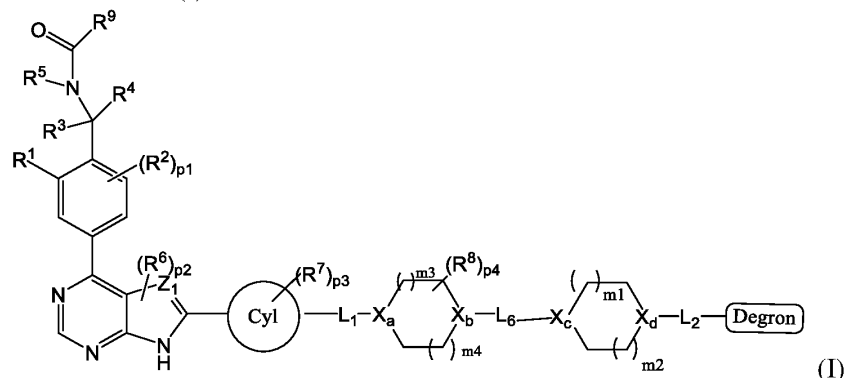


WHAT IS CLAIMED IS:**1. A compound of Formula (I)**

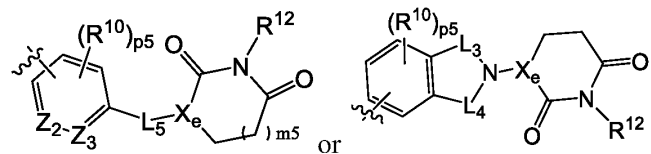
or a pharmaceutically acceptable salt thereof, or a stereoisomer thereof,

wherein:



is a 5- or 6- membered aromatic ring comprising 0-3 heteroatoms selected from nitrogen, oxygen and sulfur;

the **Degron** moiety is an E3 Ubiquitin ligase moiety selected from



L_1, L_2, L_3, L_4 and L_5 are each independently a bond, -O-, -CO-, $-(CR_cR_d)_{n2}$ - or $-NR_c$;

L_6 is each independently $-(CR_aR_b)_{n1}$ -, $-CO-(CR_aR_b)_{n1}-NH-(CR_eR_f)_{n3}$ -, $-CO-(CR_aR_b)_{n1}-NH$ -, or $-(CR_aR_b)_{n1}-NH-(CR_eR_f)_{n3}$;

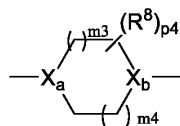
Z_1, Z_2 and Z_3 are each independently CR^{12} or N;

X_a, X_b, X_c, X_d and X_e are each independently CR^{12} or N;

$R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8$ and R^{10} are each independently, hydrogen, halogen, $-C_{1-8}$ alkyl, $-C_{1-8}$ alkoxy, $-C_{2-8}$ alkenyl, $-C_{2-8}$ alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, oxo, -CN, $-NO_2$, $-OR_a$, $-SO_2R_a$, $-COR_a$, $-CO_2R_a$, $-CONR_aR_b$, $-C(=NR_a)NR_bR_c$, $-NR_aR_b$, $-NR_aCOR_b$, $-NR_aCONR_bR_c$, $-NR_aCO_2R_b$, $-NR_aSONR_bR_c$, $-NR_aSO_2NR_bR_c$, or $-NR_aSO_2R_b$, each of said $-C_{1-8}$ alkyl, $-C_{2-8}$ alkenyl, $-C_{2-8}$ alkynyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with halogen, hydroxy, $-haloC_{1-8}$ alkyl, $-C_{1-8}$ alkoxy, cycloalkyl, heterocyclyl, aryl, or heteroaryl;

or R^4 and R^2 on the ortho position of the phenyl ring form a 5- or 6-membered carbon ring;

or X_a and either of the two adjacent carbon atoms form a double bond, provided that X_a is CR^{12} and R^{12} is absent;



or two non-adjacent R^8 on the moiety form a bridge comprising one or two or three CH_2 ;

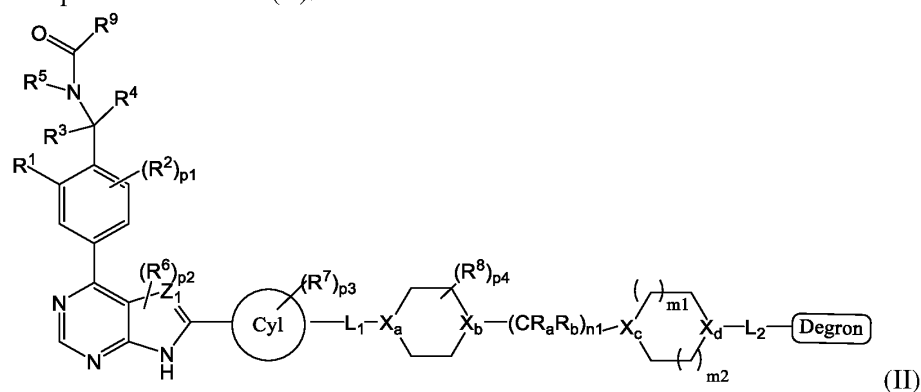
each R^{12} is independently hydrogen or $-C_{1-8}$ alkyl;

R^9 is 5- or 6- membered aromatic ring comprising 0-3 heteroatoms selected from nitrogen, oxygen and sulfur; each of said aromatic ring is optionally substituted with halogen, $-C_{1-8}$ alkyl, $-C_{2-8}$ alkenyl, $-C_{2-8}$ alkynyl, $-C_{1-8}$ alkoxy, cycloalkyl, heterocyclyl, aryl, heteroaryl, $-CN$, $-NO_2$, $-OR_a$, $-SO_2R_a$, $-COR_a$, $-CO_2R_a$, $-CONR_aR_b$, $-C(=NR_a)NR_bR_c$, $-NR_aR_b$, $-NR_aCOR_b$, $-NR_aCONR_bR_c$, $-NR_aCO_2R_b$, $-NR_aSONR_bR_c$, $-NR_aSO_2NR_bR_c$, or $-NR_aSO_2R_b$, each of said $-C_{1-8}$ alkyl, $-C_{2-8}$ alkenyl, $-C_{2-8}$ alkynyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with halogen, hydroxy, $-haloC_{1-8}$ alkyl, $-C_{1-8}$ alkoxy, cycloalkyl, heterocyclyl, aryl, or heteroaryl;

n_1 , n_2 , n_3 , m_1 , m_2 , m_3 , m_4 , m_5 , p_1 , p_2 , p_3 , p_4 and p_5 are each independently 0, 1, 2, 3 or 4;

R_a , R_b , R_c , R_d , R_e and R_f are each independently hydrogen, $-C_{1-8}$ alkyl, $-C_{2-8}$ alkenyl, $-C_{2-8}$ alkynyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl.

2. A compound of Formula (II):



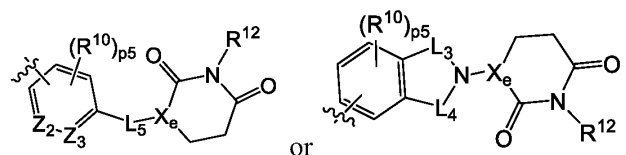
or a pharmaceutically acceptable salt thereof, or a stereoisomer thereof,

wherein:



Cyl is a 5- or 6- membered aromatic ring comprising 0-3 heteroatoms selected from nitrogen, oxygen and sulfur;

the $Degron$ moiety is an E3 Ubiquitin ligase moiety selected from



L_1 , L_2 , L_3 , L_4 and L_5 are each independently a bond, $-O-$, $-CO-$, $-(CR_dR_e)_{n2}-$ or $-NR_c-$;

Z_1 , Z_2 and Z_3 are each independently CR^{12} or N ;

X_a, X_b, X_c, X_d and X_e are each independently CR^{12} or N;

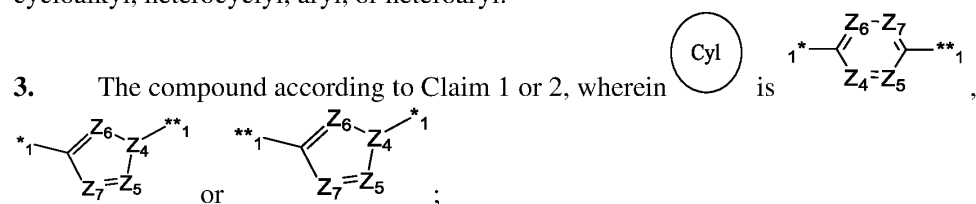
$R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8$ and R^{10} are each independently hydrogen, halogen, $-C_{1-8}alkyl$, $-C_{1-8}alkoxy$, $-C_{2-8}alkenyl$, $-C_{2-8}alkynyl$, cycloalkyl, heterocyclyl, aryl, heteroaryl, oxo, $-CN$, $-NO_2$, $-OR_a$, $-SO_2R_a$, $-COR_a$, $-CO_2R_a$, $-CONR_aR_b$, $-C(=NR_a)NR_bR_c$, $-NR_aR_b$, $-NR_aCOR_b$, $-NR_aCONR_bR_c$, $-NR_aCO_2R_b$, $-NR_aSONR_bR_c$, $-NR_aSO_2NR_bR_c$, or $-NR_aSO_2R_b$, each of said $-C_{1-8}alkyl$, $-C_{2-8}alkenyl$, $-C_{2-8}alkynyl$, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with halogen, hydroxy, $-haloC_{1-8}alkyl$, $-C_{1-8}alkoxy$, cycloalkyl, heterocyclyl, aryl, or heteroaryl;

each R^{12} is independently hydrogen or $-C_{1-8}alkyl$;

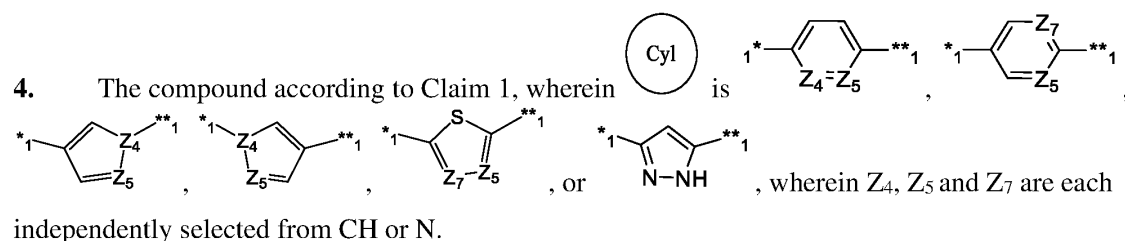
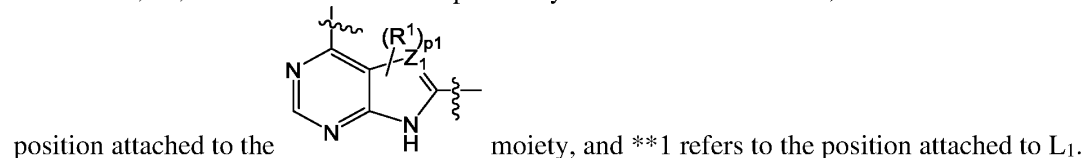
R^9 is 5- or 6- membered aromatic ring comprising 0-3 heteroatoms selected from nitrogen, oxygen and sulfur; each of said aromatic ring is optionally substituted with halogen, $-C_{1-8}alkyl$, $-C_{2-8}alkenyl$, $-C_{2-8}alkynyl$, $-C_{1-8}alkoxy$, cycloalkyl, heterocyclyl, aryl, heteroaryl, $-CN$, $-NO_2$, $-OR_a$, $-SO_2R_a$, $-COR_a$, $-CO_2R_a$, $-CONR_aR_b$, $-C(=NR_a)NR_bR_c$, $-NR_aR_b$, $-NR_aCOR_b$, $-NR_aCONR_bR_c$, $-NR_aCO_2R_b$, $-NR_aSONR_bR_c$, $-NR_aSO_2NR_bR_c$, or $-NR_aSO_2R_b$, each of said $-C_{1-8}alkyl$, $-C_{2-8}alkenyl$, $-C_{2-8}alkynyl$, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with halogen, hydroxy, $-haloC_{1-8}alkyl$, $-C_{1-8}alkoxy$, cycloalkyl, heterocyclyl, aryl, or heteroaryl;

$n_1, n_2, m_1, m_2, p_1, p_2, p_3, p_4$ and p_5 are each independently 0, 1, 2, 3 or 4;

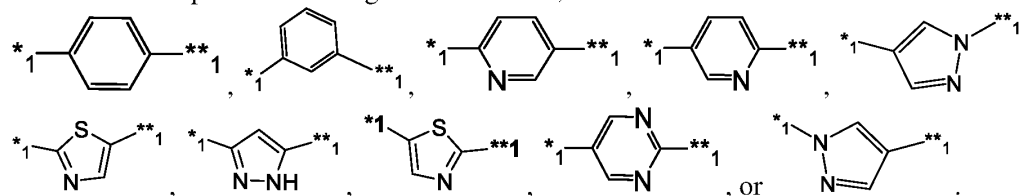
R_a, R_b, R_c , and R_d are each independently hydrogen, $-C_{1-8}alkyl$, $-C_{2-8}alkenyl$, $-C_{2-8}alkynyl$, cycloalkyl, heterocyclyl, aryl, or heteroaryl.



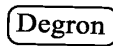
wherein Z_4, Z_5, Z_6 and Z_7 are each independently selected from CH or N; wherein $*1$ refers to the

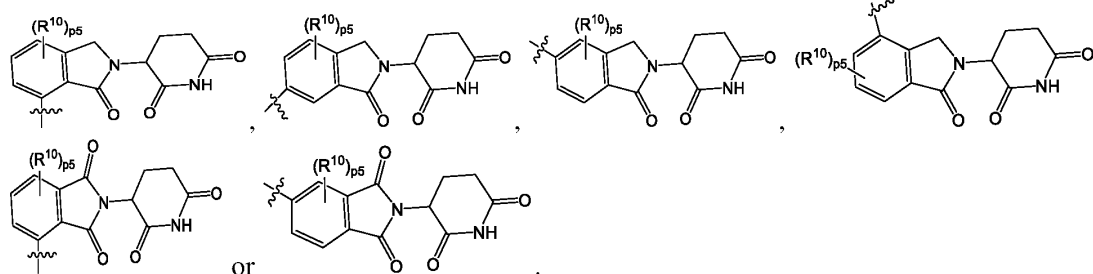


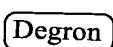
5. The compound according to Claim 3 or 4, wherein  is selected from

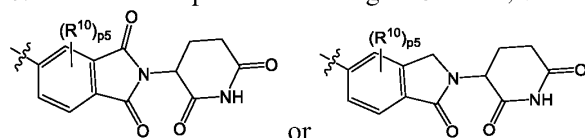


6. The compound according to any one of Claims 3 to 5, wherein p3 is 0, 1, or 2, and each R⁷ is independently selected from halogen, -C₁₋₈alkyl, or -C₁₋₈alkoxy, preferably F, Cl, Br, I, CH₃, or -OCH₃.

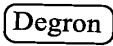
7. The compound according to Claim 1 or 2, wherein the  moiety is selected from

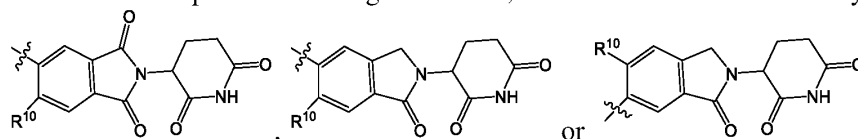


8. The compound according to Claim 7, wherein the  moiety is selected from

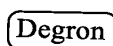


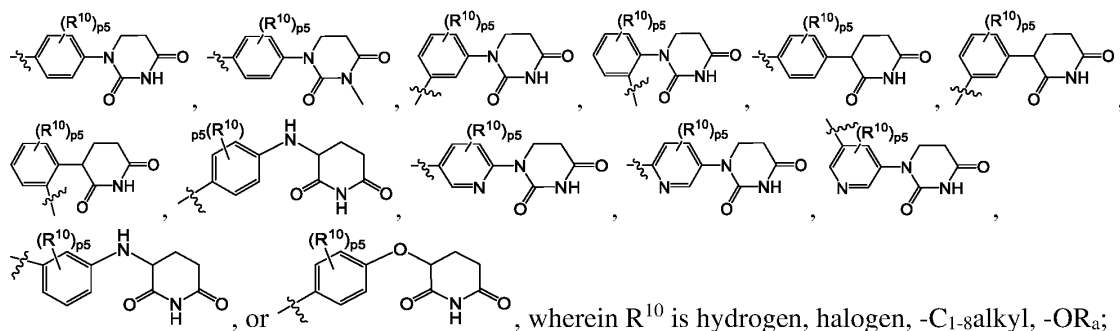
, R¹⁰ is selected from hydrogen or halogen; and p5 is 0 or 1.

9. The compound according to Claim 8, wherein the  moiety is selected from

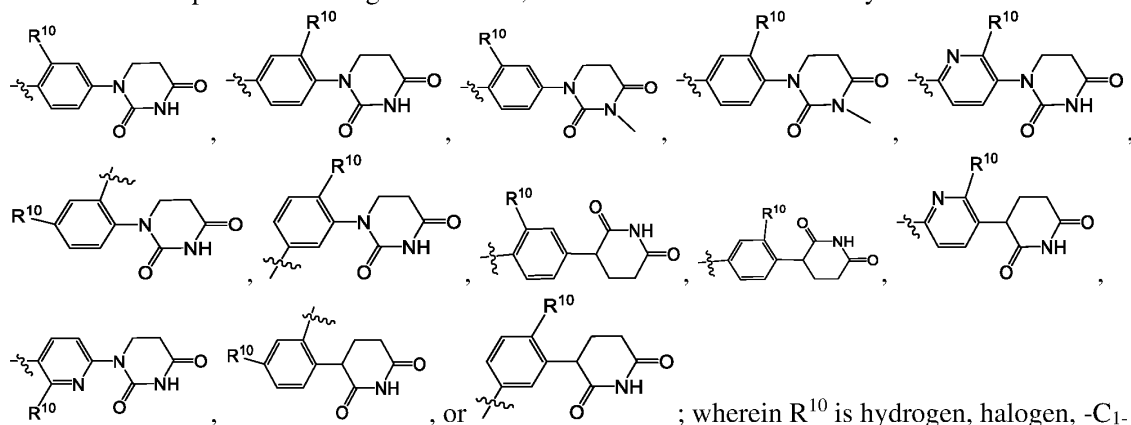


, R¹⁰ is selected from hydrogen, F, Cl, Br and I.

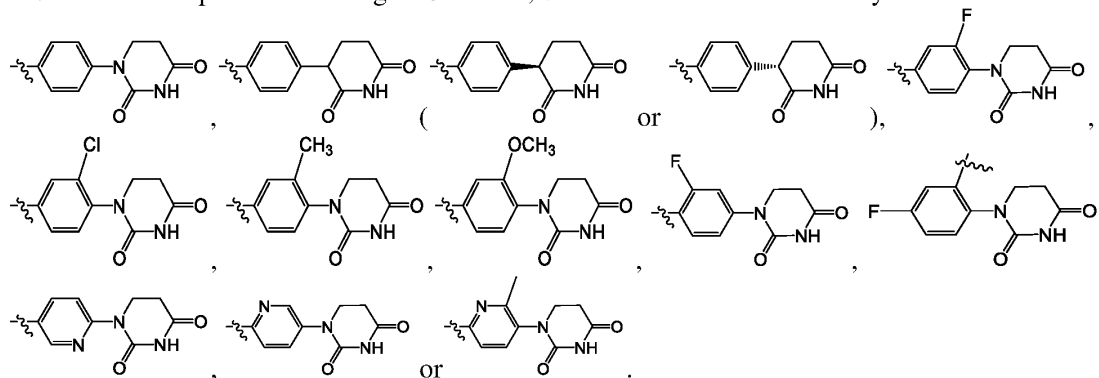
10. The compound according to Claim 1 or 2, wherein the  moiety is selected from



11. The compound according to Claim 10, wherein the **Degron** moiety is selected from



12. The compound according to Claim 11, wherein the **Degron** moiety is selected from



13. The compound according to Claim 1 or 2, wherein L_1 is a bond or $-O-$, and L_2 is a bond.

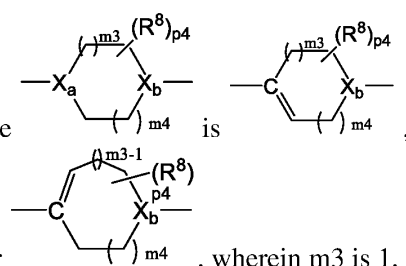
14. The compound according to Claim 1 or 2, wherein R_a and R_b are independently selected from hydrogen or CH_3 ; and n_1 is 1 or 2.

15. The compound according to Claim 1 or 2, wherein X_a is selected from CH or N; X_b is N; X_c is CH, and X_d is N.

16. The compound according to Claim 1 or 2, wherein m_1 , m_2 , m_3 , m_4 and m_5 are each independently selected from 0, 1 or 2, preferably 1.

17. The compound according to Claim 1 or 2, wherein p_4 is 0 or 1, R^8 is selected from halogen, OH, or $-C_{1-8}$ alkyl, preferably CH_3 .

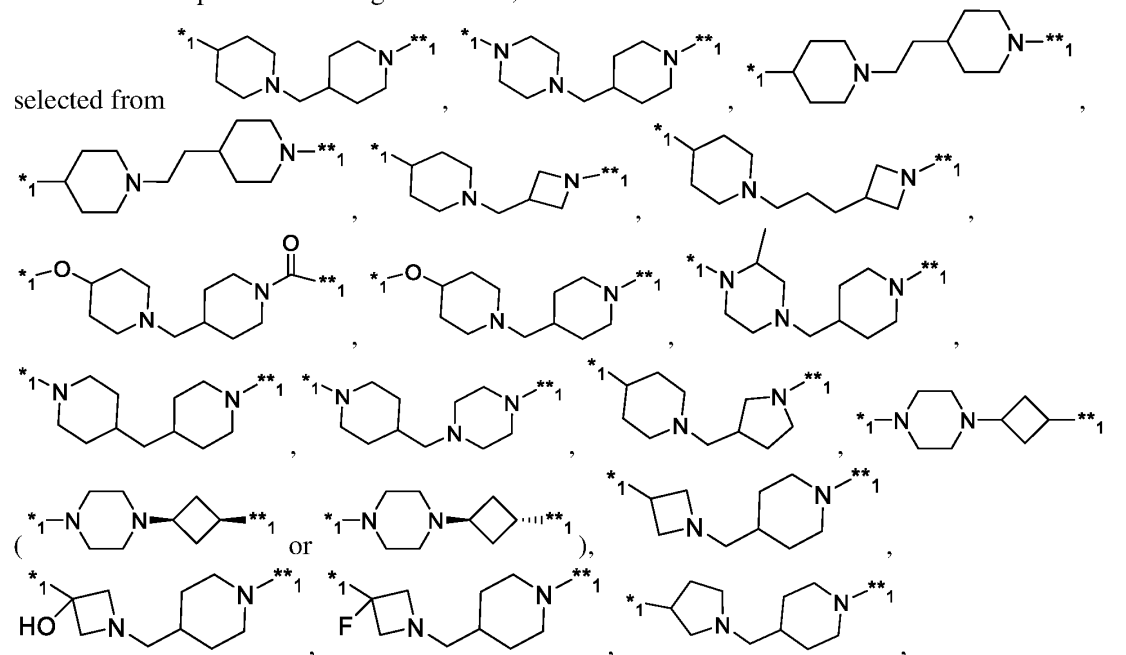
18. The compound according to Claim 1 or 2, wherein the

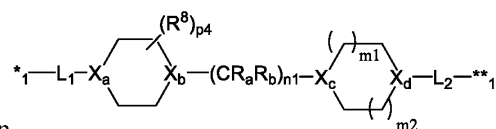
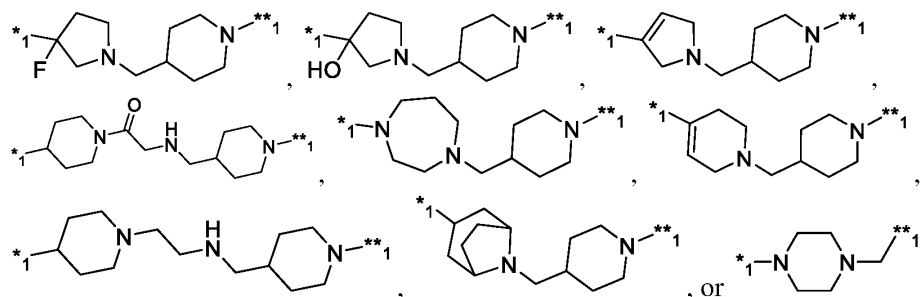


wherein m_3 and m_4 are each independently 0, 1, 2, 3 or 4, or 3 or 4 and m_4 is 0, 1, 2, 3 or 4.

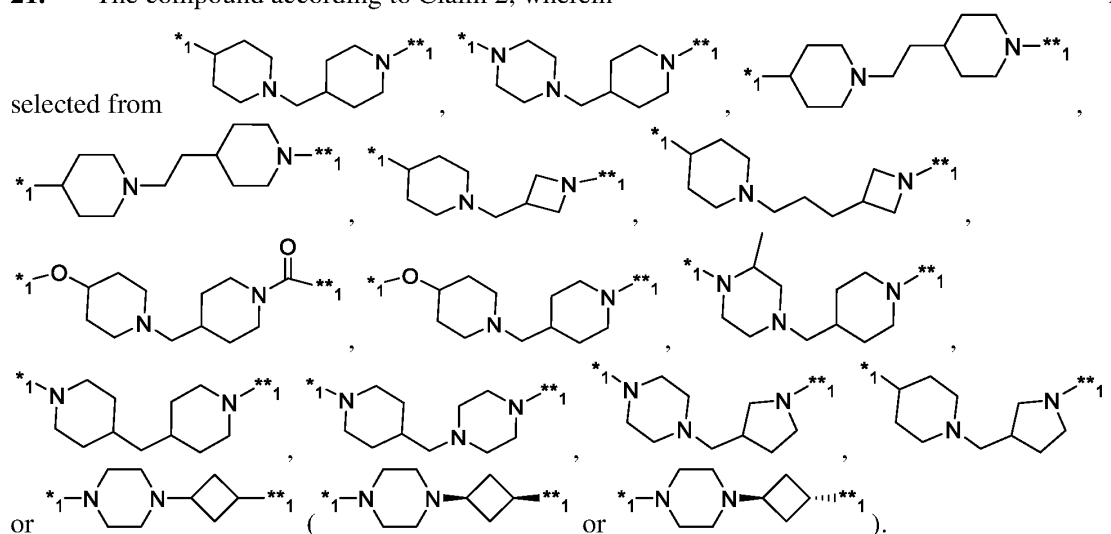
19. The compound according to Claim 1 or 2, wherein p_4 is 2, two non-adjacent R^8 form a bridge comprising one or two or three CH_2 .

20. The compound according to Claim 1, wherein

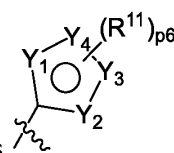




is



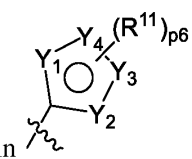
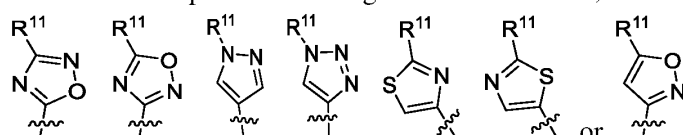
24. The compound according to any Claims of 1-23, wherein R³ is hydrogen; R⁴ and R⁵ are selected from hydrogen or methyl.

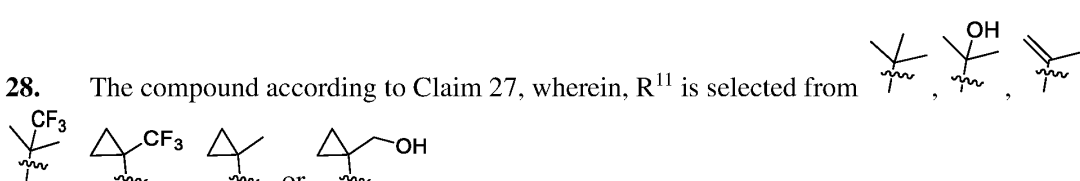


25. The compound according to any Claims of 1-24, wherein R⁹ is ; Y₁, Y₂, Y₃ and Y₄ are selected from CH, O, S or N; R¹¹ is selected from hydrogen, halogen, -C₁₋₈alkyl, -C₁₋₈alkoxy, -C₂₋₈alkenyl, -C₂₋₈alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, -CN, -NO₂, -OR_a, -

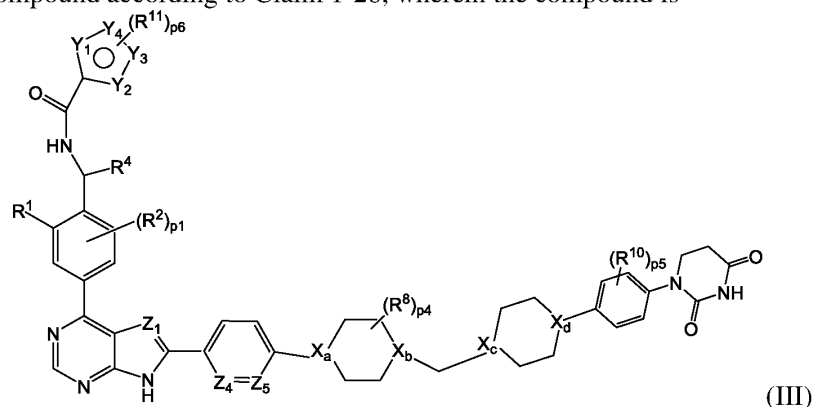
SO₂R_a, -COR_a, -CO₂R_a, -CONR_aR_b, -C(=NR_a)NR_bR_c, -NR_aR_b, -NR_aCOR_b, -NR_aCONR_bR_c, -NR_aCO₂R_b, -NR_aSONR_bR_c, -NR_aSO₂NR_bR_c, or -NR_aSO₂R_b, each of said -C₁₋₈alkyl, -C₂₋₈alkenyl, -C₂₋₈alkynyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with halogen, hydroxy, -haloC₁₋₈alkyl, -C₁₋₈alkoxy, cycloalkyl, heterocyclyl, aryl, or heteroaryl; R_a, R_b, and R_c are each independently hydrogen, -C₁₋₈alkyl, -C₂₋₈alkenyl, -C₂₋₈alkynyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl; and p₆ is 0, 1, 2, 3 or 4.

26. The compound according to Claim 25, wherein Y₁ is CH, S, N or O; Y₂ is CH, O or N; Y₃ is O, S or N; and Y₄ is S, CH or N.

27. The compound according to Claims 25 or 26, wherein  is selected from .

28. The compound according to Claim 27, wherein, R¹¹ is selected from .

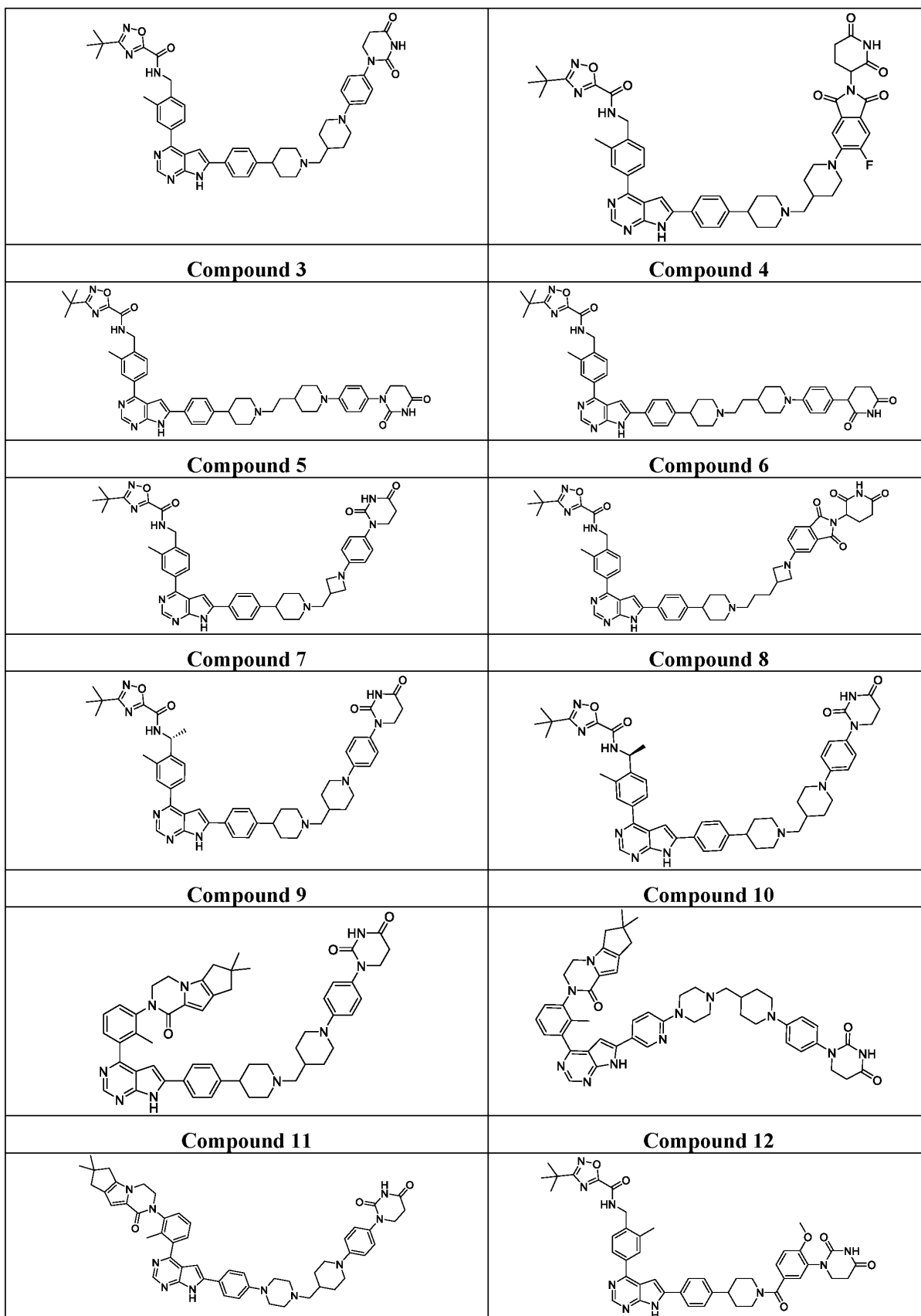
29. The compound according to Claim 1-28, wherein the compound is

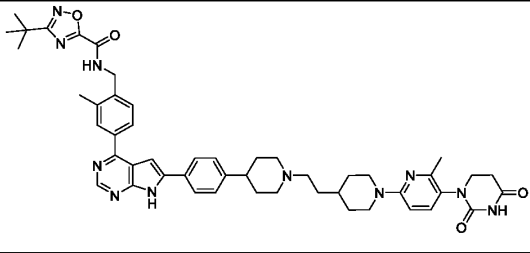
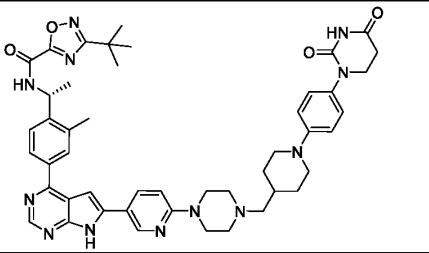
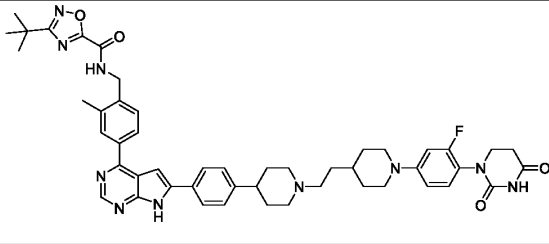
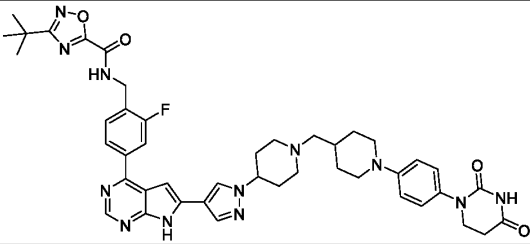
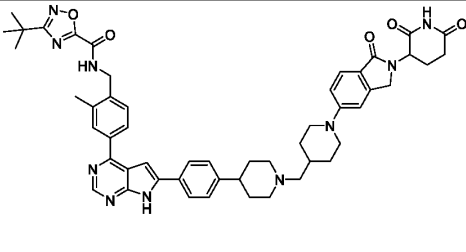
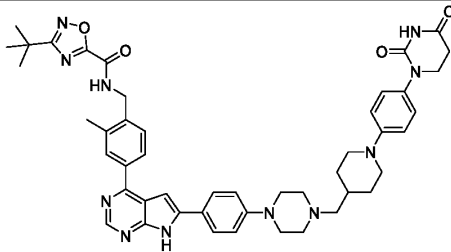
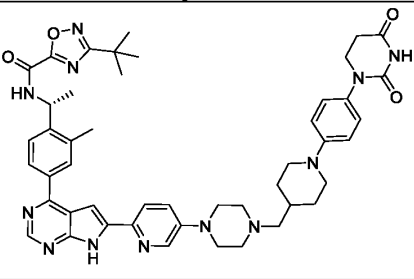
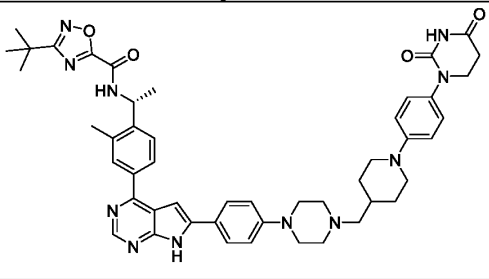
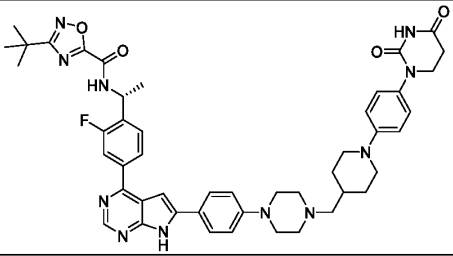
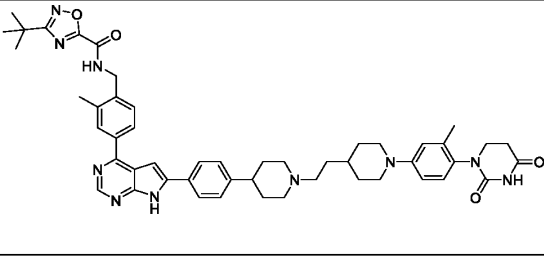


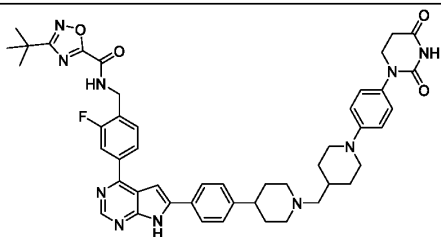
wherein the variables are defined as herein.

30. The compound according to Claim 1, wherein the compound is selected from

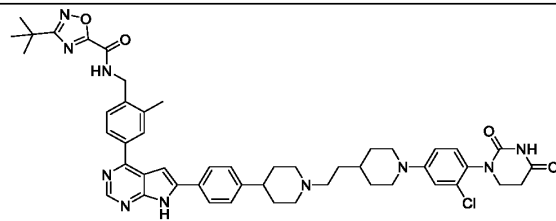
Compound 1	Compound 2
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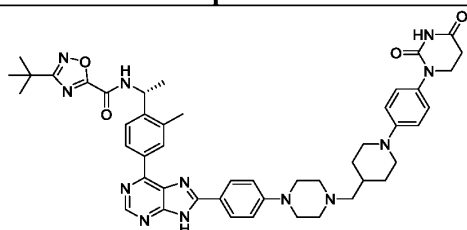
Compound 13	Compound 14
	
Compound 15	Compound 16
	
Compound 17	Compound 18
	
Compound 19	Compound 20
	
Compound 21	Compound 22
	
Compound 23	Compound 24



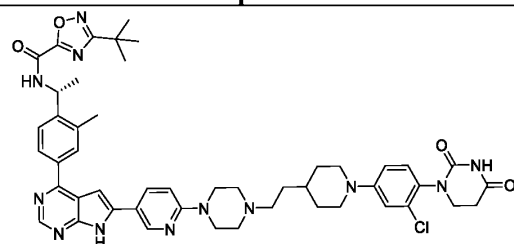
Compound 25



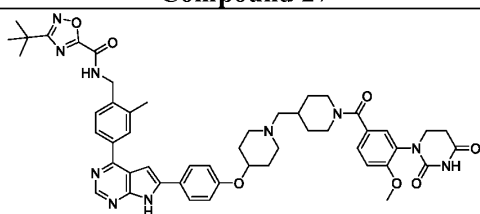
Compound 26



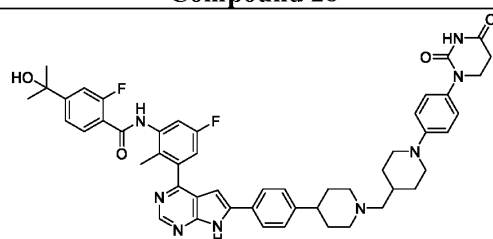
Compound 27



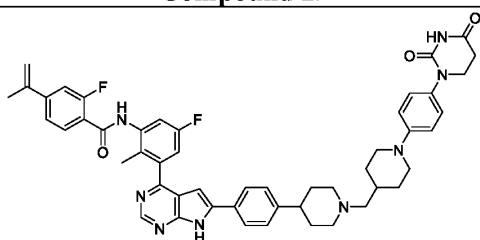
Compound 28



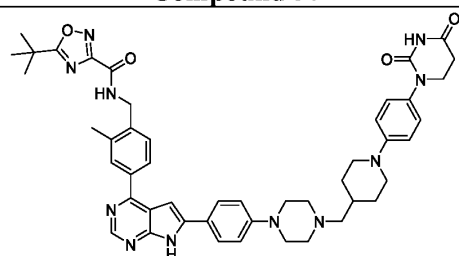
Compound 29



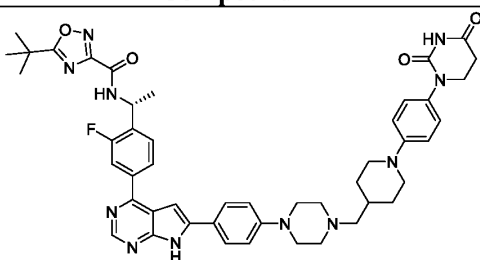
Compound 30



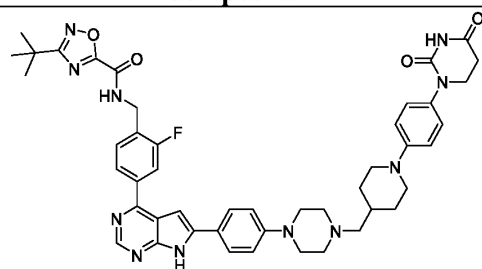
Compound 31



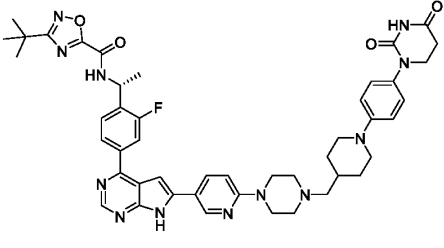
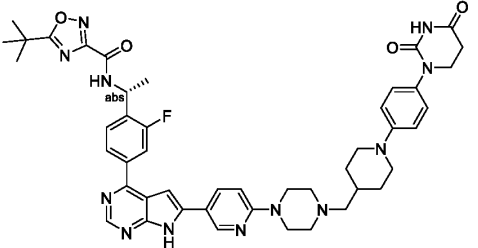
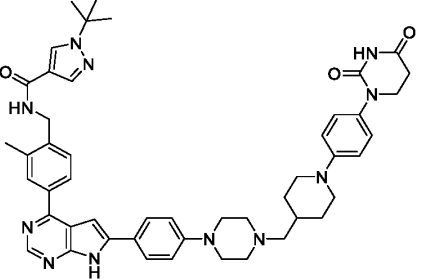
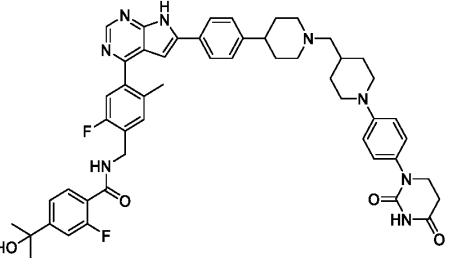
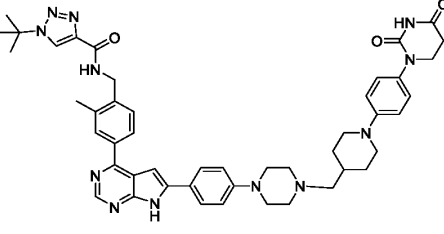
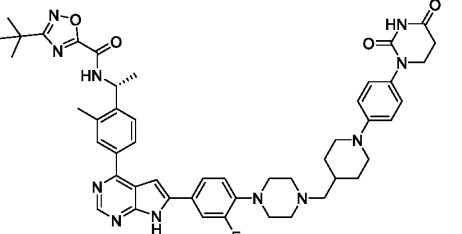
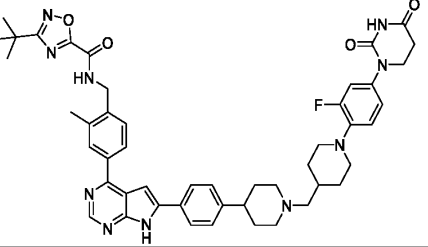
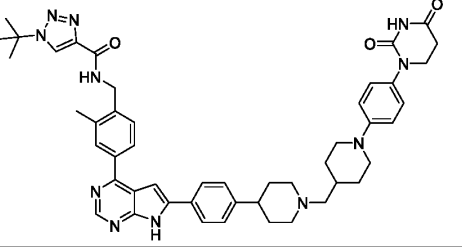
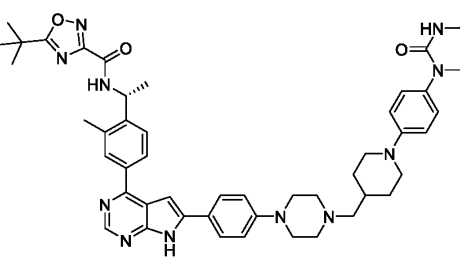
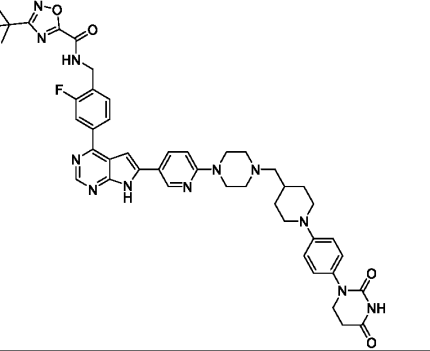
Compound 32

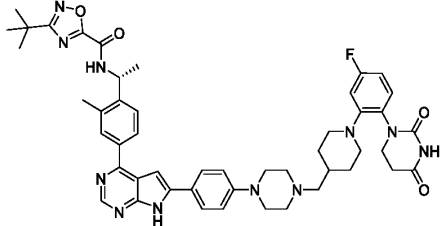
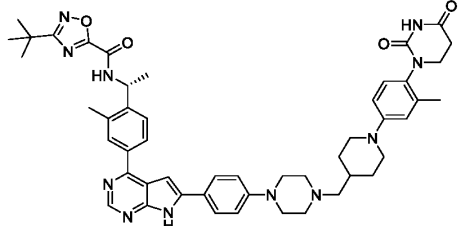
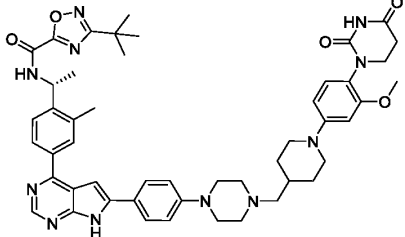
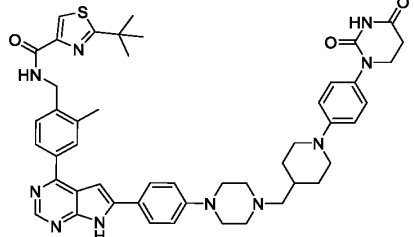
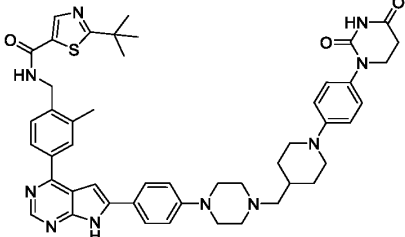
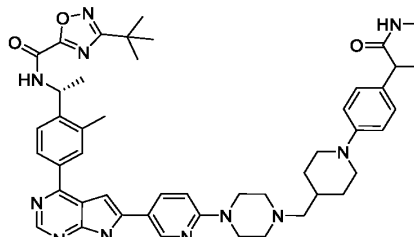
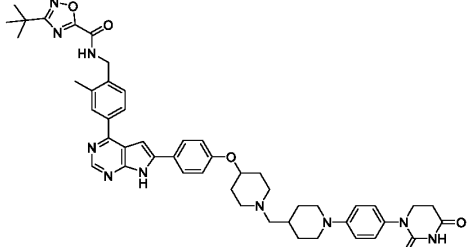
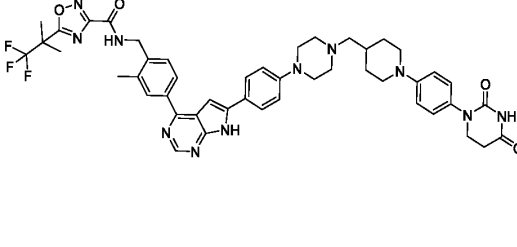
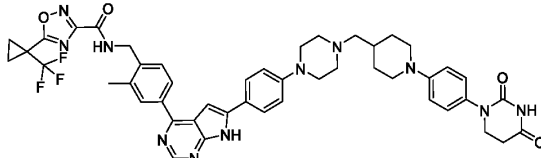
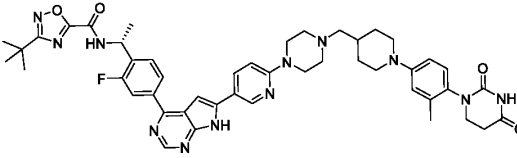
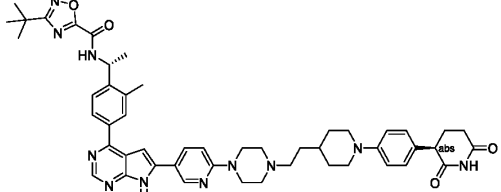
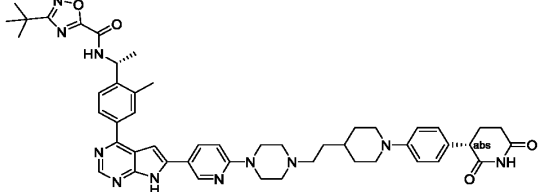


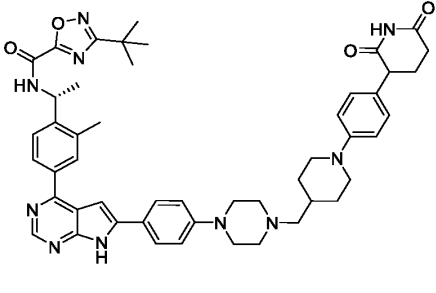
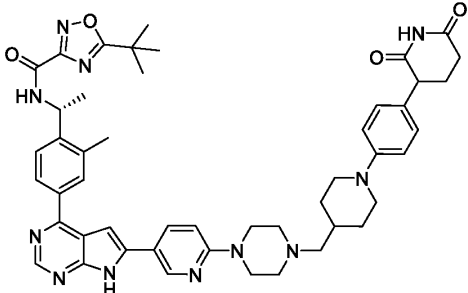
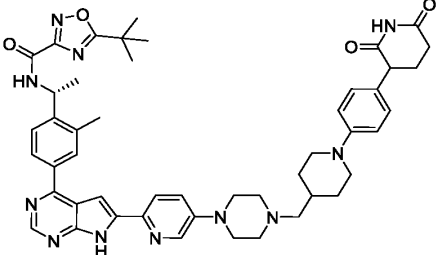
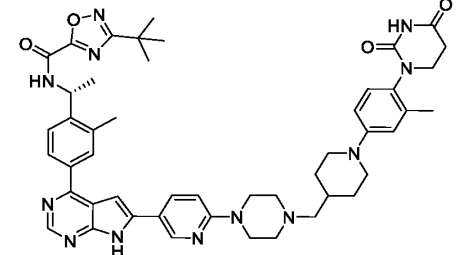
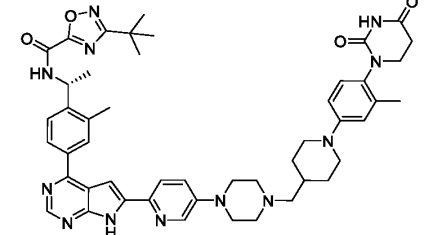
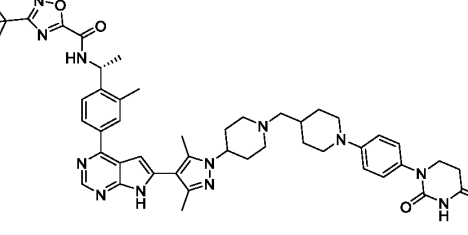
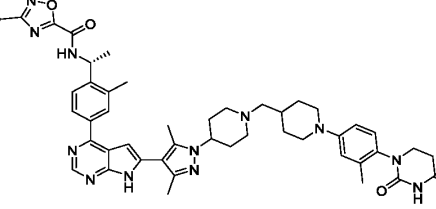
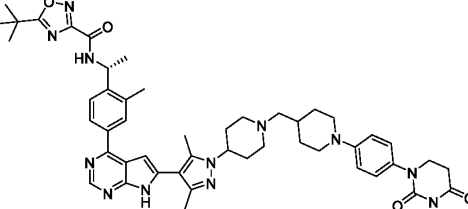
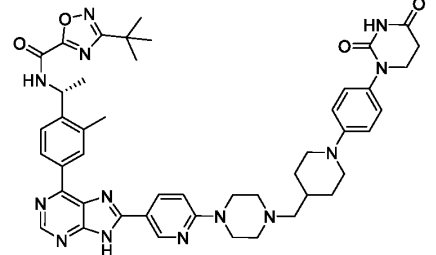
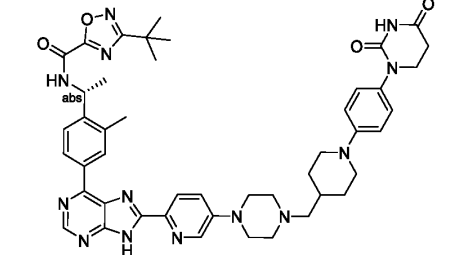
Compound 33

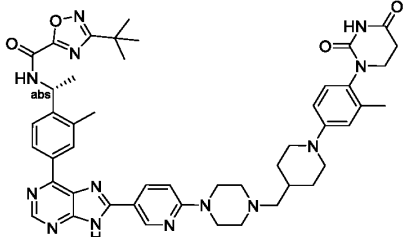
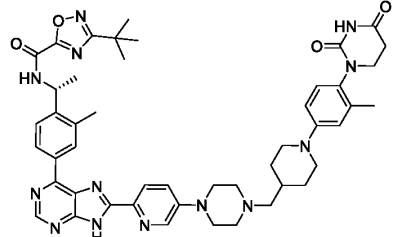
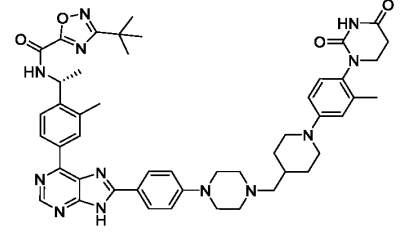
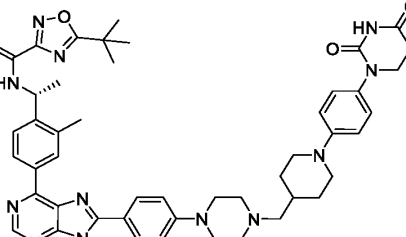
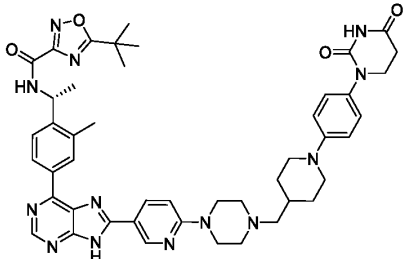
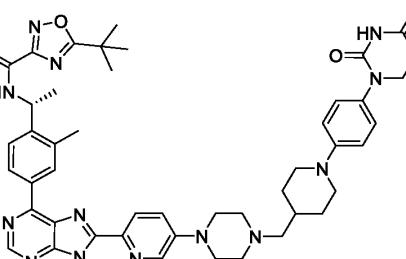
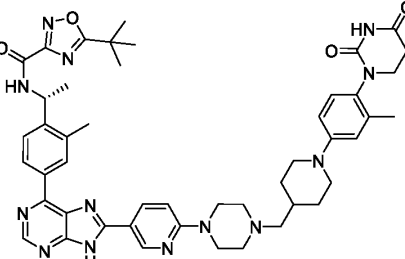
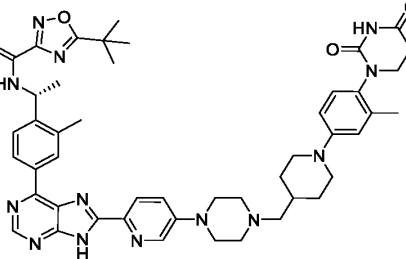
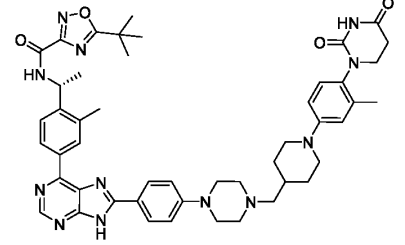
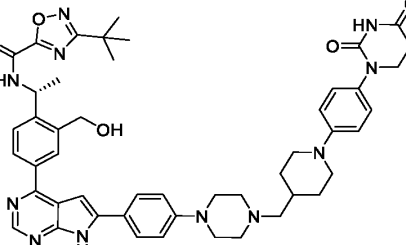


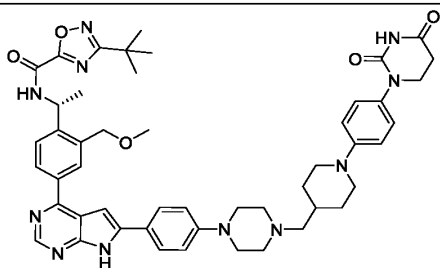
Compound 34

	
Compound 35	Compound 36
	
Compound 37	Compound 38
	
Compound 39	Compound 40
	
Compound 41	Compound 42
	
Compound 43	Compound 44

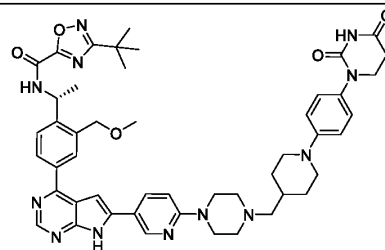
	
Compound 45	Compound 46
	
Compound 47	Compound 48
	
Compound 49	Compound 50
	
Compound 51	Compound 52
	
Compound 53	Compound 54
	
Compound 55	Compound 56

	
Compound 57	Compound 58
	
Compound 59	Compound 60
	
Compound 61	Compound 62
	
Compound 63	Compound 64
	
Compound 65	Compound 66

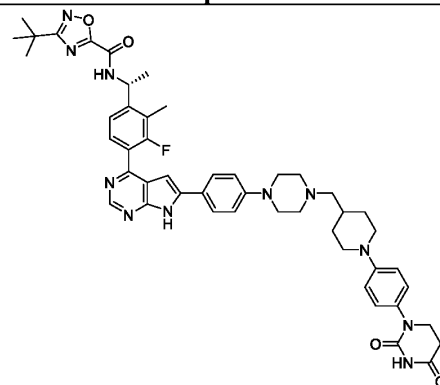
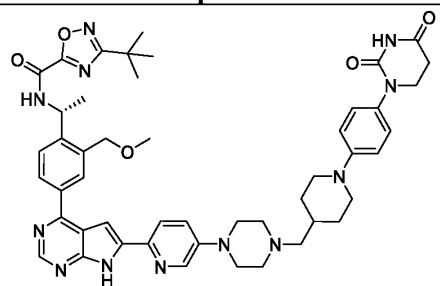
	
Compound 67	Compound 68
	
Compound 69	Compound 70
	
Compound 71	Compound 72
	
Compound 73	Compound 74
	
Compound 75	Compound 76



Compound 77

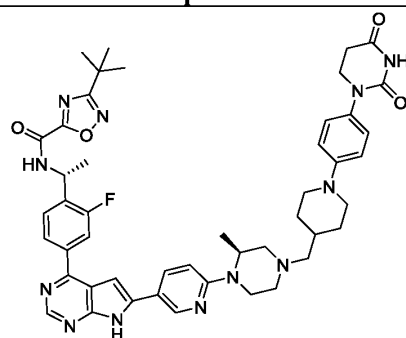
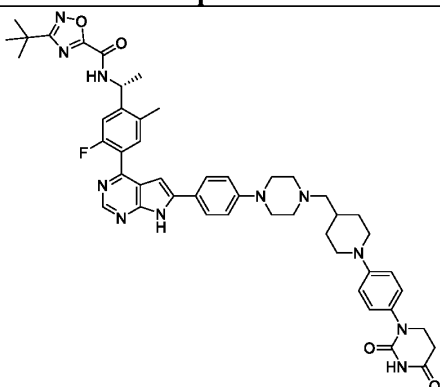


Compound 78



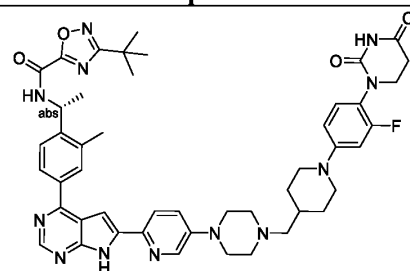
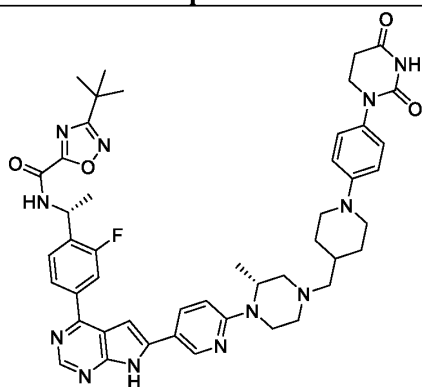
Compound 79

Compound 80



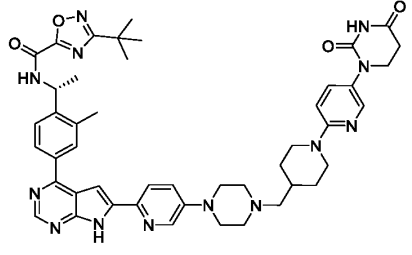
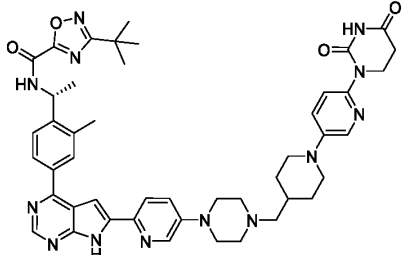
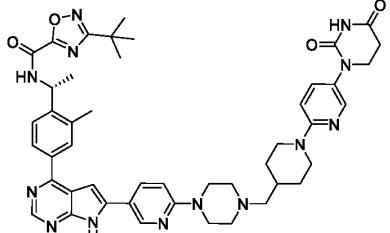
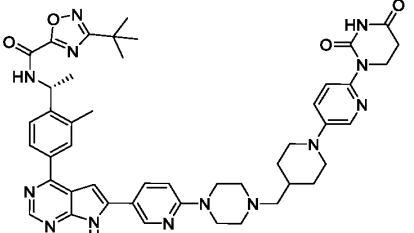
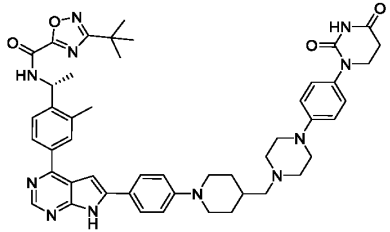
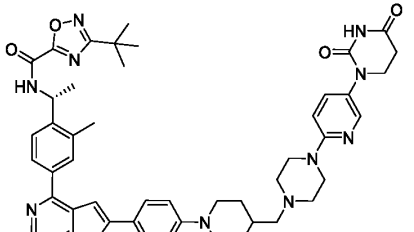
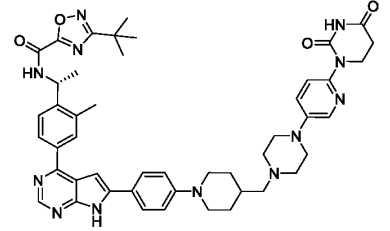
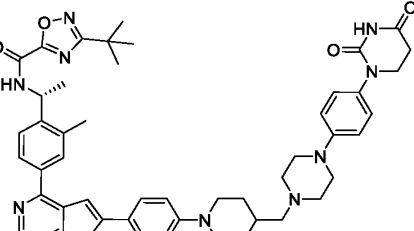
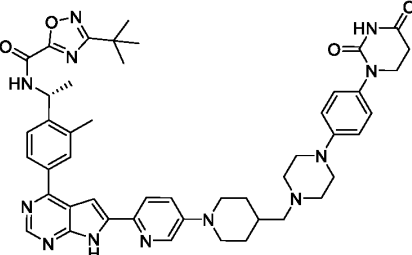
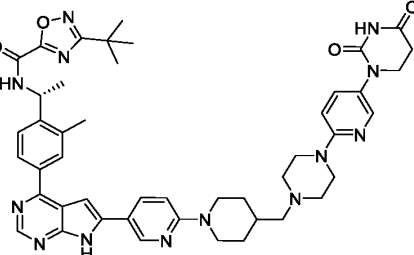
Compound 81

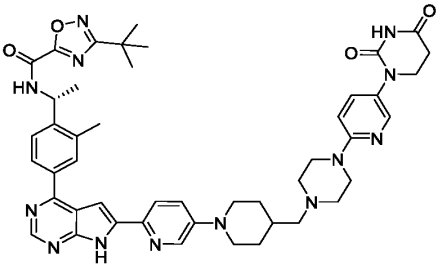
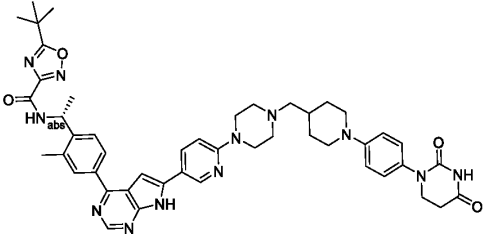
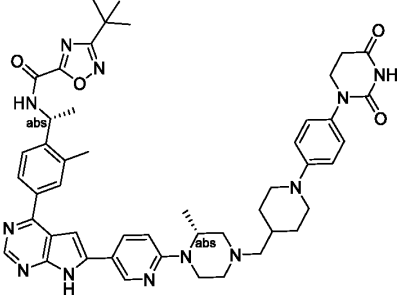
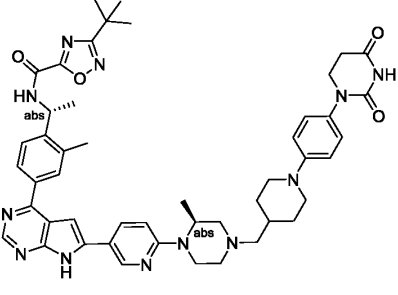
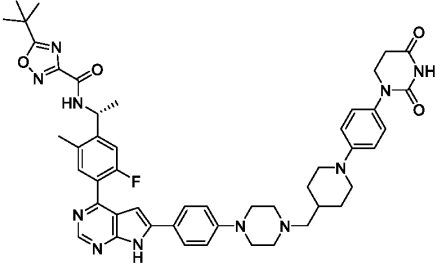
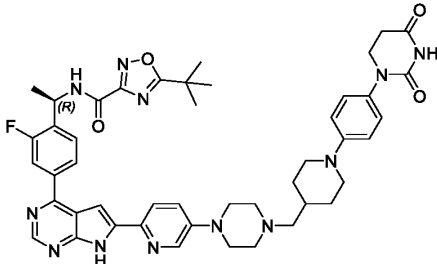
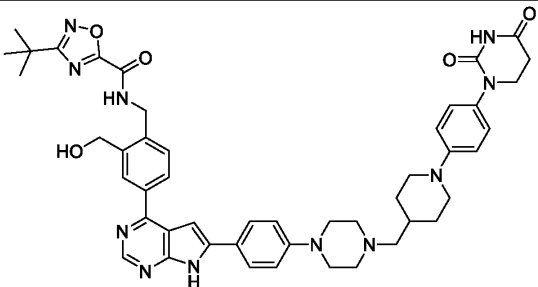
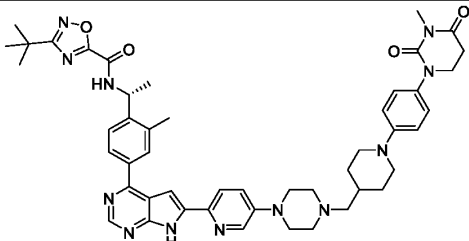
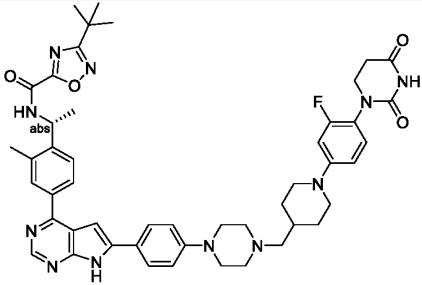
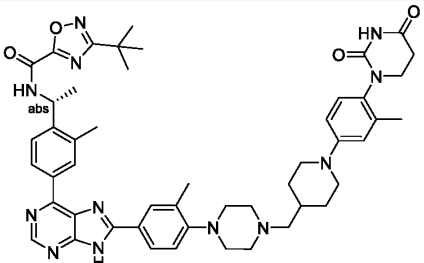
Compound 82

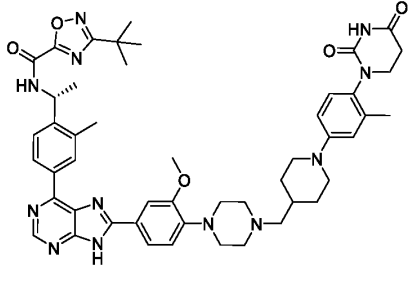
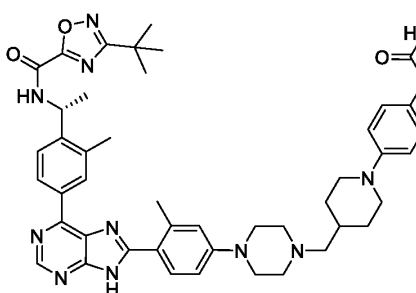
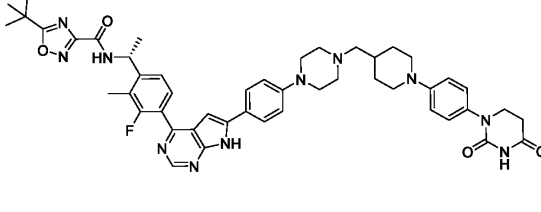
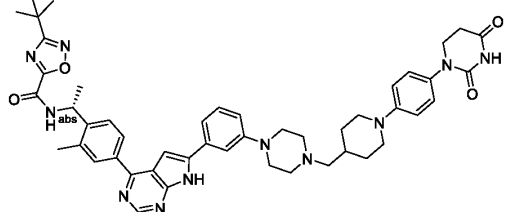
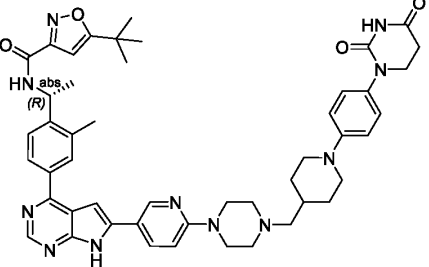
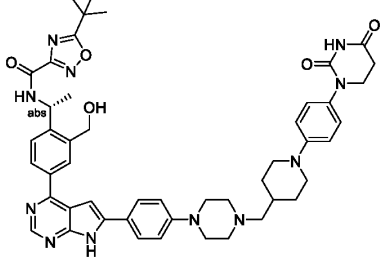
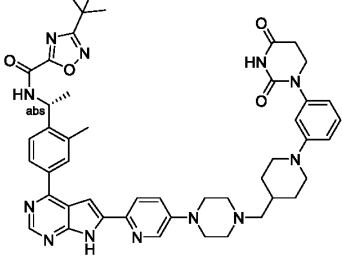
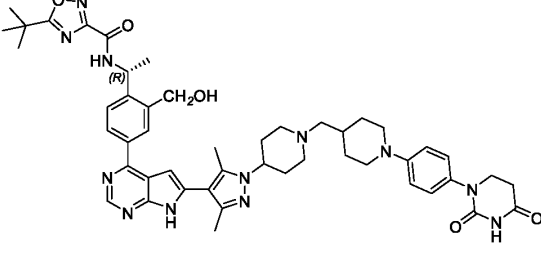
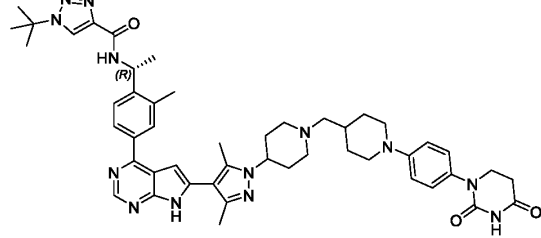
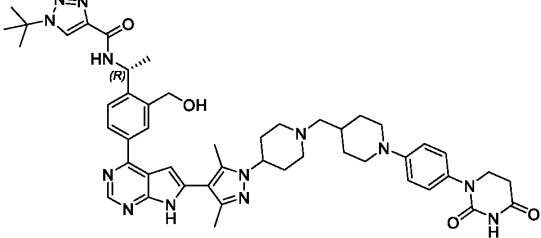


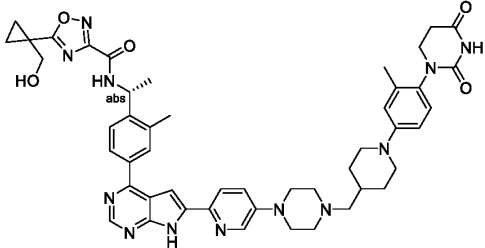
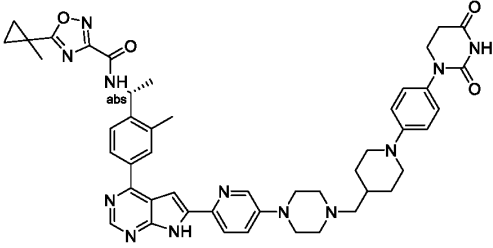
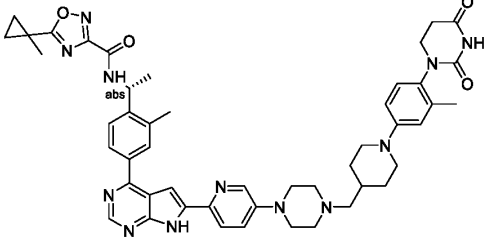
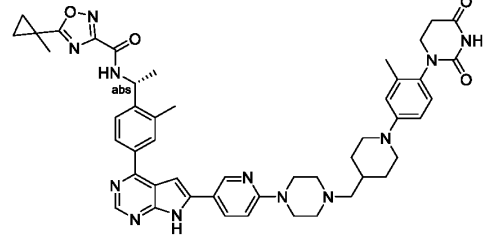
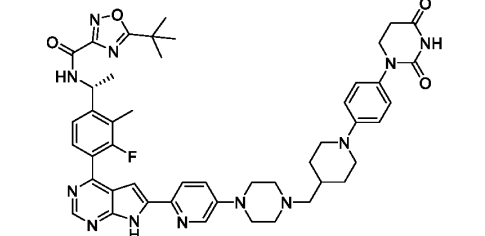
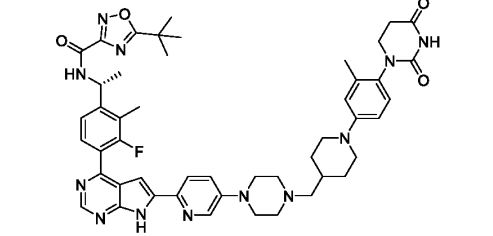
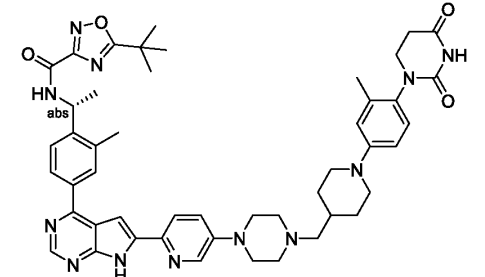
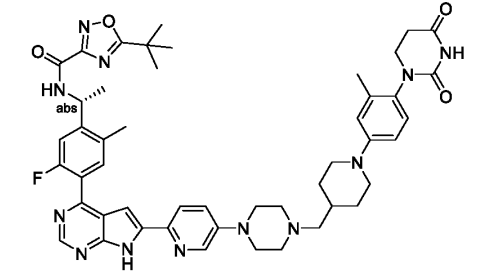
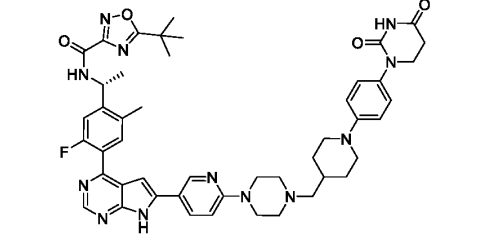
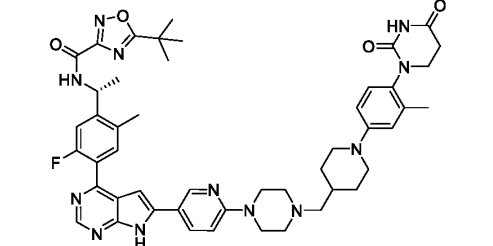
Compound 83

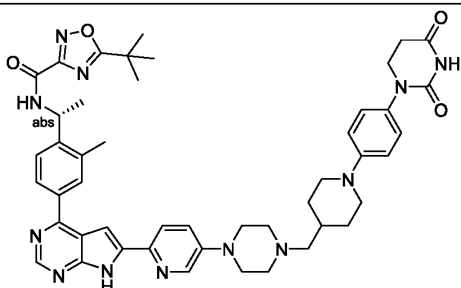
Compound 84

	
Compound 95	Compound 96
	
Compound 97	Compound 98
	
Compound 99	Compound 100
	
Compound 101	Compound 102
	
Compound 103	Compound 104

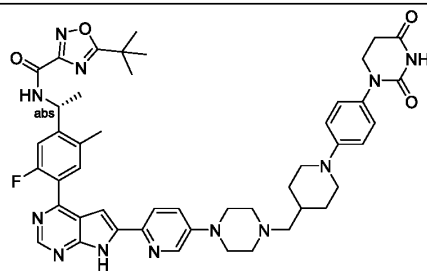
	
Compound 105	Compound 106
	
Compound 107	Compound 108
	
Compound 109	Compound 110
	
Compound 111	Compound 112
	
Compound 113	Compound 114

	
Compound 115	Compound 116
	
Compound 117	Compound 118
	
Compound 119	Compound 120
	
Compound 121	Compound 122
	
Compound 123	Compound 124

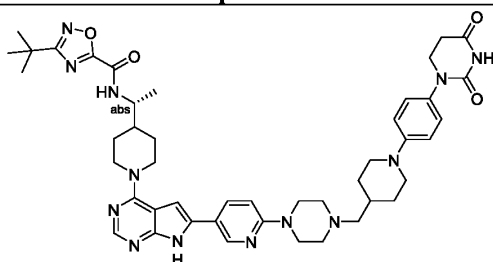
	
Compound 125	Compound 126
	
Compound 127	Compound 128
	
Compound 129	Compound 130
	
Compound 131	Compound 132
	
Compound 133	Compound 134



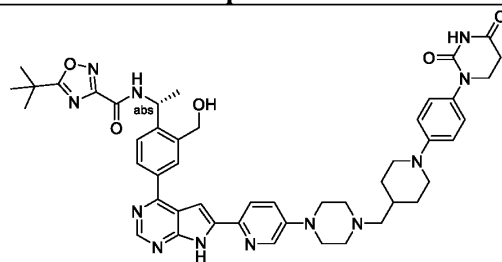
Compound 135



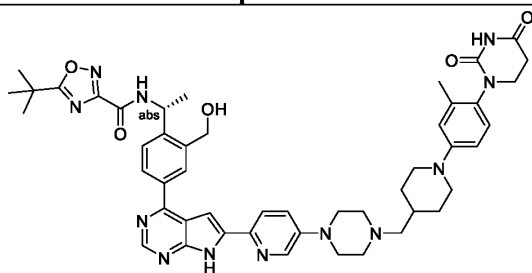
Compound 136



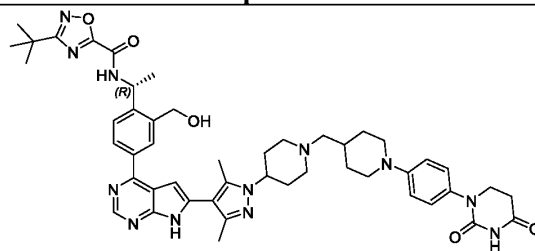
Compound 137



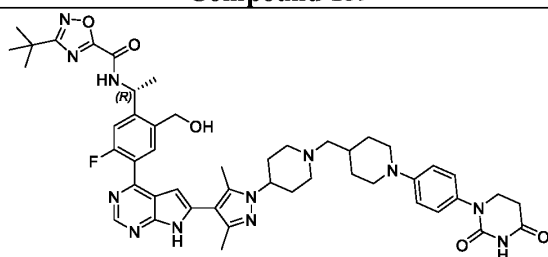
Compound 138



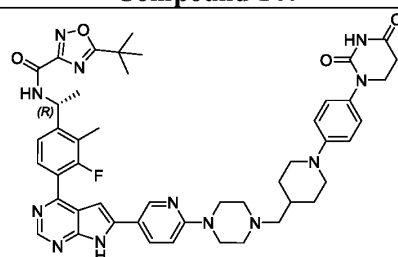
Compound 139



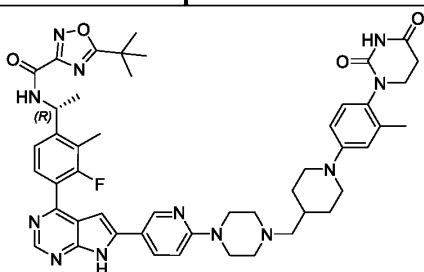
Compound 140



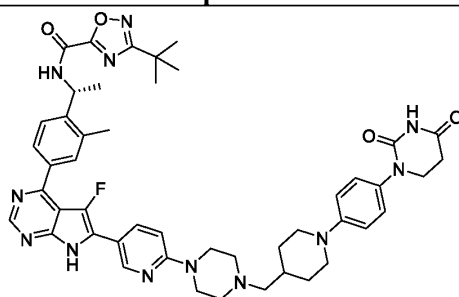
Compound 141



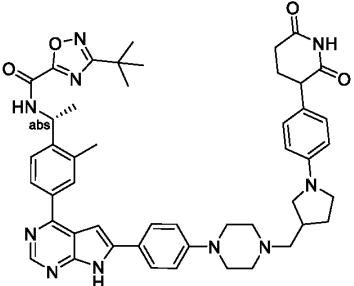
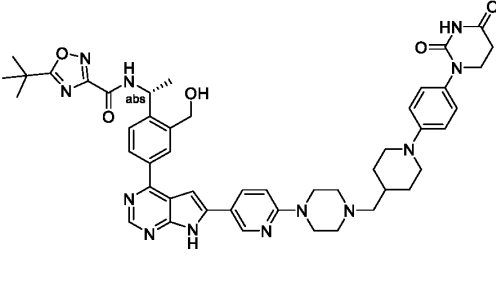
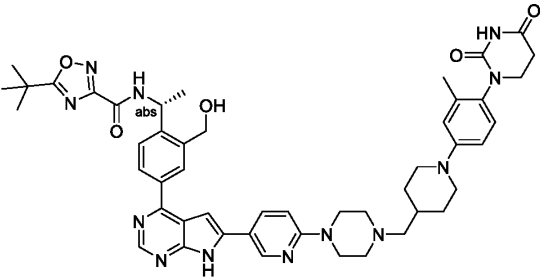
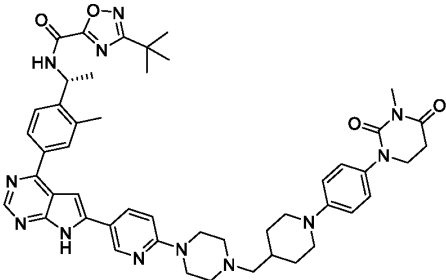
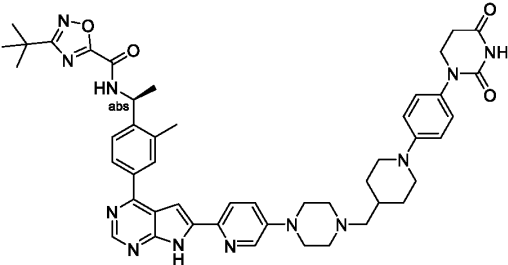
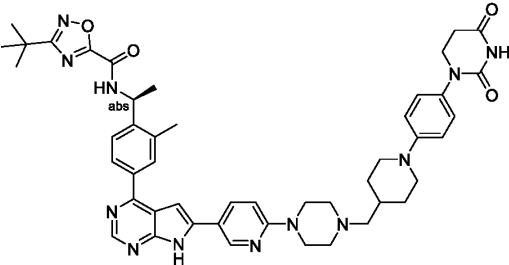
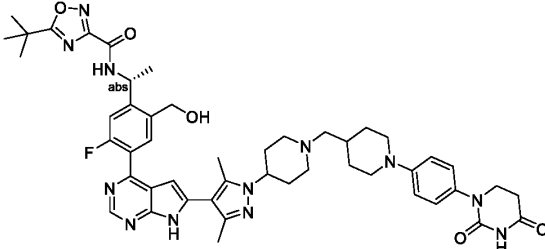
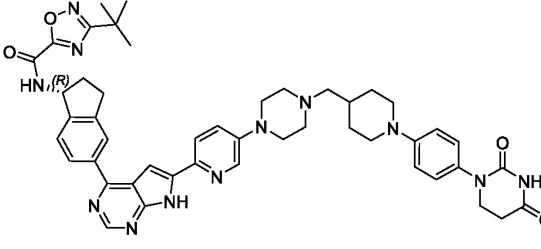
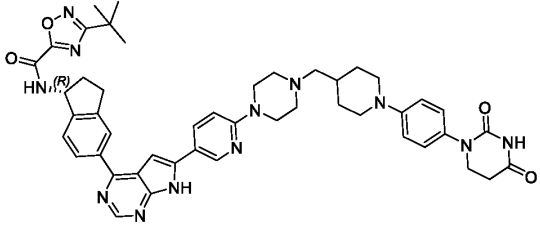
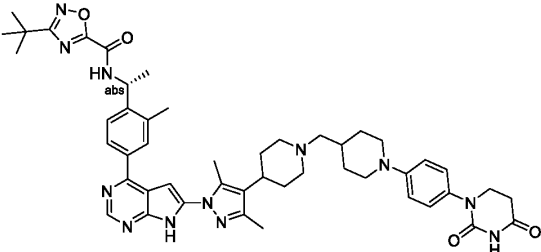
Compound 142

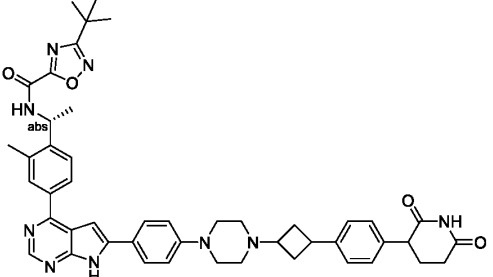
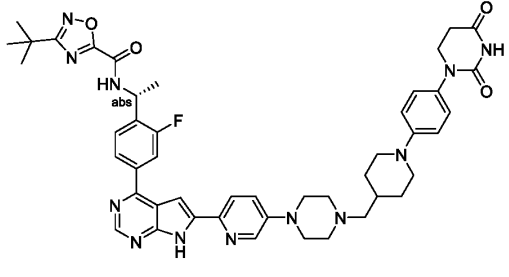
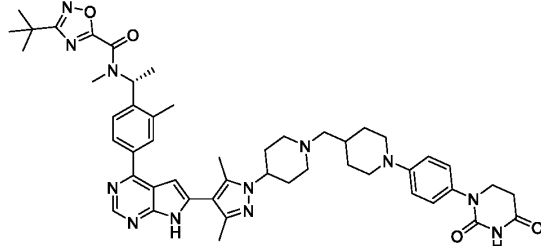
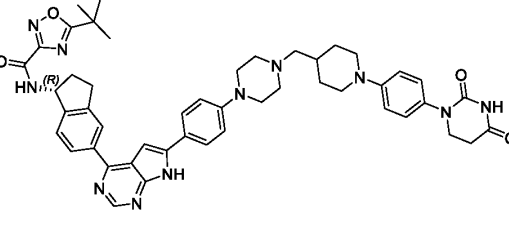
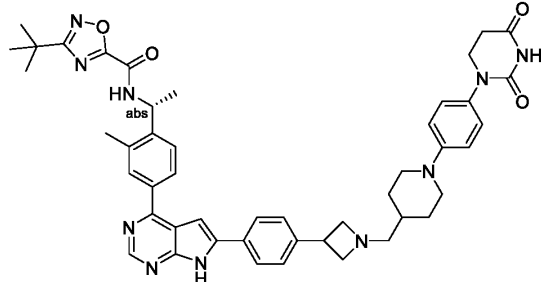
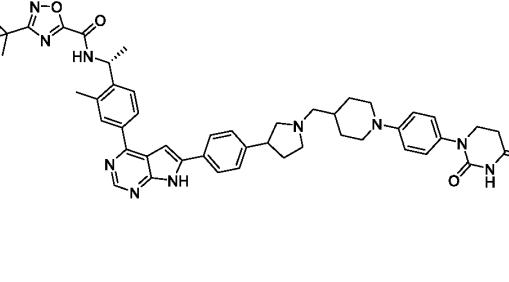
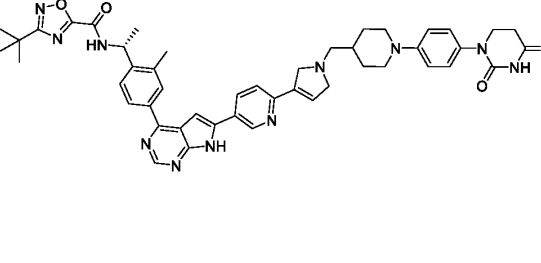
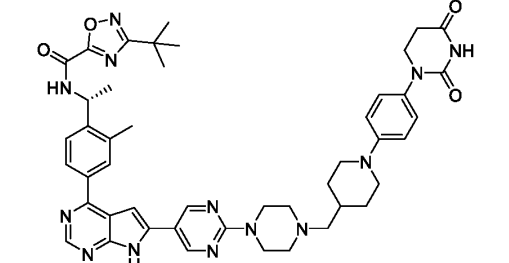
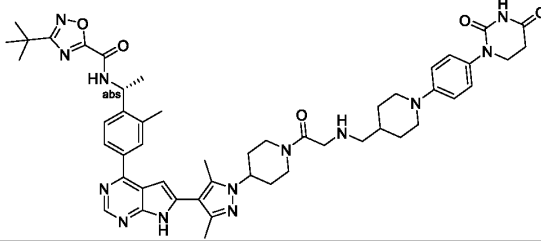
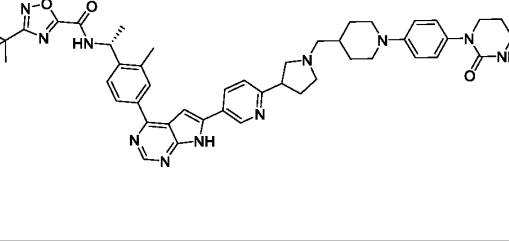


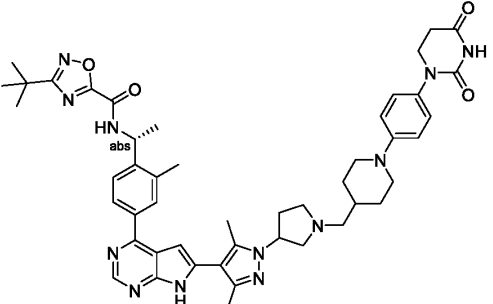
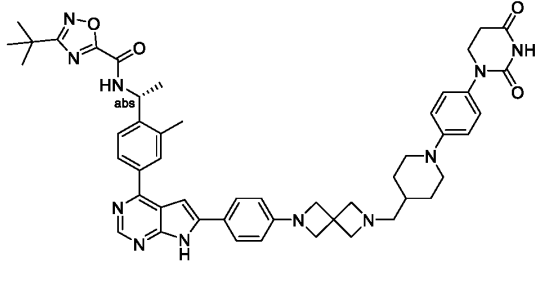
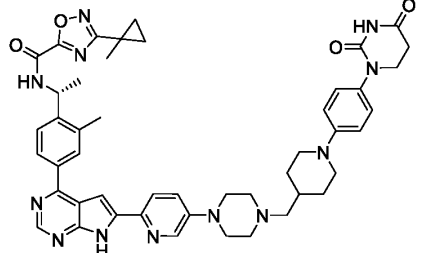
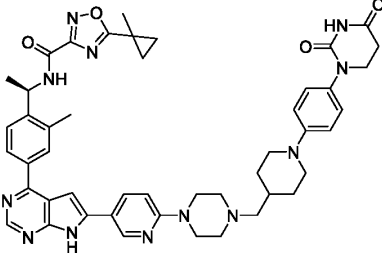
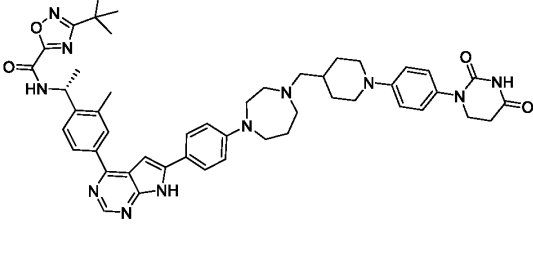
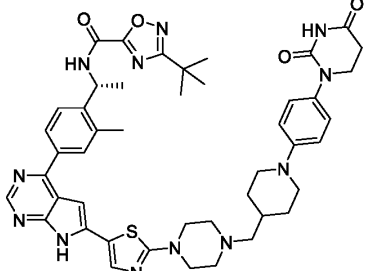
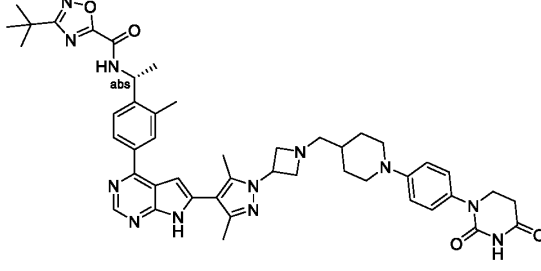
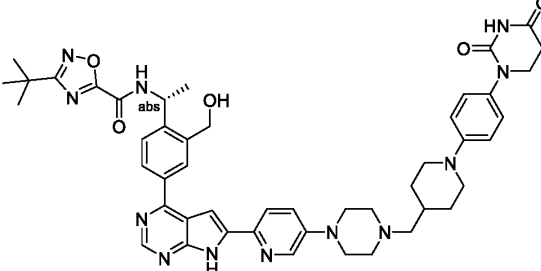
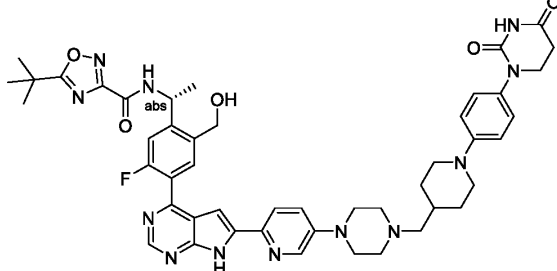
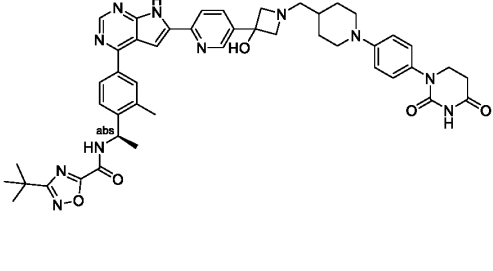
Compound 143

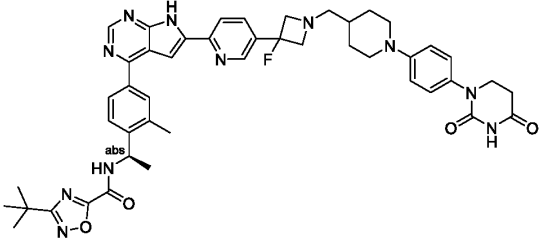
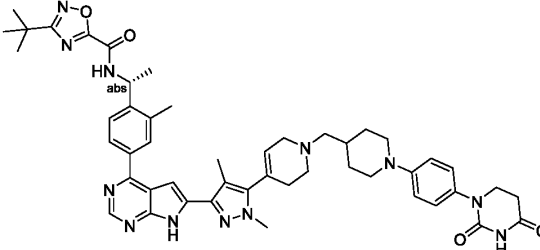
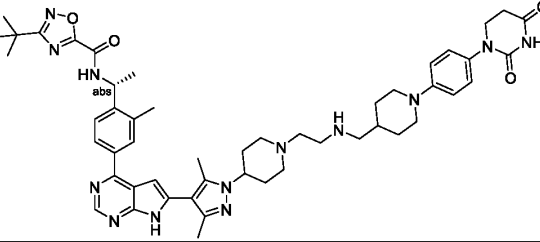
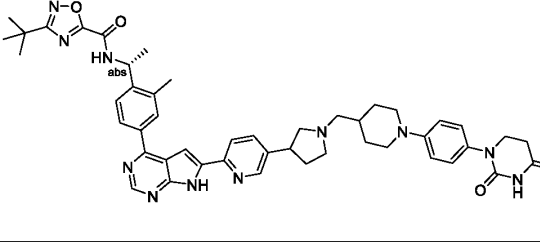
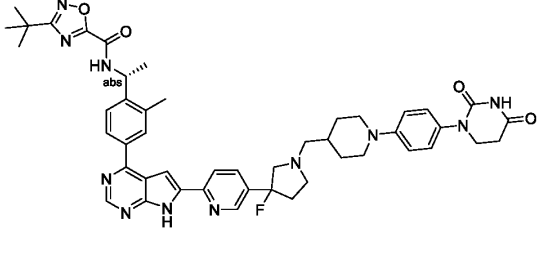
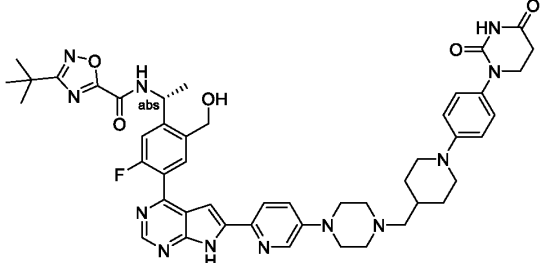
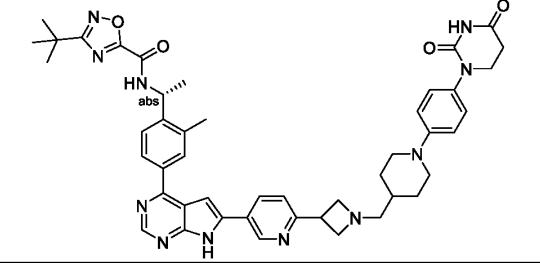
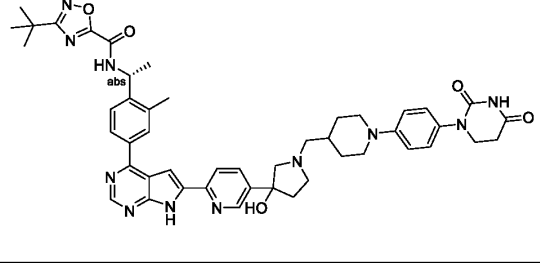
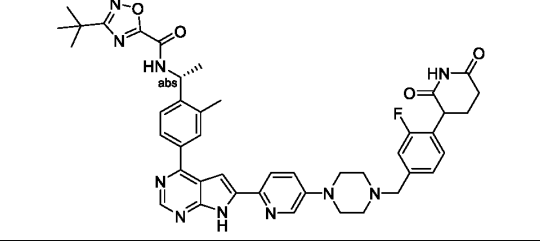
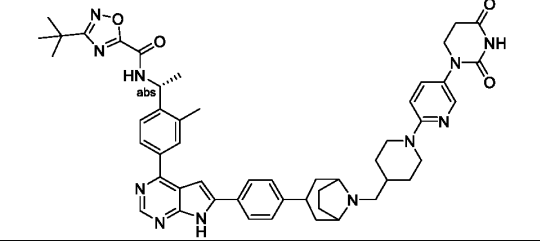


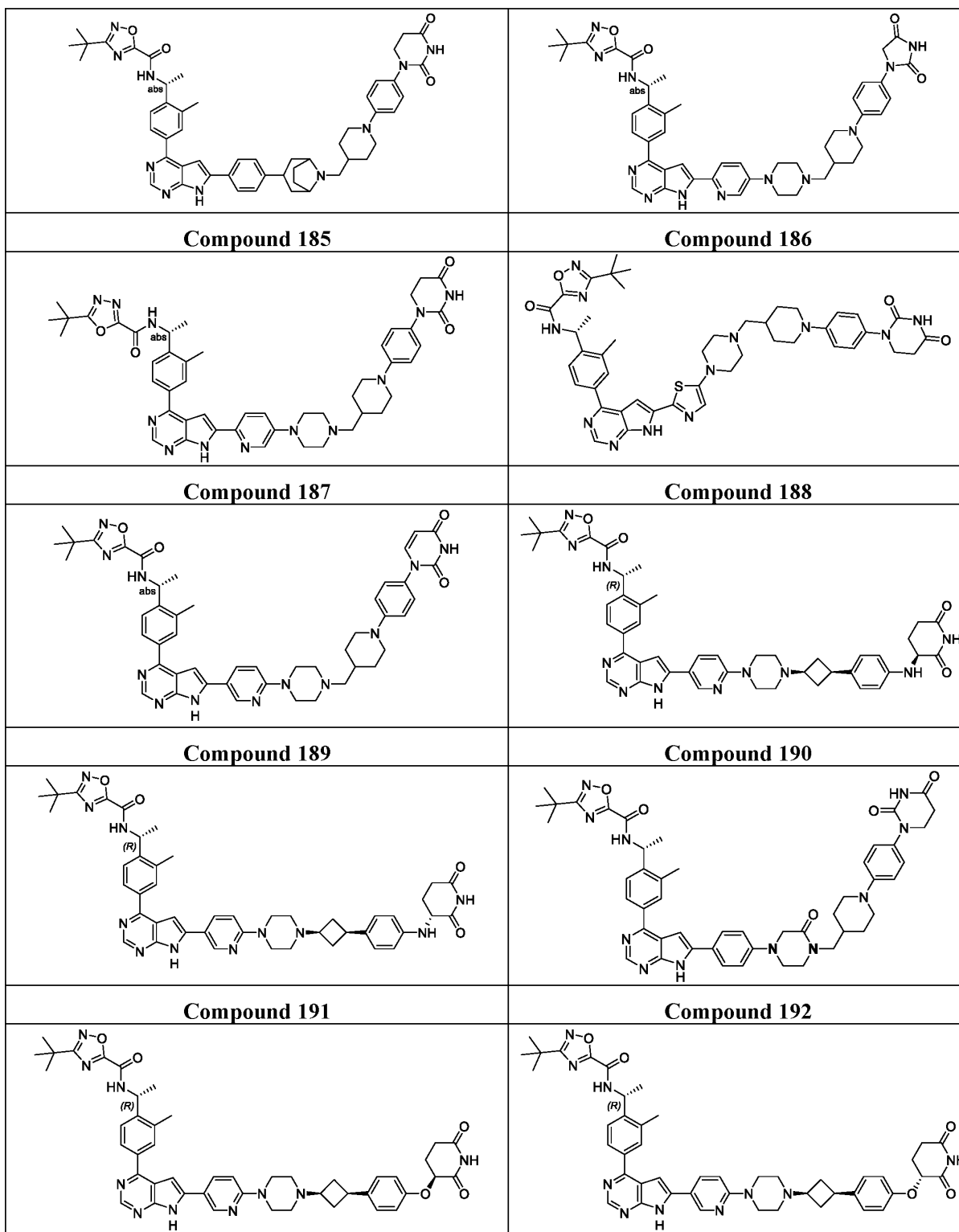
Compound 144

	
Compound 145	Compound 146
	
Compound 147	Compound 148
	
Compound 149	Compound 150
	
Compound 151	Compound 152
	
Compound 153	Compound 154

	
Compound 155	Compound 156
	
Compound 157	Compound 158
	
Compound 159	Compound 160
	
Compound 161	Compound 162
	
Compound 163	Compound 164

	
Compound 165	Compound 166
	
Compound 167	Compound 168
	
Compound 169	Compound 170
	
Compound 171	Compound 172
	
Compound 173	Compound 174

	
Compound 175	Compound 176
	
Compound 177	Compound 178
	
Compound 179	Compound 180
	
Compound 181	Compound 182
	
Compound 183	Compound 184



- 31.** A pharmaceutical composition comprising the compound according to any one of Claims 1-30, or a pharmaceutically acceptable salt thereof, and at least one pharmaceutically acceptable carrier or excipient.
- 32.** A method of inhibiting BTK activity, which comprises administering to an individual the compound according to any one of Claims 1-30, or a pharmaceutically acceptable salt thereof, including the compound of formula (I) or the specific compounds exemplified herein.
- 33.** A method of treating a disease or disorder in a patient comprising administering to the patient a therapeutically effective amount of the compound any one of Claims 1-30, or a pharmaceutically acceptable salt thereof as an BTK kinase inhibitor, wherein the disease or disorder is associated with inhibition of BTK, preferably, the disease or disorder is cancer.
- 34.** A method of decreasing BTK activity by inhibition and/or protein degradation, comprising administering to an individual the compound according to any one of Claims 1-30, or a pharmaceutically acceptable salt thereof.