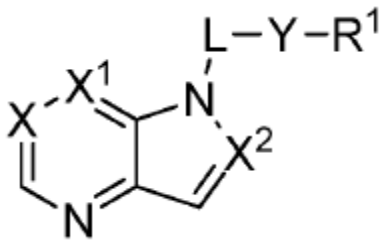
CLAIMS

We Claim:

1. A compound of formula I,



I

or a pharmaceutically acceptable salt thereof, wherein:

X is CR^2; X^1 is N or CR^2;

X^2 is CR^2;

each R^2 is independently selected from R, halogen, -haloalkyl, —OR, —SR, —CN, —NO_2, —SO_2R, —SOR, —C(O)R, —CO_2R, —$C(O)N(R)_2$, —NRC(O)R, —$NRC(O)N(R)_2$, —$NRSO_2R$, or —$N(R)_2$;

each R is independently hydrogen, C_{1-6} aliphatic, C_{3-10} aryl, a 3-8 membered saturated or partially unsaturated carbocyclic ring, a 3-7 membered heterocylic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur; each of which is optionally substituted; or

two R groups on the same atom are taken together with the atom to which they are attached to form a C_{3-10} aryl, a 3-8 membered saturated or partially unsaturated carbocyclic ring, a 3-7 membered heterocylic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur; each of which is optionally substituted;

L is a divalent group selected from C_{1-6} aliphatic, C_{3-10} aryl, a 3-8 membered saturated or partially unsaturated carbocyclic ring, a 3-7 membered heterocylic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur; each of which is optionally substituted; or L is a divalent group selected from Cis aliphatic-C_{3-10}

aryl, C_{1-6} aliphatic-3-8 membered saturated or partially unsaturated carbocyclic ring, C_{1-6} aliphatic-3-7 membered heterocylic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur, and a C_{1-6} aliphatic-5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur; each of which is optionally substituted;

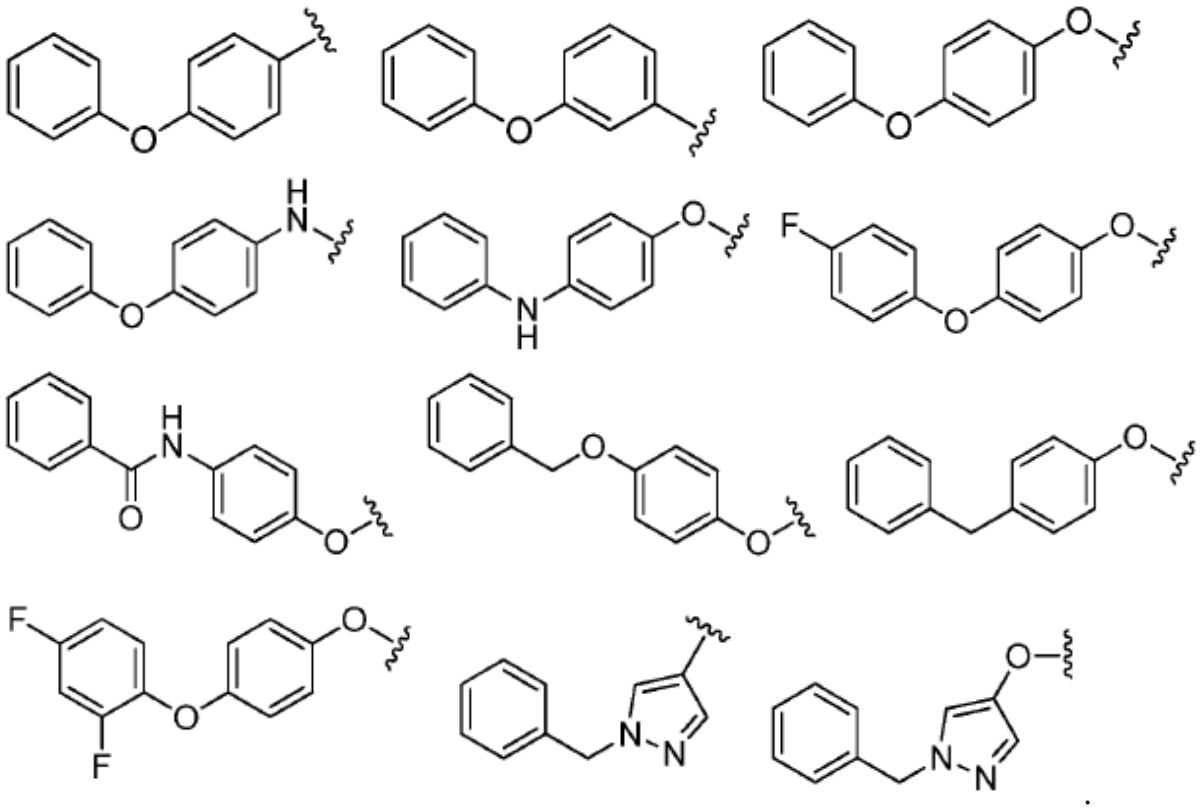
Y is O, S, SO_2, SO, C(O), CO_2, C(O)N(R), —NRC(O), —NRC(O)N(R), —$NRSO_2$, or N(R); and

R^1 is C_{2-6} alkenyl or C_{2-6} alkynyl, which is optionally substituted; or R^1 is CN.

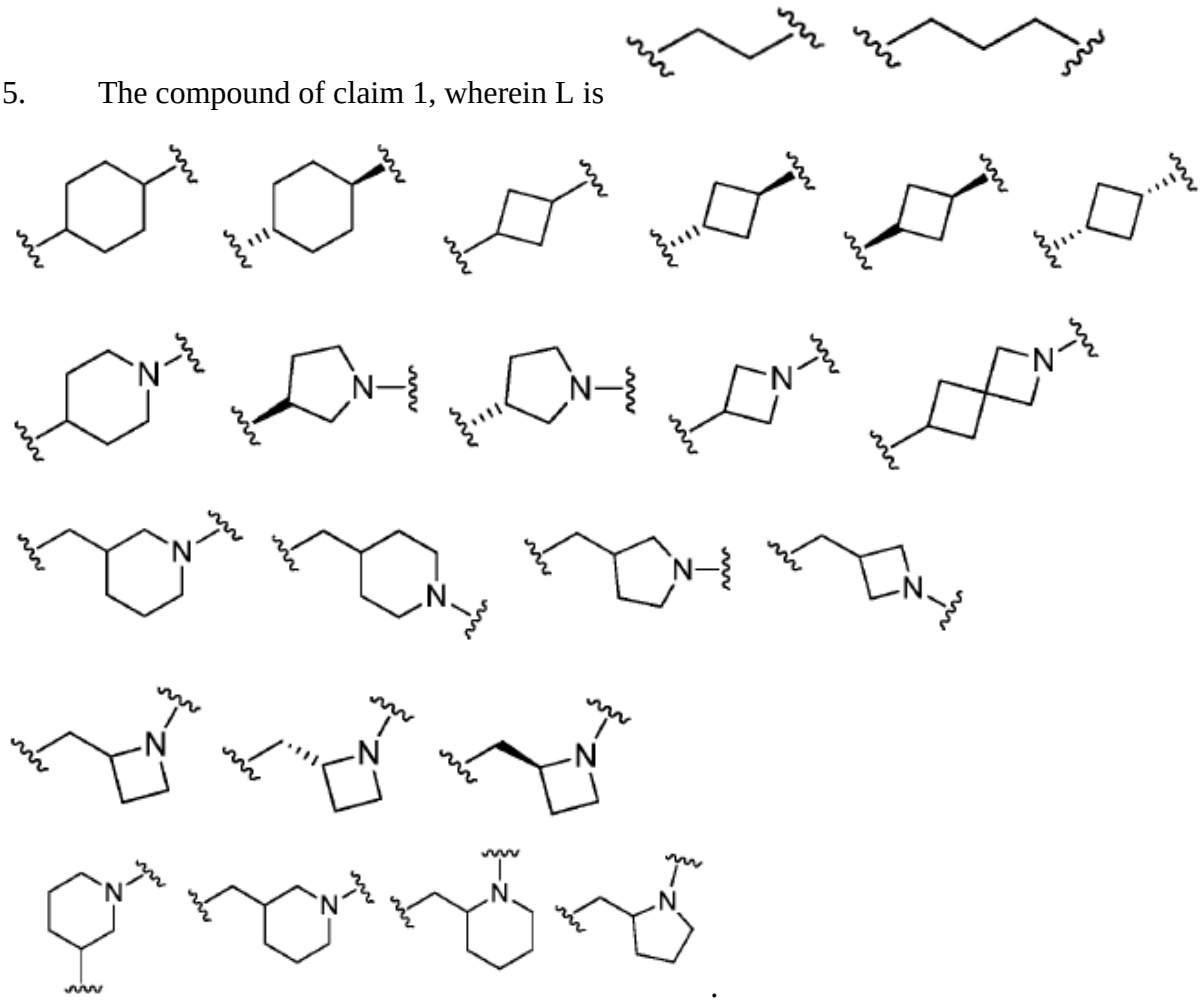
2. The compound of claim 1, wherein each R^2 is independently phenyl or pyrazolyl.

3. The compound of claim 1, wherein each R^2 is independently —OR or —$N(R)_2$.

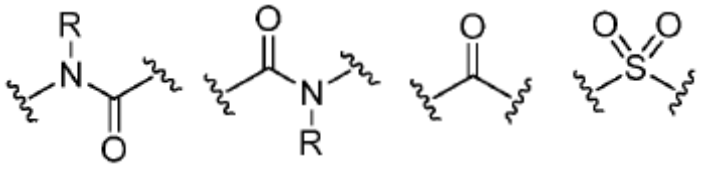
4. The compound of claim 1, wherein each R^2 is independently hydrogen,



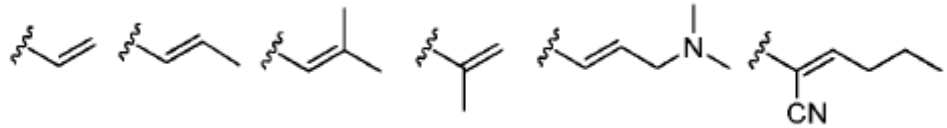
5. The compound of claim 1, wherein L is



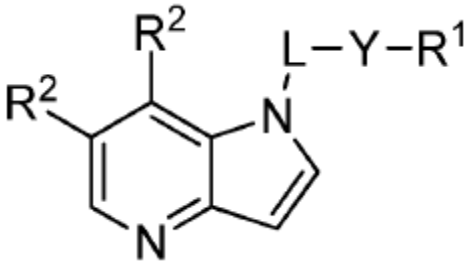
6. The compound of claim 1, wherein Y is



7. The compound of claim 1, wherein R^1 is —CN, —CH_2CN,



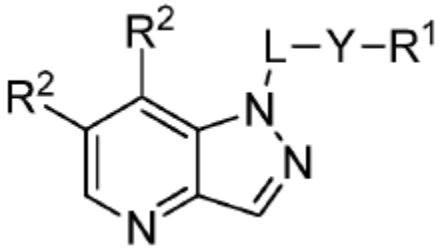
8. The compound of claim 1, of formula I-b1,



I-b1;

or a pharmaceutically acceptable salt thereof.

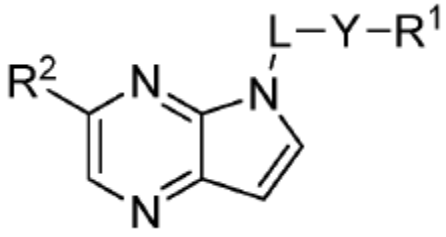
9. The compound of claim 1, of formula I-b2,



I-b2;

or a pharmaceutically acceptable salt thereof.

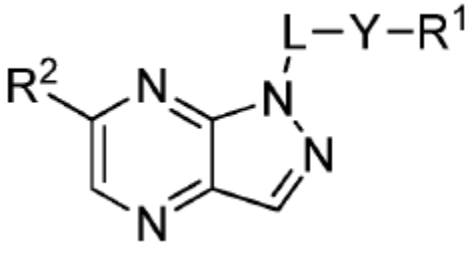
10. The compound of claim 1, of formula I-c1,



I-c1;

or a pharmaceutically acceptable salt thereof.

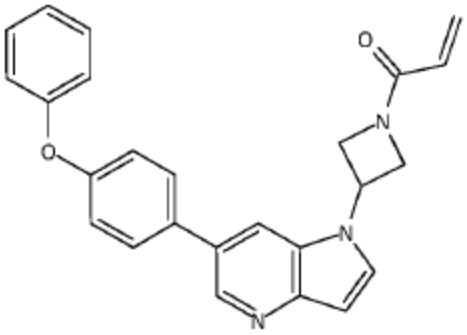
11. The compound of claim 1, of formula I-c2,



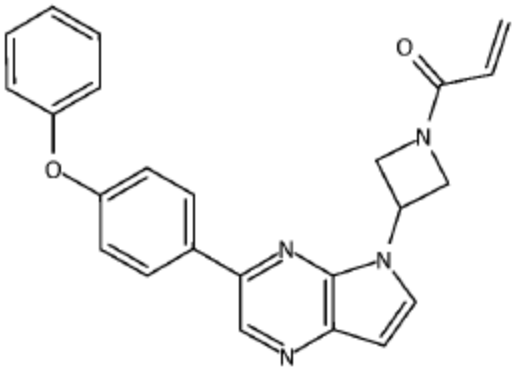
I-c2;

or a pharmaceutically acceptable salt thereof.

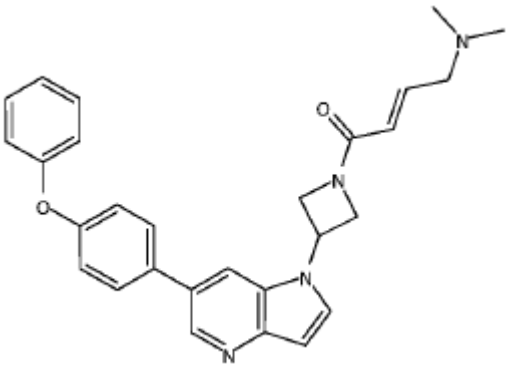
12. The compound of claim 1, selected from



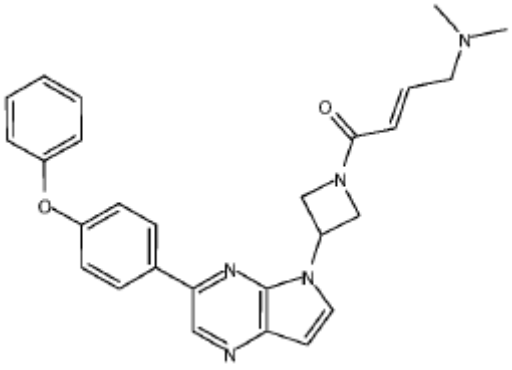
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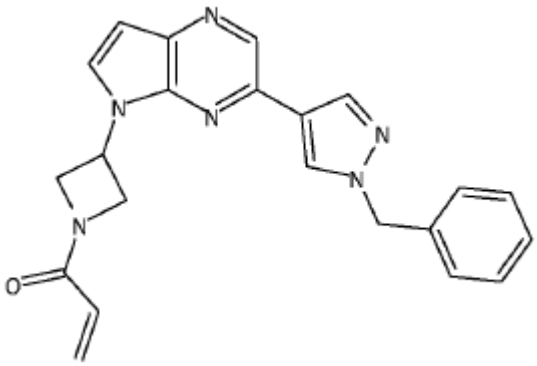
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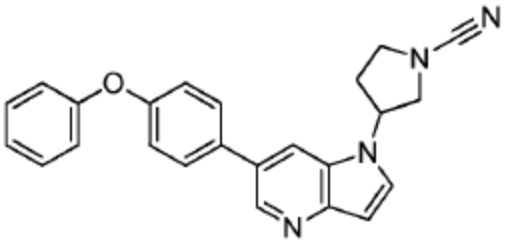
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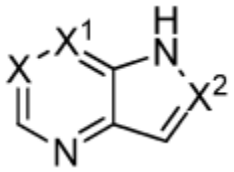


77.

13. A pharmaceutical composition comprising a compound of claim 1, and a pharmaceutically acceptable adjuvant, carrier, or vehicle.

14. A process for manufacturing a compound of formula I according to claim 1, comprising the steps of:

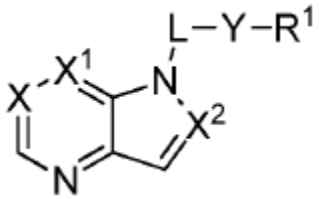
reacting a compound of formula (II-a)



II-a

wherein X, X^1, and X^2, are as defined in claim 1;

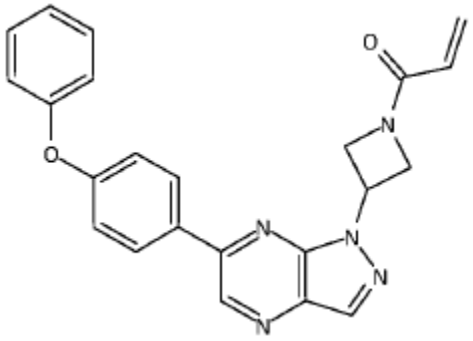
with a compound to yield a compound of formula I:



I

wherein X, X^1, X^2, R^1, L and Y are as defined in claim 1.

15. Compound



23.