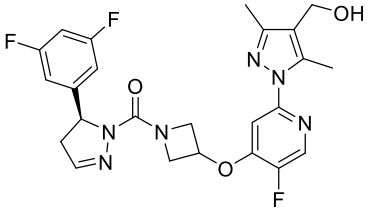
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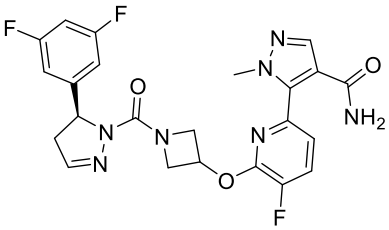
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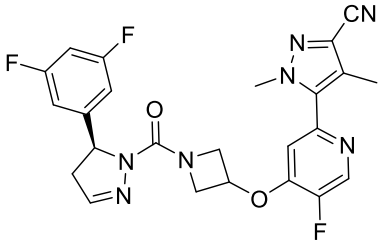
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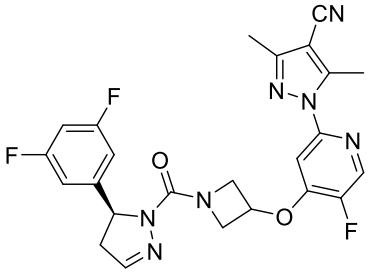
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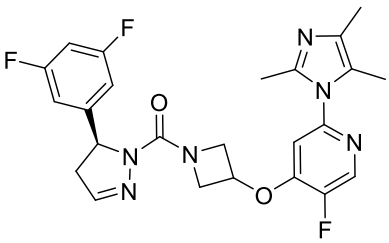
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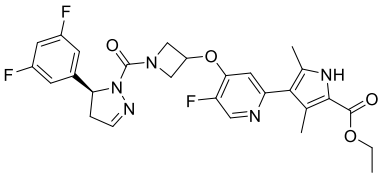
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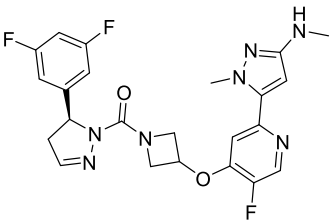
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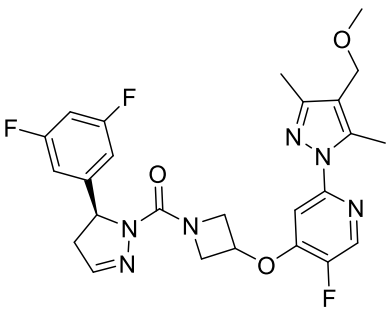
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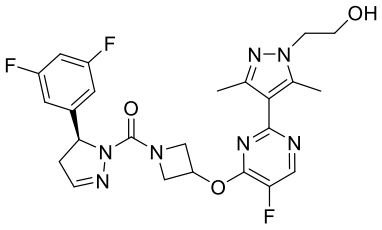
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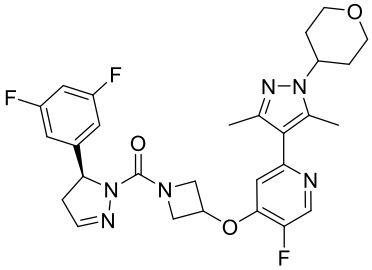
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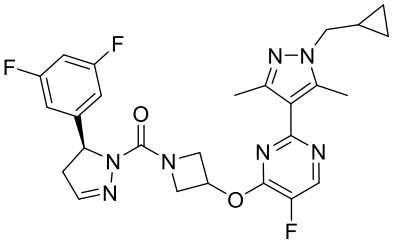
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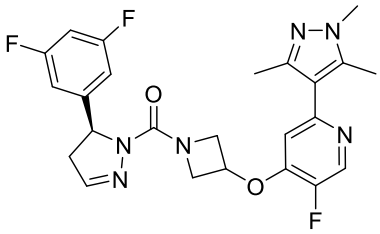
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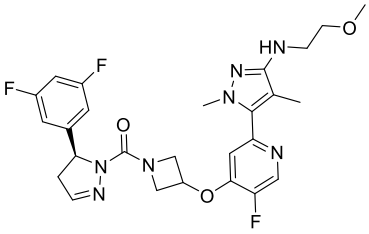
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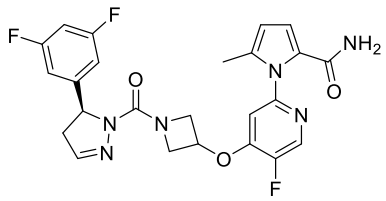
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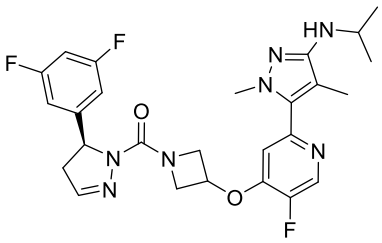
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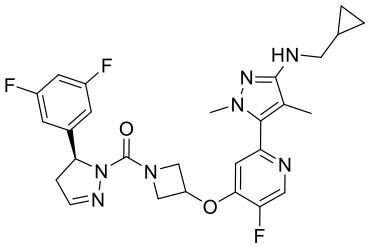
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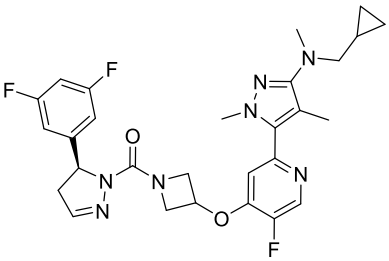
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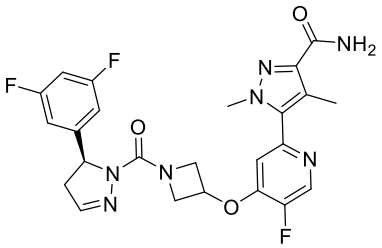
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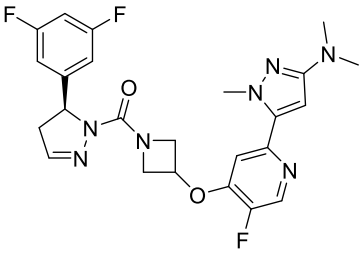
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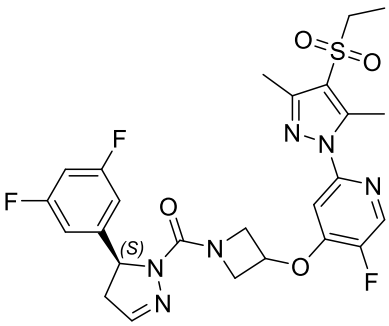
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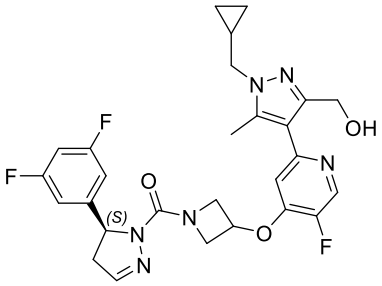
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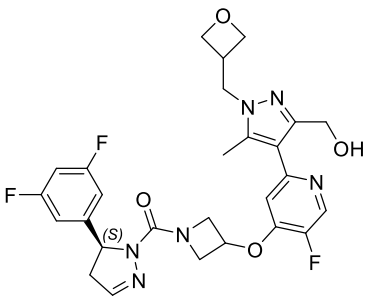
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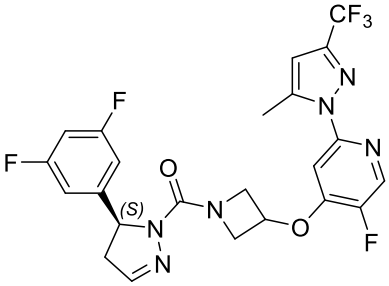
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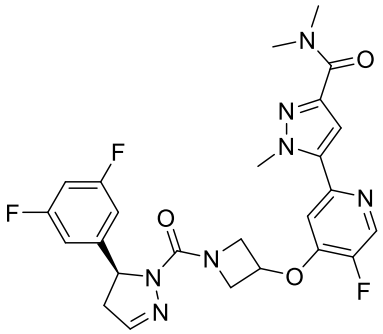
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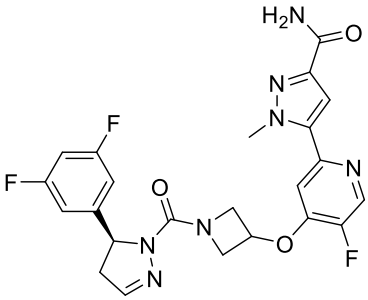
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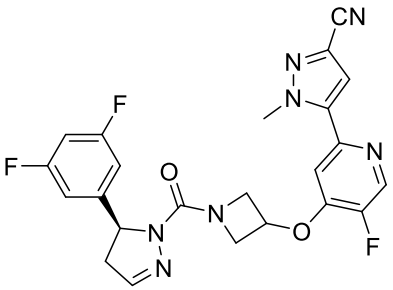
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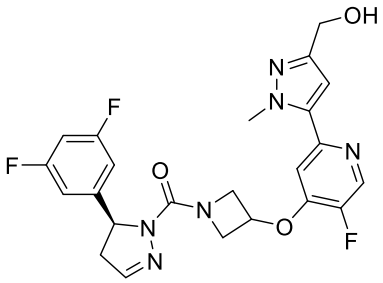
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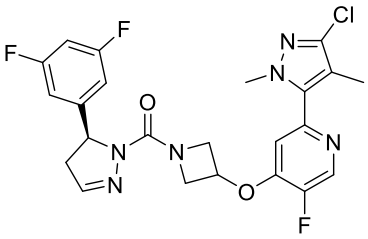
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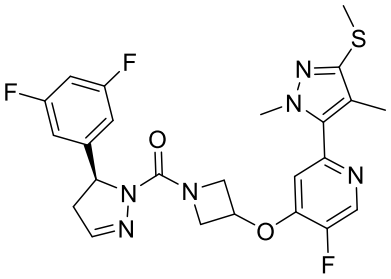
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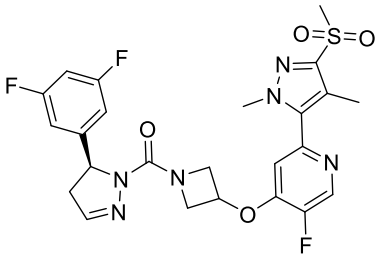
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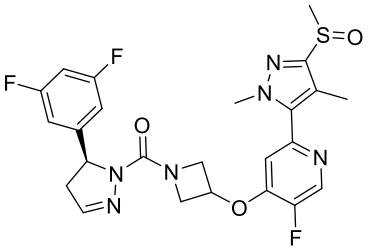
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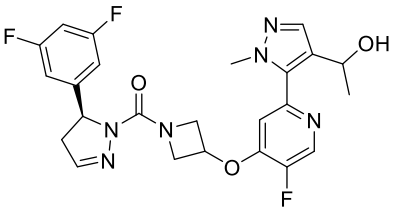
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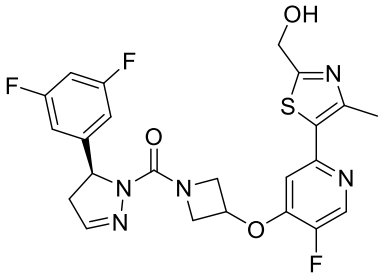
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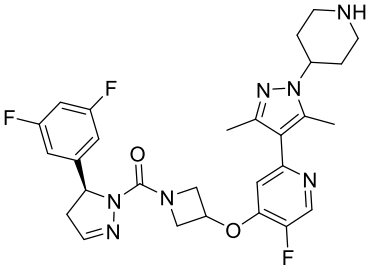
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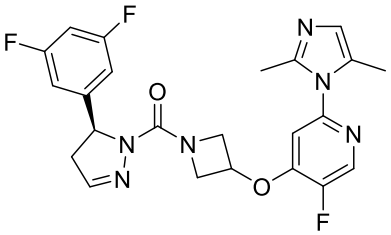
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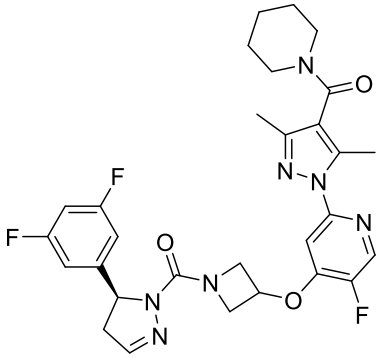
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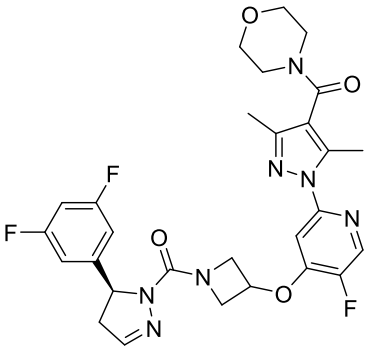


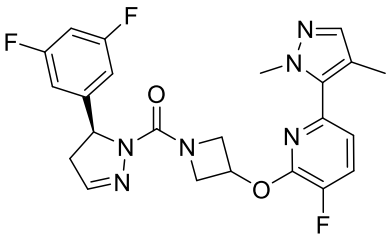
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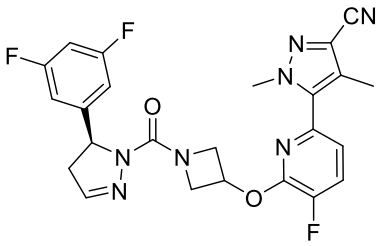




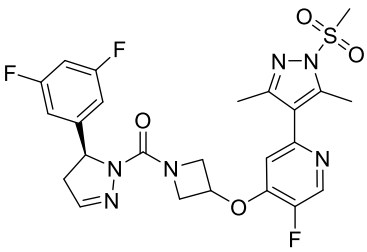


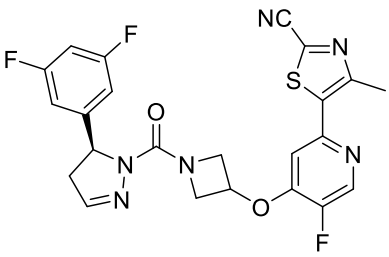
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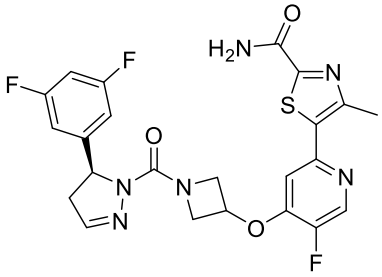


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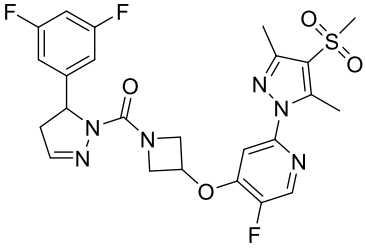




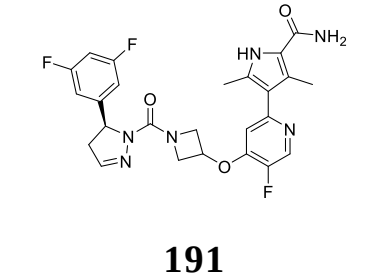
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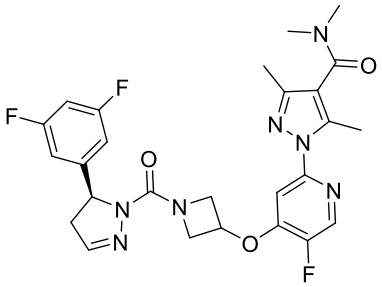


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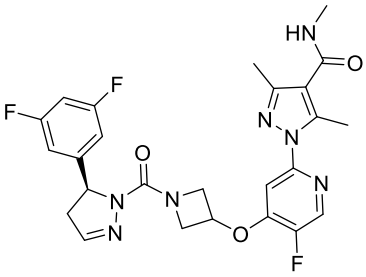
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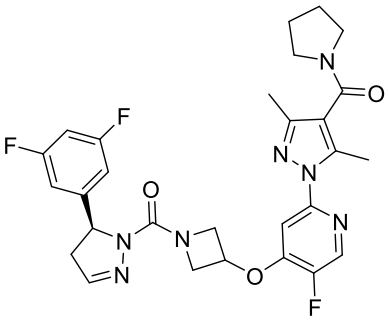
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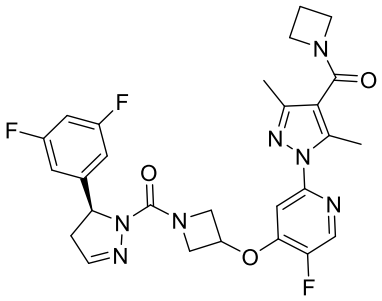
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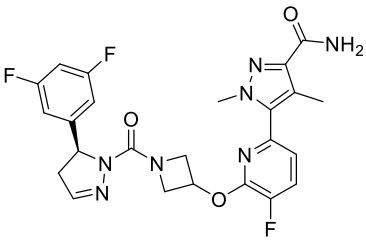
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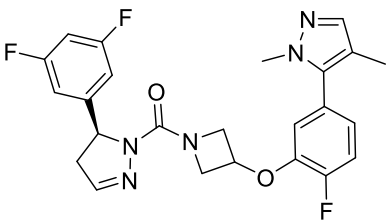
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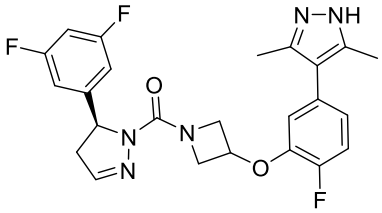
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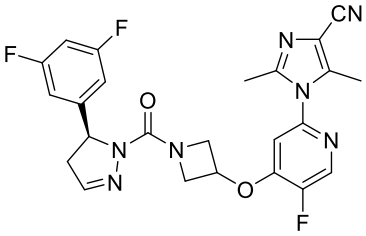
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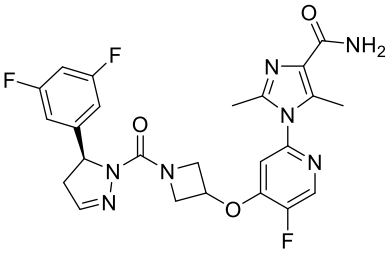
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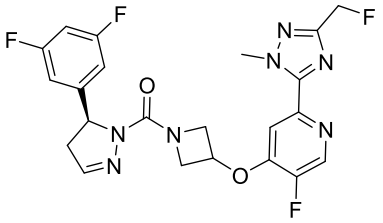


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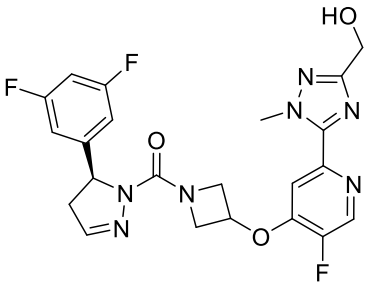


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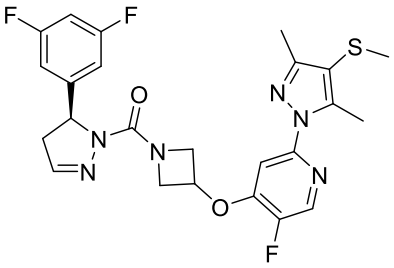




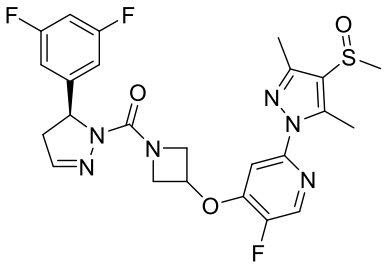
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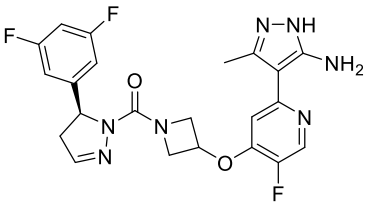
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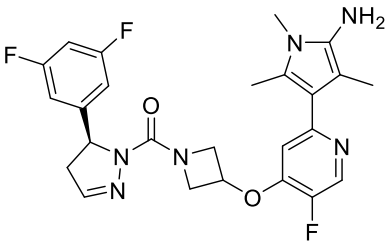
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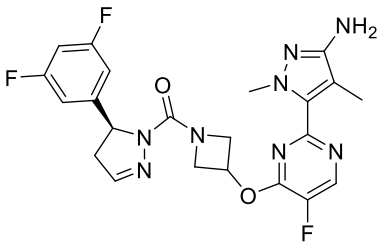
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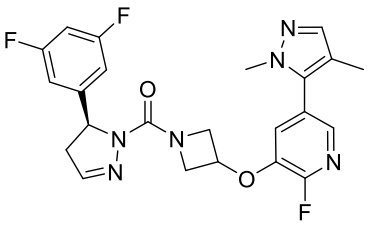
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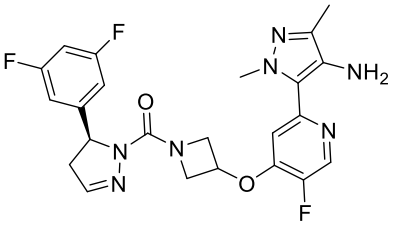
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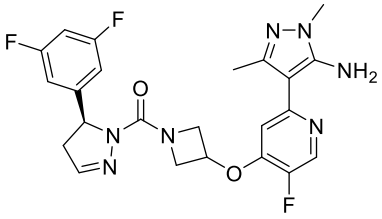
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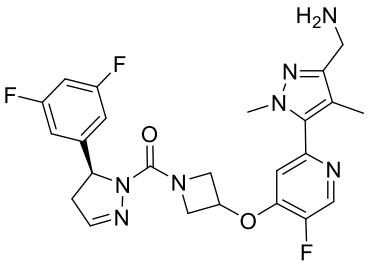
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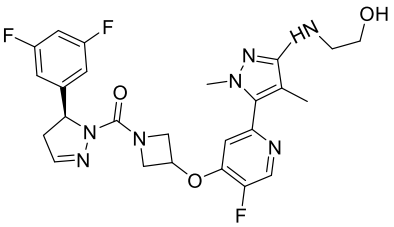
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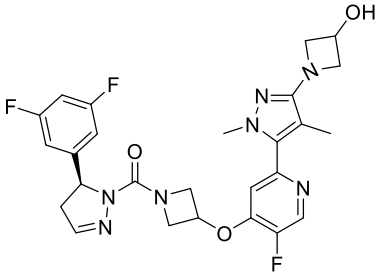
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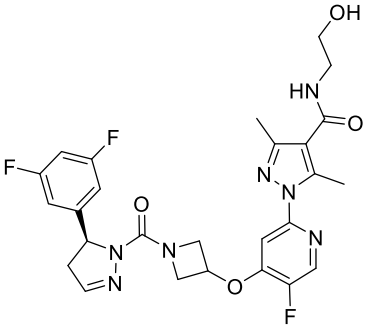
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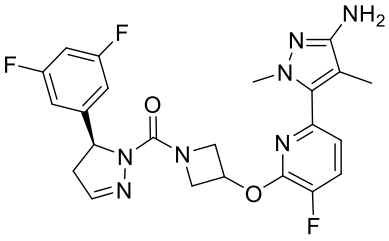
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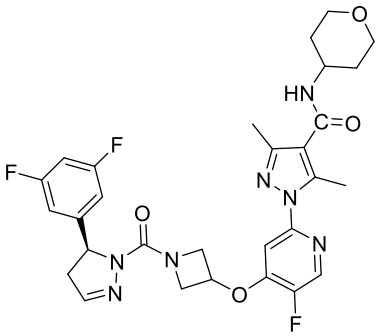
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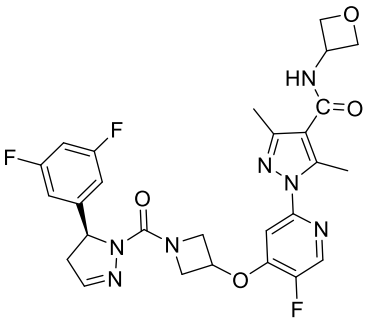
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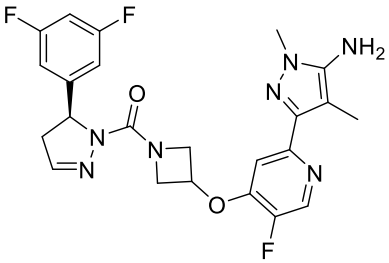
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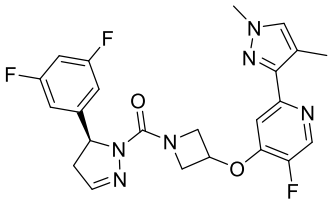
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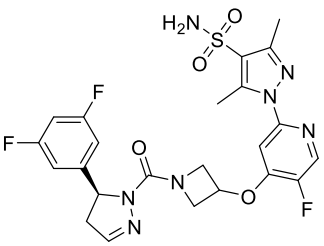
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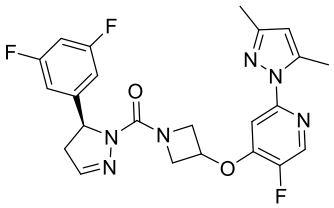
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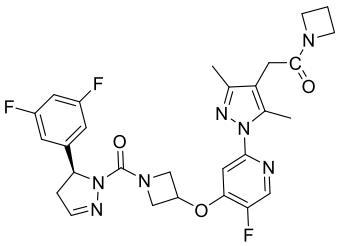
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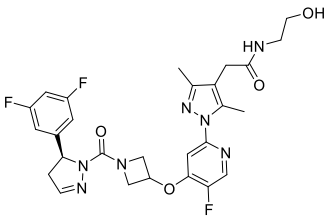
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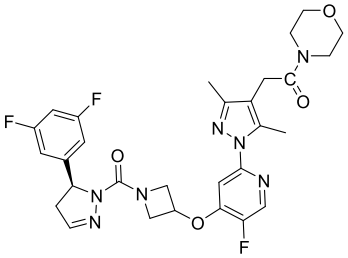
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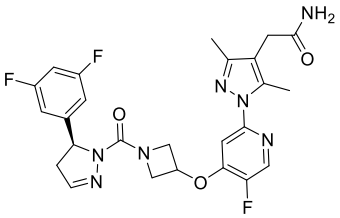
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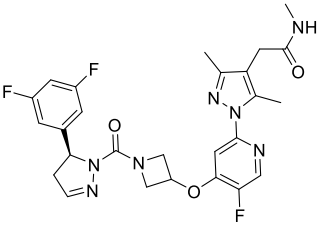
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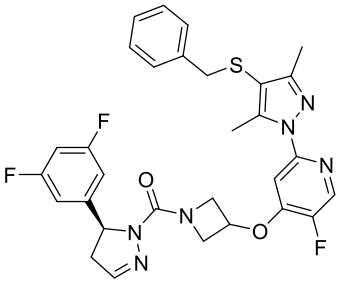
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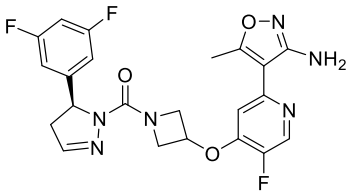
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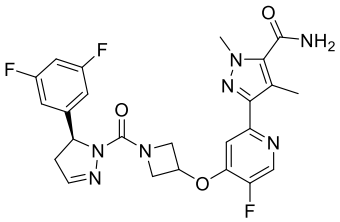
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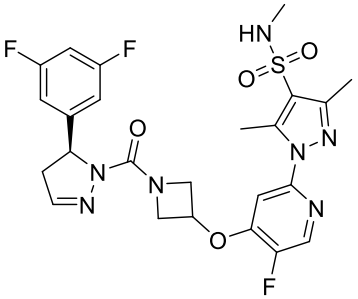
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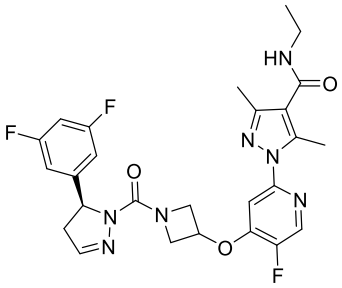
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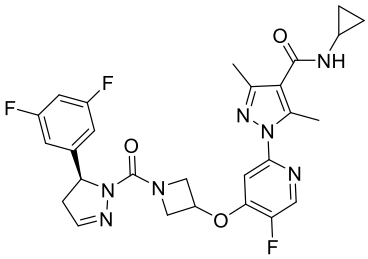
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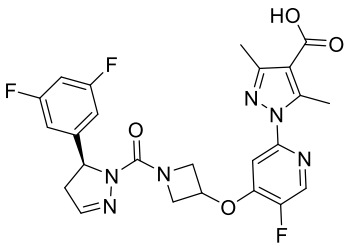
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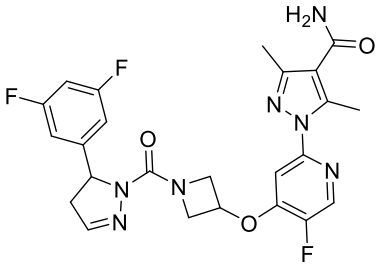
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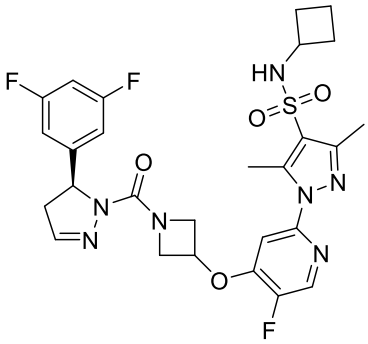
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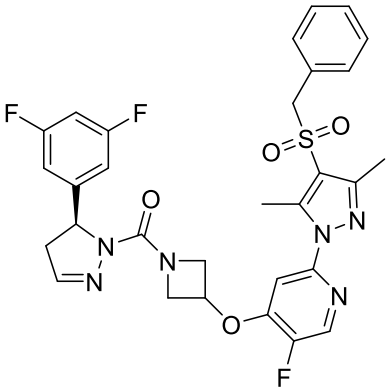
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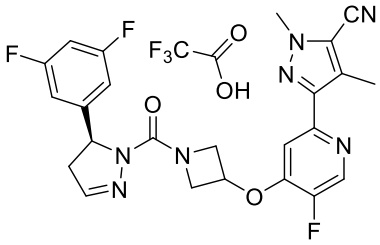
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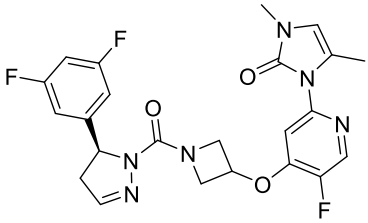
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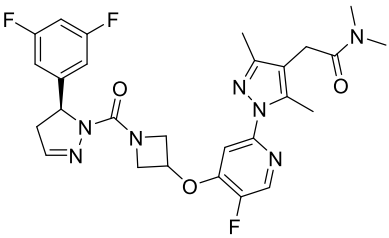
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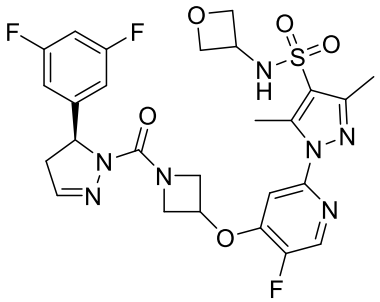
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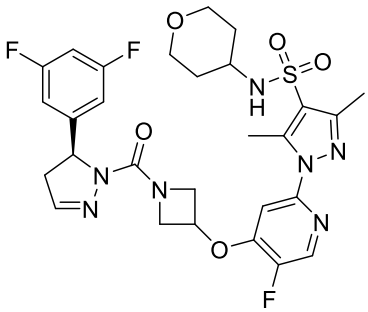
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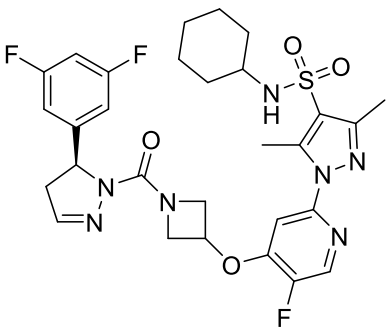
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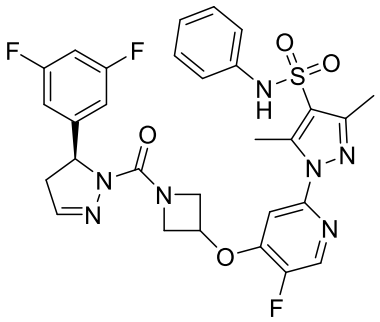
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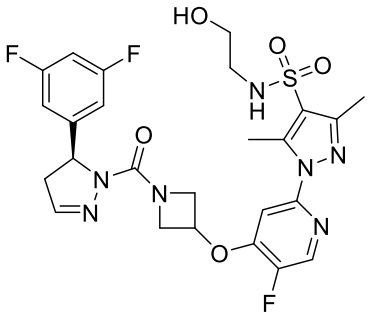
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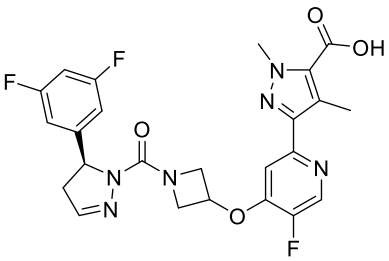
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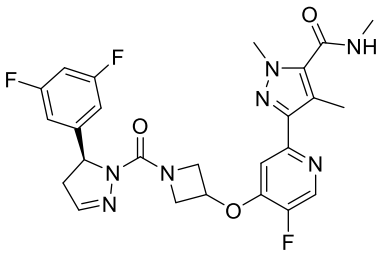
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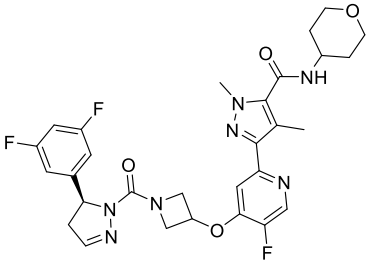
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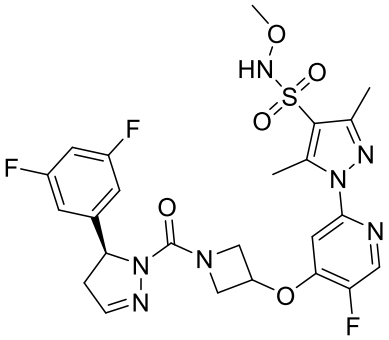
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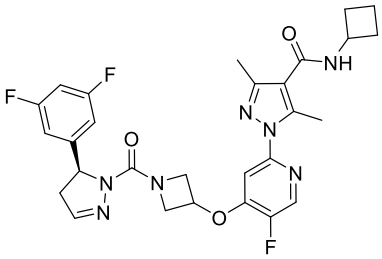
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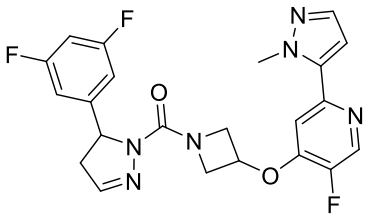
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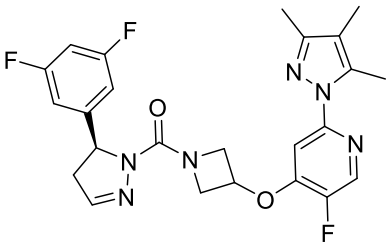
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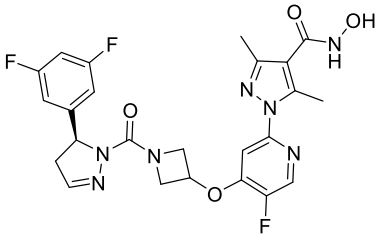
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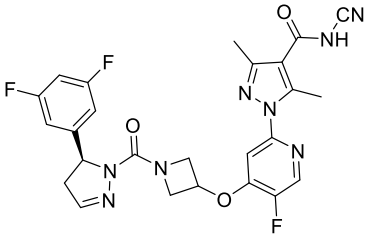
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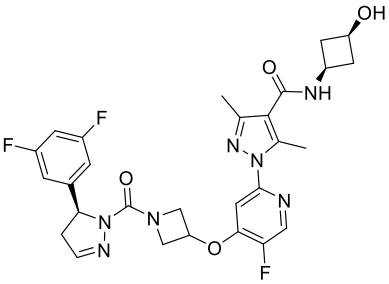
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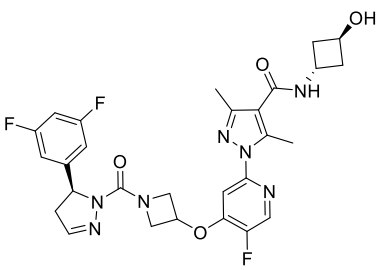
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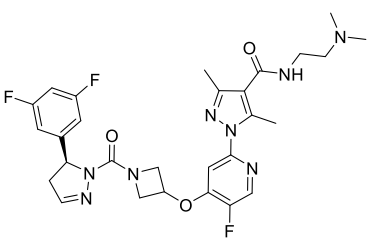
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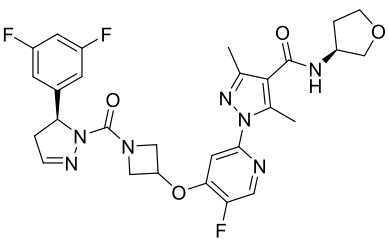
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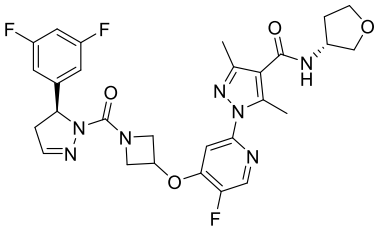
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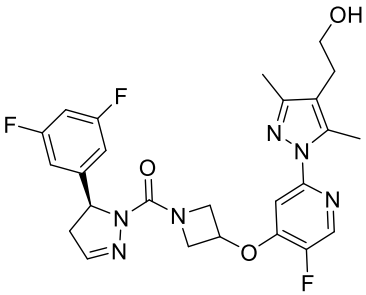
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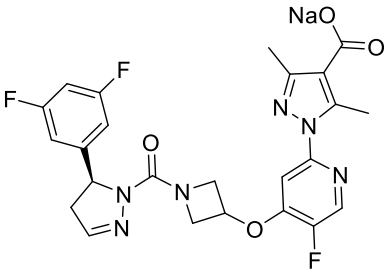
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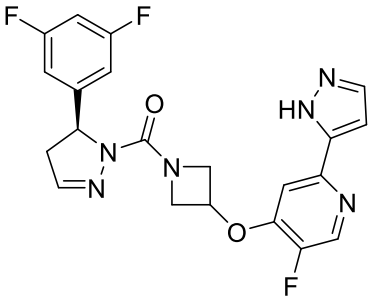
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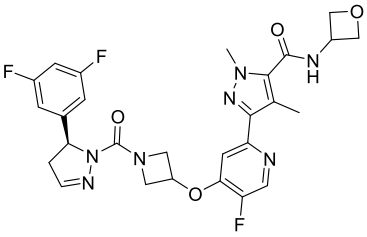
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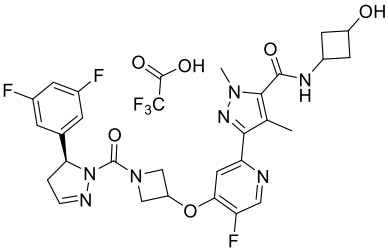
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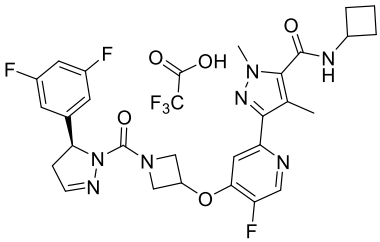
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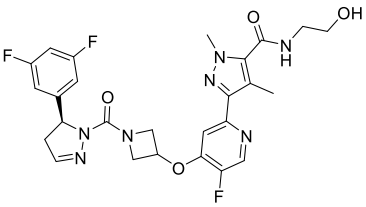
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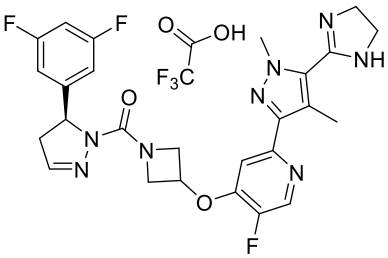
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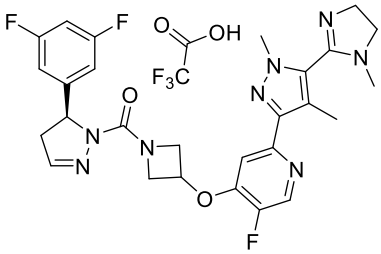
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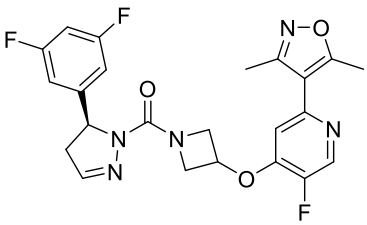
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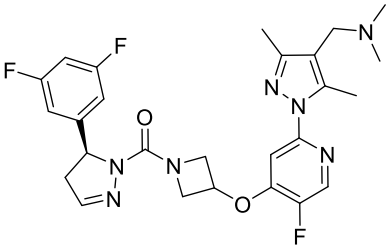
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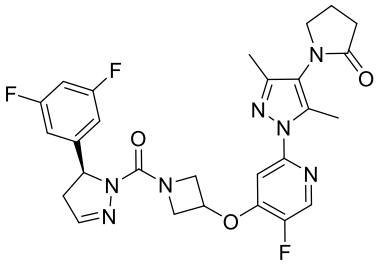
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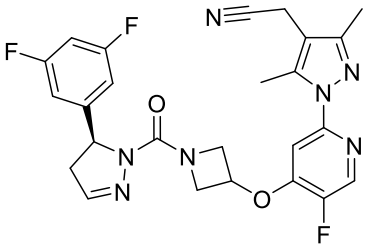
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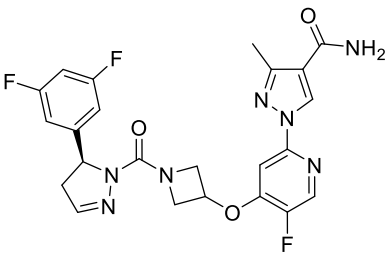
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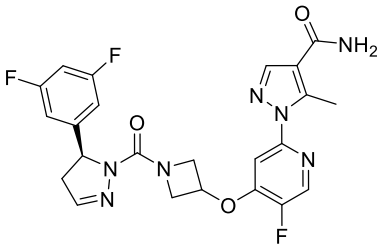
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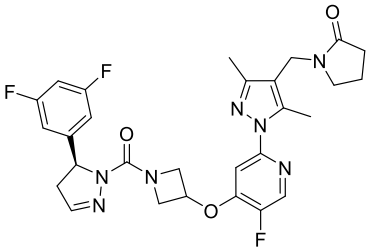
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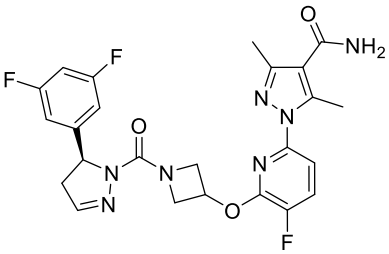
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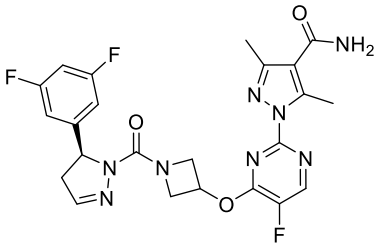
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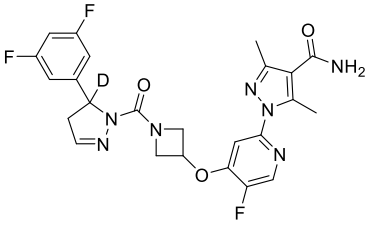
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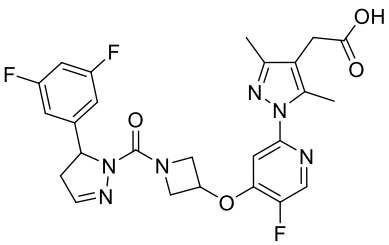
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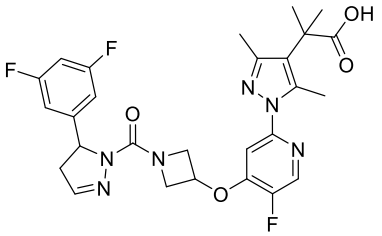
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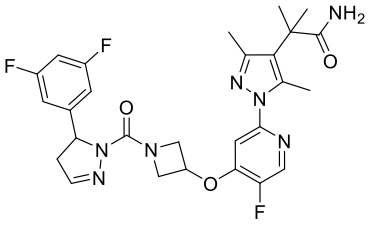
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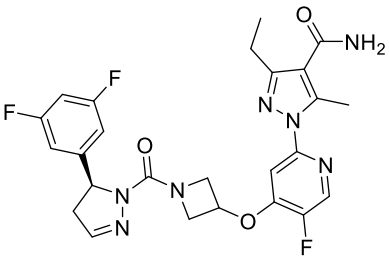
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21. A pharmaceutical composition comprising a therapeutically effective amount of the compound, salt, hydrate, or stereoisomer of any one of claims 1-20 and one or more pharmaceutically acceptable excipients, in predetermined, unit dosage form.

22. Use of the compound, salt, hydrate, or stereoisomer of any one of claims 1-20 or composition of claim 21 in the manufacture of a medicament for inhibiting necrosis, necroptosis, ferroptosis, human RIP1, or related indications, in a person in need thereof.

23. A compound, salt, hydrate, or stereoisomer of any one of claims 1-20 or composition of claim 21 for use in inhibiting necrosis, necroptosis, ferroptosis, human RIP1, or related indications in a person in need thereof, or in the manufacture of a medicament thereof in a person in need thereof.