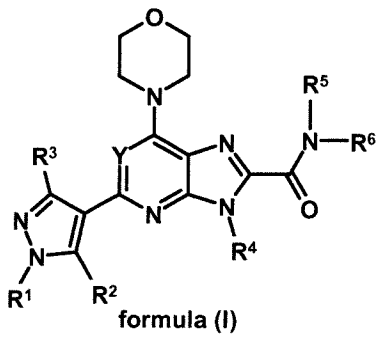
Claims:

1. A pyrazole derivative of formula (I)



formula (I)

or a pharmaceutically acceptable salt thereof, wherein:

Y represents N, CH, CF, CCl or CCH_3;

R^1, R^2 and R^3 independently represent H, alkyl containing 1 to 3 carbon atoms or halogenated alkyl containing 1 to 3 carbon atoms;

R^4 and R^5 independently represent H or optionally substituted alkyl containing 1 to 3 carbon atoms;

R^6 represents alkyl, cycloalkyl or heterocyclyl, wherein alkyl, cycloalkyl and heterocyclyl are optionally substituted; or

R^5 and R^6 are taken together with the nitrogen to which they are attached to form optionally substituted heterocyclyl optionally containing one or more heteroatom(s) selected from N, O or S.

2. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein

Y represents N, CH, CF, CCl or CCH_3;

R^1, R^2 and R^3 independently represent H, a $(C_1$-$C_3)$alkyl group or a halogenated $(C_1$-$C_3)$alkyl group;

R^4 represents H or a $(C_1$-$C_3)$alkyl group,

wherein the (C_1-C_3)alkyl group is optionally substituted with a (C_3-C_6)cycloalkyl group;

R^5 represents H or a (C_1-C_3)alkyl group;

R^6 represents a group having the formula –X-R^{6a} ,
wherein X represents a bond or a (C_1-C_3) alkylenyl group,
R^{6a} represents a (C_3-C_6)cycloalkyl group or a 4 to 6 membered heterocyclyl group which has optionally 1 to 3 substituents independently selected from the substituent group A, or

R^5 and R^6 are taken together with the nitrogen to which they are attached to form a 4 to 6 membered heterocyclyl ring, a spiro or fused ring containing 5-7 carbon atoms, and at least one N or O,
wherein the 4 to 6 membered heterocyclyl ring is optionally substituted with a group having the formula -W-R^{6b}
wherein W represents a bond, a (C_1-C_3)alkylenyl group, -NH-, -CO-, -(C_1-C_3) alkylenyl-CO- or -CO-(C_1-C_3)alkylenyl-, and
R^{6b} represents a hydroxy group, a (C_1-C_6)alkoxy group, an amino group, di(C_1-C_3)alkyl amino group, a (C_1-C_3)alkylcarbonyl group, a (C_1-C_3)alkylsulfonyl group, a heteroaryl group, an aryl group or a 4 to 6 membered heterocyclyl group which optionally has 1 to 3 substituents independently selected from substituent group A, and
the substituent group A represents the group consisting of a (C_1-C_3)alkyl group, an aryl-(C_1-C_3)alkyl group, an oxo group, a hydroxy-(C_1-C_3)alkyl group and an oxetanyl group.

3. The compound according to claim 1 or 2 or a pharmaceutically acceptable salt thereof, wherein Y represents N.

4. The compound according to claim 1 or 2 or a pharmaceutically acceptable salt thereof, wherein Y represents CH, CF, CCl or CCH_3.

5. The compound according to any one of claims 1 to 4 or a pharmaceutically acceptable salt thereof, wherein R^1 represents a methyl group, and R^2 and R^3 independently represent H or a methyl group.

6. The compound according to any one of claims 1 to 5 or a pharmaceutically acceptable salt thereof, wherein R^4 represents H or a methyl group.

7. The compound according to any one of claims 1 to 6 or a pharmaceutically acceptable salt thereof, wherein R^5 and R^6 are taken together with the nitrogen to which they are attached to form an azetidine ring, a pyrrolidine ring, a piperidine ring or a piperazine ring,
wherein the azetidine ring, the pyrrolidine ring, the piperidine ring and the piperazine ring are optionally substituted with a tetrahydropyranyl group, a morpholinyl group or a 2,6-dimethylmorpholinyl group.

8. The compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt thereof, which is {4-[cis-2,6-Dimethylmorpholin-4-yl]piperidin-1-yl}[2-(1-methyl-1*H*-pyrazol-4-yl)-6-(morpholin-4-yl)-9*H*-purin-8-yl]methanone.

9. The compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt thereof, which is [5-(1,3-Dimethyl-1*H*-pyrazol-4-yl)-6-fluoro-3-methyl-7-(morpholin-4-yl)-3*H*-imidazo[4,5-*b*]pyridin-2-yl][4-(morpholin-4-yl)piperidin-1-yl]methanone.

10. The compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt thereof, which is [2-(1-Methyl-1*H*-pyrazol-4-yl)-6-(morpholin-4-yl)-9*H*-purin-8-yl][4-(morpholin-4-yl)piperidin-1-yl]methanone.

11. The compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt thereof, which is [5-(1,3-Dimethyl-1*H*-

pyrazol-4-yl)-7-(morpholin-4-yl)-3*H*-imidazo[4,5-*b*]pyridin-2-yl][4-(morpholin-4-yl)piperidin-1-yl]methanone.

12. The compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt thereof, which is {4-[cis-2,6-Dimethylmorpholin-4-yl]piperidin-1-yl}[5-(1,3-dimethyl-1*H*-pyrazol-4-yl)-7-(morpholin-4-yl)-3*H*-imidazo[4,5-*b*]pyridin-2-yl]methanone.

13. A pharmaceutical composition comprising a compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof as an active ingredient and one or more pharmaceutically acceptable excipient(s).

14. A pharmaceutical composition according to claim 13 for use in treating or lessening the severity of disease or disorder responsive to the inhibition of phosphoinositol-3-kinase δ (PI3Kδ).

15. A pharmaceutical composition for use according to claim 14, wherein the disease or the disorder is psoriasis, psoriatic arthritis, rheumatoid arthritis, allergic asthma, severe asthma, steroid resistant asthma, COPD, systemic lupus erythematous, primary immunodeficiency syndrome or cancer.

16. Use of a compound according to any one of claims 1 to 12 or a pharmaceuticatically acceptable salt thereof for the manufacture of a medicament for treating or lessening the severity of disease or disorder responsive to the inhibition of PI3Kδ, wherein the disease or the disorder is psoriasis, psoriatic arthritis, rheumatoid arthritis, allergic asthma, severe asthma, steroid resistant asthma, COPD, systemic lupus erythematous, primary immunodeficiency syndrome or cancer.

17. The compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof for use in treating or lessening the severity of disease or disorder responsive to the inhibition of PI3Kδ.

18. The compound for use according to claim 17 or a pharmaceutically acceptable salt thereof, wherein the disease or the disorder is psoriasis, psoriatic arthritis, rheumatoid arthritis, allergic asthma, severe asthma, steroid resistant asthma, COPD, systemic lupus erythematous, primary immunodeficiency syndrome or cancer.

19. A medicament for use in treating or lessening the severity of disease or disorder responsive to the inhibition of PI3Kδ comprising the compound according to any one of claim 1 to 12 or a pharmaceutically acceptable salt thereof as an active ingredient.

20. A medicament for use according to claim 19, wherein the disease or the disorder is psoriasis, psoriatic arthritis, rheumatoid arthritis, allergic asthma, severe asthma, steroid resistant asthma, COPD, systemic lupus erythematous, primary immunodeficiency syndrome or cancer.