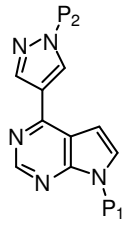
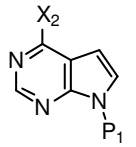
CLAIMS

1. A process of preparing a compound of Formula XII:



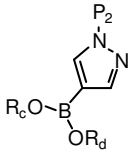
XII

comprising reacting a compound of Formula X:



X

with a compound of Formula XIII:



XIII

in the presence of a palladium catalyst, base, and a solvent, to form a compound of Formula XII

wherein:

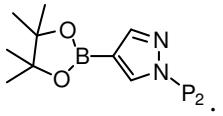
X_2 is a tosylate group, a triflate group, iodo, chloro, or bromo; and

R_c and R_d are each independently H or C_{1-6} alkyl; or

R_c and R_d, together with the oxygen atoms to which they are attached and the boron atom to which the oxygen atoms are attached, form a 5- to 6-membered heterocyclic ring, which is optionally substituted with 1, 2, 3, or 4 C_{1-4} alkyl groups; and

P_1 and P_2 are each independently a protecting group.

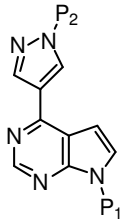
2. A process according to claim 1, wherein said compound of Formula XIII has formula:



3. A process according to any one of claims 1 to 2, wherein P_1 is $-CH_2OC(=O)C(CH_3)_3$ or $-CH_2OCH_2CH_2Si(CH_3)_3$.

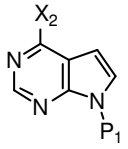
4. A process according to any one of claims 1 to 3, wherein P_2 is 1-(ethoxy)ethyl.

5. A process of preparing a compound of Formula XII:



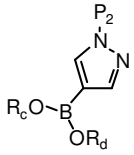
XII

comprising reacting a compound of Formula X:



X

with a compound of Formula XIII:



XIII

in the presence of a palladium catalyst, base, and a solvent, to form a compound of Formula XII,

wherein:

X_2 is a tosylate group, a triflate group, iodo, chloro, or bromo;

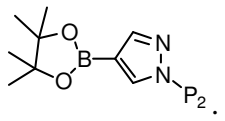
R_c and R_d are each independently H or $C_{1\text{-}6}$ alkyl; or

R_c and R_d, together with the oxygen atoms to which they are attached and the boron atom to which the oxygen atoms are attached, form a 5- to 6-membered heterocyclic ring, which is optionally substituted with 1, 2, 3, or 4 C_{1-4} alkyl groups;

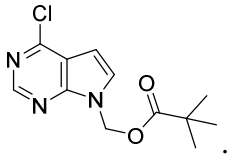
P_1 is $-CH_2OC(=O)C(CH_3)_3$; and

P_2 is a protecting group.

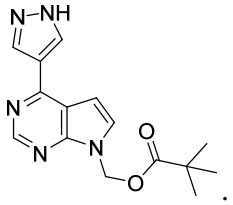
6. The process according to claim 5, wherein said compound of Formula XIII has the formula:



7. A compound which is:



8. A compound which is:



9. The process according to claim 5, wherein said compound of Formula X has the formula:

