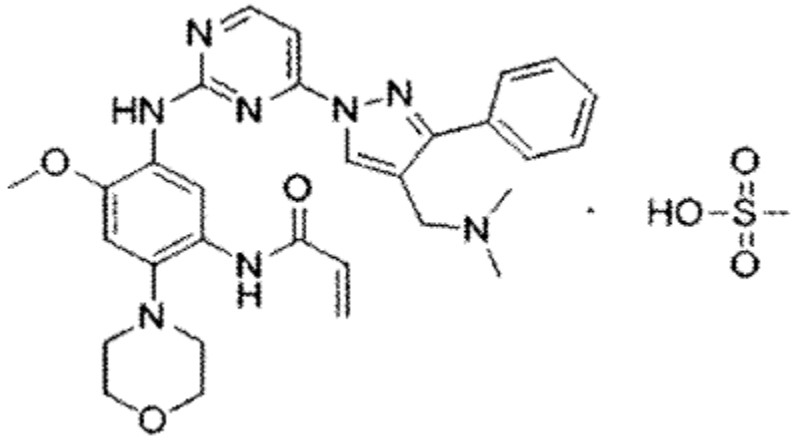
Claims

1. Mesylate salt of N-(5-(4-(4-((dimethylamino)methyl)-3-phenyl-1H-pyrazol-1-yl)pyrimidine-2-ylamino)-4-methoxy-2-morpholinophenyl)acrylamide, as represented by the following Formula 1:

[Formula 1]



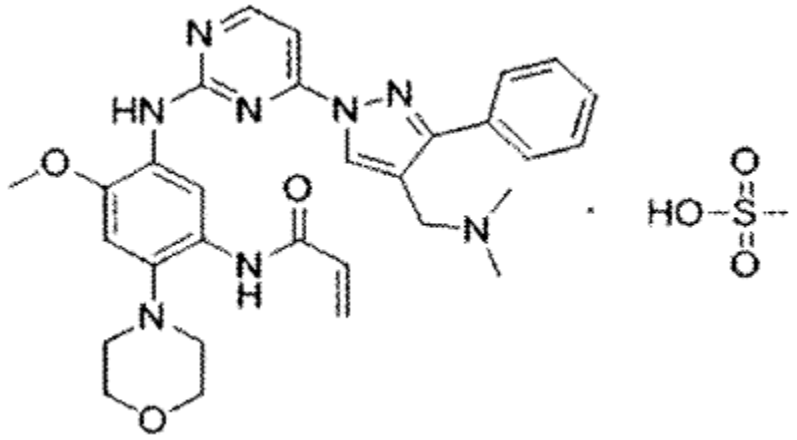
, which is in a crystalline form (I) that has diffraction peaks in a PXRD (powder X-ray diffraction) graph present at 2θ (theta) angles of 5.6 ± 0.2, 17.1 ± 0.2, and 21.6 ± 0.2 degrees.

2. The mesylate salt of claim 1, wherein the crystalline form (I) has diffraction peaks in a PXRD (powder X-ray diffraction) graph present at 2θ (theta) angles of 5.6 ± 0.2, 12.4 ± 0.2, 14.1 ± 0.2, 17.1 ± 0.2, 21.6 ± 0.2, 22.1 ± 0.2, and 22.5 ± 0.2 degrees.

3. The mesylate salt of claim 1, wherein the crystalline form has diffraction peaks in a PXRD graph present at 2θ angles of 5.6 ± 0.2, 12.4 ± 0.2, 14.1 ± 0.2, 17.1 ± 0.2, 18.0 ± 0.2, 19.1 ± 0.2, 21.6 ± 0.2, 22.1 ± 0.2, and 22.5 ± 0.2 degrees.

4. Mesylate salt of N-(5-(4-(4-((dimethylamino)methyl)-3-phenyl-1H-pyrazol-1-yl)pyrimidine-2-ylamino)-4-methoxy-2-morpholinophenyl)acrylamide, as represented by the following Formula 1:

[Formula 1]



, which is in a crystalline form (I) that has an endothermic transition peak value at 210 to 230°C in a DSC (differential scanning calorimetry) graph.

5. The mesylate salt of claim 4, wherein the crystalline form has an endothermic transition peak value at 217 ± 2°C in a DSC graph.

6. A pharmaceutical composition for treating a protein kinase-mediated disorder, which comprises the mesylate salt of claim 1 and a pharmaceutically acceptable additive.

7. A pharmaceutical composition which comprises the mesylate salt of claim 2 and a pharmaceutically acceptable additive.

8. A pharmaceutical composition for treating a protein kinase-mediated disorder, which comprises the mesylate salt of claim 4 and a pharmaceutically acceptable additive.

9. A pharmaceutical composition for treating a protein kinase-mediated disorder, which comprises the mesylate salt of claim 5 and a pharmaceutically acceptable additive.

10. The mesylate salt of claim 1, wherein the crystalline form (I) has diffraction peaks in a PXRD (powder X-ray diffraction) graph present at 2θ (theta) angles of 5.614 ± 0.2, 17.143 ± 0.2, and 21.585 ± 0.2 degrees.

11. The mesylate salt of claim 2, wherein the crystalline form (I) has diffraction peaks in a PXRD (powder X-ray diffraction) graph present at 2θ (theta) angles of 5.614 ± 0.2, 12.394 ± 0.2, 14.086 ± 0.2, 17.143 ± 0.2, 21.585 ± 0.2, 22.131 ± 0.2, and 22.487 ± 0.2 degrees.

12. The mesylate salt of claim 3, wherein the crystalline form (I) has diffraction peaks in a PXRD (powder X-ray diffraction) graph present at 2θ (theta) angles of 5.614 ± 0.2, 12.394 ± 0.2, 14.086 ± 0.2, 17.143 ± 0.2, 18.020 ± 0.2, 19.104 ± 0.2, 21.585 ± 0.2, 22.131 ± 0.2, and 22.487 ± 0.2 degrees.