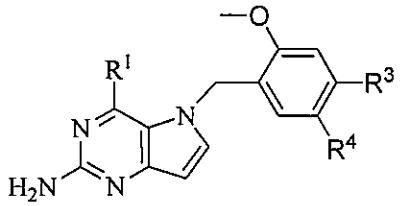
1. A compound of Formula (I), or pharmaceutically acceptable salt thereof:



Formula (I)

wherein:

R^1 is $-NHR^6$ or $-NHCHR^6R^9$;

R^3 is H, $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CF_2C(=O)OR^7$, $-N(R^{11})_2$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

R^4 is H, $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CF_2C(=O)OR^7$, $-N(R^{11})_2$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

where when R^4 is H, then R^3 is $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CF_2C(=O)OR^7$, $-N(R^{11})_2$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

or when R^3 is H, then R^4 is $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CF_2C(=O)OR^7$, $-N(R^{11})_2$, -

$CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

L_1 is $-(CH_2)_m-$;

L_2 is $-(CH_2)_m-$;

L_3 is $-(CH_2)_m-$;

L_4 is $-(CH_2)_m-$;

L_5 is $-(CH_2)_m-$;

L_6 is $-(CH_2)_mO(CH_2)_m-$;

R^6 is $-C_4$-C_6alkyl;

R^7 is $-C_1$-C_3alkyl;

R^9 is L_1OH;

each R^{11} is independently selected from H or $-C_1$-C_3alkyl;

R^{12} is

a) $-N(R^{11})_2$;

b) an unsubstituted 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O;

c) a 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O substituted with =O;

d) a 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O substituted with C_1-C_3alkyl or $-C(=O)OR^7$;

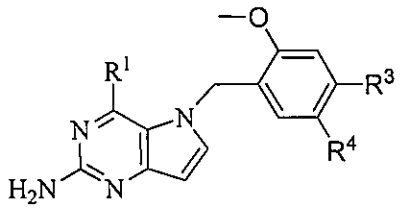
or

e) an unsubstituted phenyl;

and

each m is independently selected from 1, 2, 3, and 4.

2. The compound of Formula (I) of claim 1, or pharmaceutically acceptable salt thereof,:



Formula (I)

wherein:

R^1 is $-NHR^6$ or $-NHCHR^6R^9$;

R^3 is H, $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

R^4 is H, $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

where when R^4 is H, then R^3 is $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

or when R^3 is H, then R^4 is $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)R^7$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

L_1 is $-(CH_2)_m-$;

L_2 is $-(CH_2)_m-$;

L_3 is $-(CH_2)_m-$;

L_4 is $-(CH_2)_m-$;

L_5 is $-(CH_2)_m-$;

L_6 is $-(CH_2)_mO(CH_2)_m-$;

R^6 is $-C_4$-C_6alkyl;

R^7 is $-C_1$-C_3alkyl;

R^9 is L_1OH;

each R^{11} is independently selected from H or $-C_1$-C_3alkyl;

R^{12} is

a) $-N(R^{11})_2$;

b) an unsubstituted 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O;

c) a 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O substituted with =O;

d) a 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O substituted with C_1-C_3alkyl or $-C(=O)OR^7$;

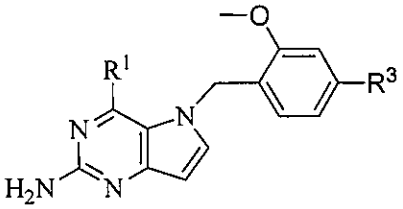
or

e) an unsubstituted phenyl;

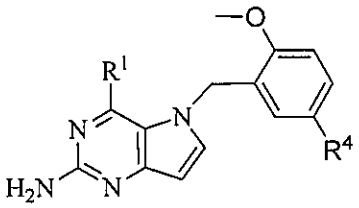
and

each m is independently selected from 1, 2, 3, and 4.

3. The compound of claim 1 or claim 2, wherein the compound of Formula (I) is a compound of Formula (Ia) or Formula (Ib):



Formula (Ia)



Formula (Ib).

4. The compound of any one of claims 1 to 3, wherein,

R^1 is $-NHR^6$ or $-NHCHR^6R^9$;

R^3 is H, $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

R^4 is H, $-CF_2C(=O)R^7$, $-L_4R^{12}$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OR^7$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

where when R^4 is H, then R^3 is $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

or when R^3 is H, then R^4 is $-CF_2C(=O)R^7$, $-L_4R^{12}$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OR^7$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

L_1 is $-CH_2-$;

L_2 is $-CH_2-$ or $-CH_2CH_2-$;

L_3 is $-CH_2CH_2-$ or $-CH_2CH_2CH_2CH_2-$;

L_4 is $-CH_2-$,

L_5 is $-CH_2CH_2-$,

L_6 is $-(CH_2)_2O(CH_2)_2-$;

R^6 is $-C_4$alkyl or $-C_5$alkyl;

R^7 is methyl, ethyl or propyl;

R^9 is L_1OH;

each R^{11} is independently selected from $-C_1$-C_3alkyl;

and

R^{12} is

a) $-N(R^{11})_2$;

b) an unsubstituted piperazinyl or an unsubstituted morpholinyl;

c) a 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O substituted with =O;

d) a piperazinyl substituted with C_1-C_3alkyl or $-C(=O)OR^7$;

or

e) an unsubstituted phenyl.

5. The compound of claim 3, wherein,

R^1 is $-NHR^6$ or $-NHCHR^6R^9$;

R^3 is $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)OR^7$, $-N(R^{11})_2$ or $-L_2C(=O)OL_3R^{12}$;

R^4 is $-CF_2C(=O)R^7$, $-L_4R^{12}$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OR^7$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$, $-CF_2C(=O)OR^7$, $-N(R^{11})_2$ or $-L_2C(=O)OL_3R^{12}$;

L_1 is $-CH_2-$;

L_2 is $-CH_2-$ or $-CH_2CH_2-$;

L_3 is $-CH_2CH_2-$ or $-CH_2CH_2CH_2CH_2-$;

L_4 is $-CH_2-$,

L_5 is $-CH_2CH_2-$,

L_6 is $-(CH_2)_2O(CH_2)_2-$;

R^6 is $-C_4$alkyl or $-C_5$alkyl;

R^7 is methyl, ethyl or propyl;

R^9 is L_1OH;

each R^{11} is independently selected from $-C_1$-C_3alkyl;

and

R^{12} is

a) $-N(R^{11})_2$;

b) an unsubstituted piperazinyl or an unsubstituted morpholinyl;

c) a 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O substituted with =O;

d) a piperazinyl substituted with C_1-C_3alkyl or $-C(=O)OR^7$;

or

e) an unsubstituted phenyl.

6. The compound of claim 3, wherein,

R^1 is $-NHR^6$ or $-NHCHR^6R^9$;

R^3 is $-L_2C(=O)OR^7$, $-C(=O)OL_6R^{12}$, $-C(=O)OL_2R^{12}$, $-L_2C(=O)OL_2R^{12}$, $-L_4C(=O)OL_5OH$, $-L_4R^{12}$, $-L_2C(=O)OL_4C(=O)L_2R^{12}$, $-L_2C(=O)OL_6R^{12}$, $-L_2C(=O)OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-L_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

R^4 is $-CF_2C(=O)R^7$, $-L_4R^{12}$, $-CH=CHC(=O)OL_4C(=O)R^{12}$, $-OL_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2R^{12}$, $-L_2C(=O)OR^7$, $-L_2C(=O)OL_4C(=O)R^{12}$, $-OL_4C(=O)OL_2C(=O)R^{12}$ or $-L_2C(=O)OL_3R^{12}$;

L_1 is $-CH_2-$;

L_2 is $-CH_2-$ or $-CH_2CH_2-$;

L_3 is $-CH_2CH_2-$ or $-CH_2CH_2CH_2CH_2-$;

L_4 is $-CH_2-$,

L_5 is $-CH_2CH_2-$,

L_6 is $-(CH_2)_2O(CH_2)_2-$;

R^6 is $-C_4$alkyl or $-C_5$alkyl;

R^7 is methyl, ethyl or propyl;

R^9 is L_1OH;

each R^{11} is independently selected from -C_1-C_3alkyl;

and

R^{12} is

a) $-N(R^{11})_2$;

b) an unsubstituted piperazinyl or an unsubstituted morpholinyl;

c) a 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O substituted with =O;

d) a piperazinyl substituted with C_1-C_3alkyl or $-C(=O)OR^7$;

or

e) an unsubstituted phenyl.

7. The compound of any one of claims 1 to 3, wherein,

R^1 is $-NHR^6$;

R^3 is $-L_2C(=O)OL_4C(=O)R^{12}$ and R^4 is H;

or R^3 is H and R^4 is $-L_2C(=O)OL_4C(=O)R^{12}$;

R^6 is -C_4-C_6alkyl;

L_2 is $-(CH_2)_m-$;

L_4 is $-(CH_2)_m-$;

R^{12} is an unsubstituted 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O;

and

each m is independently selected from 1, 2, 3, and 4.

8. The compound of any one of claims 1 to 3, wherein,

R^1 is $-NHR^6$;

R^3 is $-L_2C(=O)OL_4C(=O)L_2R^{12}$ and R^4 is H;

or R^3 is H and R^4 is $-L_2C(=O)OL_4C(=O)L_2R^{12}$;

R^6 is -C_4-C_6alkyl;

L_2 is $-(CH_2)_m-$;

L_4 is $-(CH_2)_m-$;

R^{12} is an unsubstituted 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O;

and

each m is independently selected from 1, 2, 3, and 4.

9. The compound of any one of claims 1 to 3, wherein,

R^1 is $-NHR^6$;

R^3 is $-L_2C(=O)OL_4C(=O)R^{12}$ and R^4 is H;

or R^3 is H and R^4 is $-L_2C(=O)OL_4C(=O)R^{12}$;

R^6 is $-C_5$alkyl;

L_2 is $-CH_2-$ or $-CH_2CH_2-$;

L_4 is $-CH_2-$,

and

R^{12} is an unsubstituted piperazinyl or an unsubstituted morpholinyl.

10. The compound of any one of claims 1 to 3, wherein,

R^1 is $-NHR^6$;

R^3 is $-L_2C(=O)OL_4C(=O)L_2R^{12}$ and R^4 is H;

or R^3 is H and R^4 is $-L_2C(=O)OL_4C(=O)L_2R^{12}$;

R^6 is $-C_5$alkyl;

L_2 is $-CH_2-$ or $-CH_2CH_2-$;

L_4 is $-CH_2-$,

and

R^{12} is an unsubstituted piperazinyl or an unsubstituted morpholinyl.

11. The compound of any one of claims 1 to 3, wherein,

R^1 is $-NHR^6$ or $-NHCHR^6R^9$;

R^3 is H and R^4 is $-L_4R^{12}$;

or R^3 is $-L_4R^{12}$ and R^4 is H;

L_1 is $-(CH_2)_m-$;

L_4 is $-(CH_2)_m-$;

R^6 is $-C_4$-C_6alkyl;

R^9 is L_1OH;

R^{12} is an unsubstituted 5-6 membered heterocycloalkyl having 1 to 2 heteroatoms independently selected from N and O;

and

each m is independently selected from 1, 2, 3, and 4.

12. The compound of any one of claims 1 to 3, wherein,

R^1 is -NHR^6 or -$NHCHR^6R^9$;

R^3 is H and R^4 is -L_4R^{12};

or R^3 is -L_4R^{12} and R^4 is H;

L_1 is -(CH_2)-;

L_4 is -(CH_2)-;

R^6 is -C_4alkyl or –C_5alkyl;

R^9 is L_1OH,

and

R^{12} is an unsubstituted piperazinyl.

13. The compound of claim 1, wherein

R^1 is -NHR^6 or -$NHCHR^6R^9$;

R^3 is H and R^4 is -$N(R^{11})_2$;

or R^3 is -$N(R^{11})_2$ and R^4 is H;

L_1 is -(CH_2)-;

R^6 is -C_4alkyl or –C_5alkyl;

R^9 is L_1OH,

and

each R^{11} is H.

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

2-(dimethylamino)ethyl 4-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-3-methoxybenzoate;

2-(2-(dimethylamino)ethoxy)ethyl 4-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-3-methoxybenzoate;

methyl 2-(3-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenyl)acetate;

ethyl 3-(3-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenyl)propanoate;

methyl 2-(3-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenyl)-2,2-difluoroacetate;

2-morpholino-2-oxoethyl 2-(3-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenoxy)acetate;

2-morpholino-2-oxoethyl 2-(3-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenyl)acetate;

2-morpholino-2-oxoethyl 2-(4-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-3-methoxyphenyl)acetate;

2-(morpholin-4-yl)-2-oxoethyl 3-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)propanoate;

(S)-2-morpholino-2-oxoethyl 3-(3-((2-amino-4-((1-hydroxyhexan-2-yl)amino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenyl)propanoate;

(S)-2-morpholino-2-oxoethyl 2-(4-((2-amino-4-((1-hydroxyhexan-2-yl)amino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-3-methoxyphenyl)acetate;

(S)-2-morpholino-2-oxoethyl 2-(3-((2-amino-4-((1-hydroxyhexan-2-yl)amino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenyl)acetate;

(S)-2-morpholino-2-oxoethyl 3-(4-((2-amino-4-((1-hydroxyhexan-2-yl)amino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-3-methoxyphenyl)propanoate;

2-(morpholin-4-yl)-2-oxoethyl (2E)-3-(3-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-4-methoxyphenyl)prop-2-enoate;

2-(morpholin-4-yl)-2-oxoethyl 3-(3-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-4-methoxyphenyl)propanoate;

2-(benzyloxy)-2-oxoethyl 2-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)acetate;

2-(dipropylcarbamoyl)methyl 2-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)acetate;

2-(dimethylamino)-2-oxoethyl 2-(4-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-3-methoxyphenyl)acetate;

2-(4-methylpiperazin-1-yl)ethyl 2-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)acetate;

2-hydroxyethyl 2-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)acetate;

4-(dimethylamino)butyl 2-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)acetate;

2-(morpholin-4-yl)ethyl 2-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)acetate;

2-(piperazin-1-yl)ethyl 2-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)acetate;

2-(dimethylamino)ethyl 2-(3-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-4-methoxyphenoxy)acetate;

2-(piperazin-1-yl)ethyl 2-(3-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-4-methoxyphenoxy)acetate;

2-(morpholin-4-yl)ethyl 2-(3-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-4-methoxyphenoxy)acetate;

2-(4-methylpiperazin-1-yl)ethyl 2-(3-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-4-methoxyphenoxy)acetate;

(S)-2-((2-amino-5-(2-methoxy-4-(piperazin-1-ylmethyl)benzyl)-5H-pyrrolo[3,2-d]pyrimidin-4-yl)amino)hexan-1-ol;

5-(2-methoxy-4-(piperazin-1-ylmethyl)benzyl)-N4-pentyl-5H-pyrrolo[3,2-d]pyrimidine-2,4-diamine;

5-(2-methoxy-5-(piperazin-1-ylmethyl)benzyl)-N4-pentyl-5H-pyrrolo[3,2-d]pyrimidine-2,4-diamine;

(S)-2-((2-amino-5-(2-methoxy-5-(piperazin-1-ylmethyl)benzyl)-5H-pyrrolo[3,2-d]pyrimidin-4-yl)amino)hexan-1-ol, and

5-(5-amino-2-methoxybenzyl)-N4-pentyl-5H-pyrrolo[3,2-d]pyrimidine-2,4-diamine.

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

2-morpholino-2-oxoethyl 2-(3-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenoxy)acetate;

2-morpholino-2-oxoethyl 2-(3-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-4-methoxyphenyl)acetate;

2-morpholino-2-oxoethyl 2-(4-((2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)methyl)-3-methoxyphenyl)acetate, and

2-(morpholin-4-yl)-2-oxoethyl 3-(4-{[2-amino-4-(pentylamino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]methyl}-3-methoxyphenyl)propanoate.

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

(S)-2-((2-amino-5-(2-methoxy-4-(piperazin-1-ylmethyl)benzyl)-5H-pyrrolo[3,2-d]pyrimidin-4-yl)amino)hexan-1-ol;

5-(2-methoxy-4-(piperazin-1-ylmethyl)benzyl)-N4-pentyl-5H-pyrrolo[3,2-d]pyrimidine-2,4-diamine;

5-(2-methoxy-5-(piperazin-1-ylmethyl)benzyl)-N4-pentyl-5H-pyrrolo[3,2-d]pyrimidine-2,4-diamine;

(S)-2-((2-amino-5-(2-methoxy-5-(piperazin-1-ylmethyl)benzyl)-5H-pyrrolo[3,2-d]pyrimidin-4-yl)amino)hexan-1-ol, and

5-(5-amino-2-methoxybenzyl)-N4-pentyl-5H-pyrrolo[3,2-d]pyrimidine-2,4-diamine.

17. A pharmaceutical composition comprising a therapeutically effective amount of a compound of any one of claims 1-16 and a pharmaceutically acceptable carrier.

18. Use of a compound of any one of claims 1-16 in the manufacture of a medicament for treating a disease or disorder associated with TLR7 activity, wherein the disease or disorder is an infectious disease, a viral infectious disease, an inflammatory disease, a respiratory disease, a dermatological disease, an autoimmune disease, a cell-proliferative disease or cancer.

19. The use of claim 18, wherein the disease or disorder is asthma, chronic obstructive pulmonary disease (COPD), adult respiratory distress syndrome (ARDS), ulcerative colitis, Crohn's disease, bronchitis, dermatitis, actinic keratosis, basal cell carcinoma, bladder cancer, allergic rhinitis, psoriasis, scleroderma, urticaria, rheumatoid arthritis, multiple sclerosis, cancer, breast cancer, HIV, hepatitis, hepatitis C or lupus.

20. The use of claim 18, wherein the disease or disorder is hepatitis B, hepatitis C, colorectal cancer or hepatocellular carcinoma.

21. A compound for use in a method of medical treatment, wherein the method of medical treatment is for treating a disease associated with TLR7 receptor activity, wherein the disease is an infectious disease, a viral infectious disease, an inflammatory disease, a respiratory disease, a dermatological disease, an autoimmune disease, a cell-proliferative disease or cancer, and wherein the compound is a compound of any one of claims 1-16.

22. The compound of claim 21, wherein the disease is asthma, chronic obstructive pulmonary disease (COPD), adult respiratory distress syndrome (ARDS), ulcerative colitis, Crohn's disease, bronchitis, dermatitis, actinic keratosis, basal cell carcinoma, bladder cancer, allergic rhinitis, psoriasis, scleroderma, urticaria, rheumatoid arthritis, multiple sclerosis, cancer, breast cancer, HIV, hepatitis, hepatitis C or lupus.

23. The compound of claim 21, wherein the disease is hepatitis B, hepatitis C, colorectal cancer or hepatocellular carcinoma.