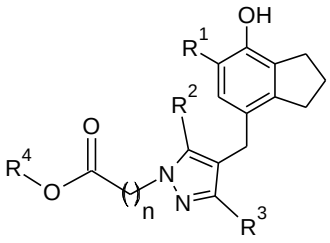
CLAIMS

1. A method for producing substituted pyrazole compound of Formula (I):



(I)

wherein:

R^1, R^2 and R^3 are each independently selected from H, C_{1-6} alkyl,;

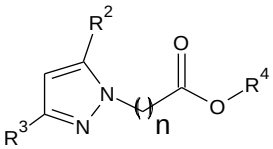
R^4 is selected from H, C_{1-10} saturated alkyl,;

n is 2;

or its pharmaceutically acceptable salts thereof;

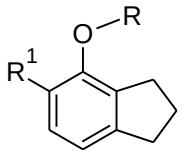
comprising

condensing a compound of Formula (XIX),



(XIX)

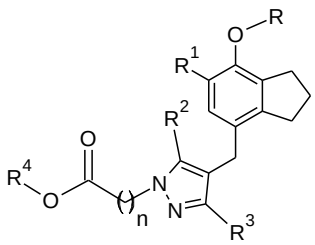
wherein R^2, R^3, R^4 and n are as defined above; with a compound of Formula (XX),



(XX)

wherein R is H or Pg^1;

wherein Pg^1 is hydroxy protecting group, and R^1 is as defined above; in the presence of a condensing agent to obtain a compound of Formula (VIIIa),



(VIIIa)

wherein R, R^1, R^2, R^3, R^4 and n are as defined above; and optionally deprotecting and/or hydrolysing the compound of Formula (VIIIa) to yield substituted pyrazole compound of Formula (I).

2. The method according to claim 1, wherein the substituents R^1, R^2, and R^3 are methyl; R^4 is H or C_{1-6} alkyl; n is 2; and when R is Pg^1 then Pg^1 is methyl or benzyl.

3. The method according to claim 1, wherein the condensing agent is selected from the group comprising formaldehyde, paraformaldehyde, 1,3,5-trioxane, or mixtures thereof.

4. The method according to claim 1, wherein the condensation of a compound of Formula (XIX) with a compound of Formula (XX) is carried out optionally in the presence of acid catalyst selected from hydrochloric acid, sulphuric acid, p-toluenesulfonic acid, zinc chloride, or tin(II) chloride.

5. The method according to claim 1, wherein the condensation reaction is carried out in the presence of a solvent selected from acetic acid, *N*,*N*-dimethylformamide, *N*,*N*-dimethylacetamide, dimethylsulphoxide, acetonitrile, *N*-methylpyrrolidone, cyclohexane, toluene, xylene or benzene.

6. The method according to claim 1, wherein the deprotection of a compound of Formula (VIIIa) is carried out in the presence of boron tribromide or palladium on carbon.

7. The method according to claim 1, wherein the hydrolysis of a compound of Formula (VIIIa) is carried out in the presence of a base selected from lithium hydroxide, sodium hydroxide, potassium hydroxide, magnesium hydroxide, sodium carbonate, potassium carbonate, cesium carbonate, magnesium carbonate, sodium bicarbonate, and potassium bicarbonate.