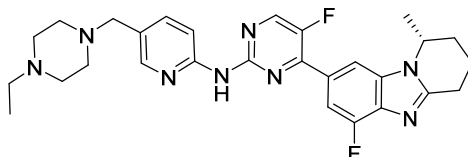


Claims

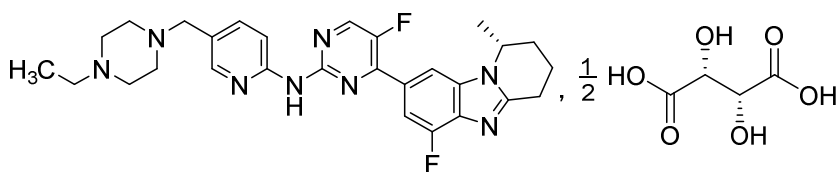
1. A salt of a compound as shown in Formula I or a crystal form of the salt:



Formula I.

2. The salt or the crystal form of the salt according to claim 1, wherein, the salt is tartaric acid salt, wherein, the tartaric acid salt is L-tartaric acid salt.

3. The salt or the crystal form of the salt according to claim 2, wherein, the tartaric acid salt has a structure as shown in Formula II:



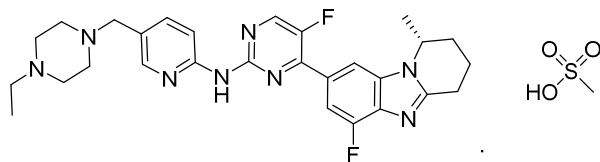
Formula II.

4. A crystal form of a compound as shown in Formula II.
5. The crystal form according to claim 4, wherein, the X-ray powder diffraction pattern of the crystal form has characteristic peaks at the diffraction angle 2θ of $4.4\pm 0.2^\circ$, $23.6\pm 0.2^\circ$ and $26.9\pm 0.2^\circ$.
6. The crystal form according to claim 5, wherein, the X-ray powder diffraction pattern of the crystal form has characteristic peaks at the diffraction angle 2θ of $4.4\pm 0.2^\circ$, $8.7\pm 0.2^\circ$, $10.8\pm 0.2^\circ$, $18.4\pm 0.2^\circ$, $23.6\pm 0.2^\circ$ and $26.9\pm 0.2^\circ$.
7. The crystal form according to claim 6, wherein, the X-ray powder diffraction pattern of the crystal form has characteristic peaks at the diffraction angle 2θ of $4.4\pm 0.2^\circ$, $8.7\pm 0.2^\circ$, $10.8\pm 0.2^\circ$, $15.9\pm 0.2^\circ$, $18.4\pm 0.2^\circ$, $23.6\pm 0.2^\circ$ and $26.9\pm 0.2^\circ$.
8. The crystal form according to claim 4, wherein, the crystal form approximately has an X-ray powder diffraction pattern as shown in Fig. 1.
9. The crystal form according to claim 4, wherein, the crystal form approximately has

an X-ray powder diffraction pattern as shown in Fig. 12.

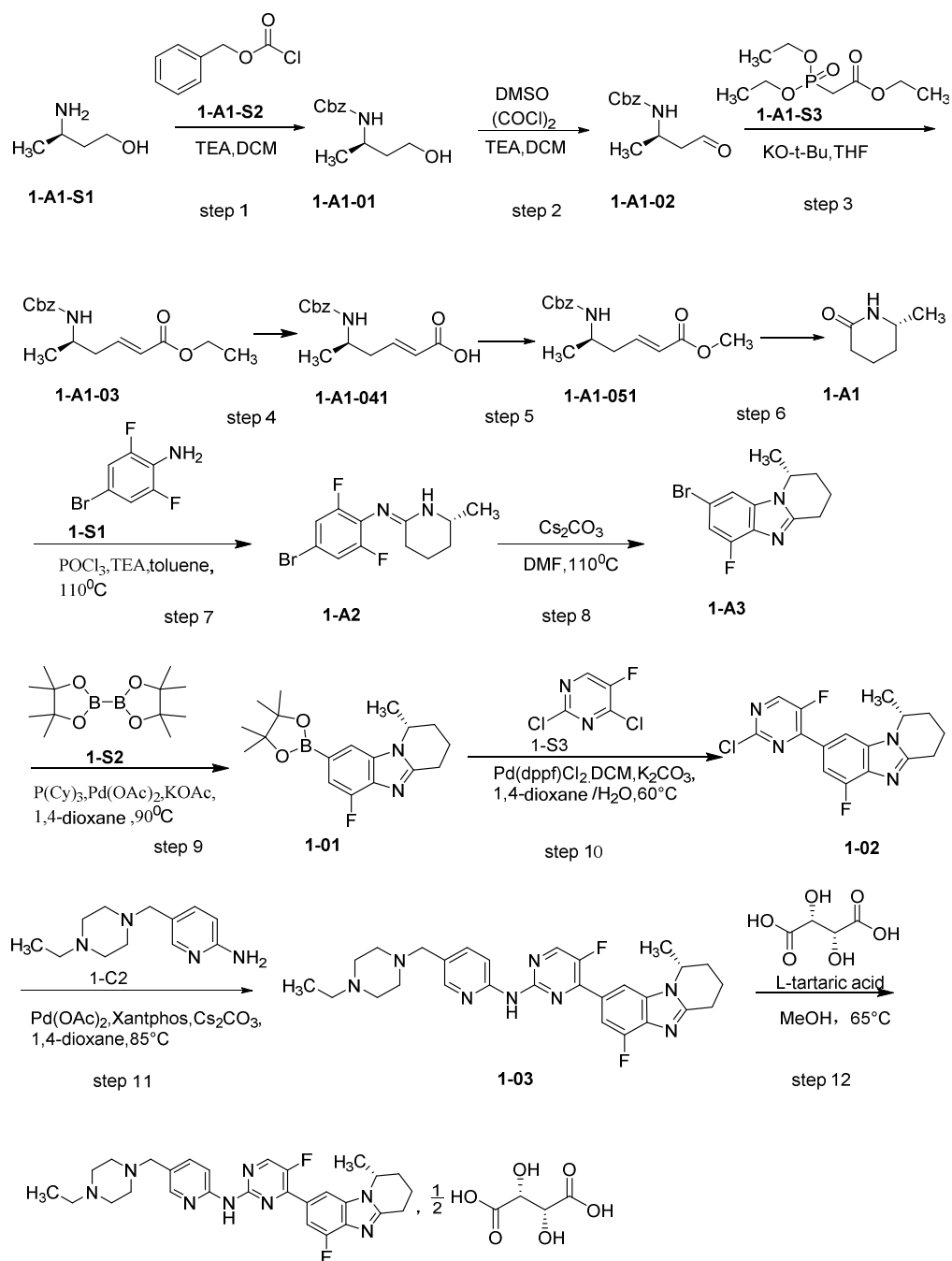
10. A crystal form of L-tartaric acid salt of the compound as shown in Formula I, wherein, the crystal form approximately has an X-ray powder diffraction pattern as shown in Fig. 3.

11. A compound of Formula III or a crystal form thereof:



Formula III.

12. A method for preparing L-tartaric acid salt of (R)-N-(5-((4-ethylpiperazin-1-yl)methyl)pyridin-2-yl)-5-fluoro-4-(6-fluoro-1-methyl-1,2,3,4-tetrahydrobenzo[4,5]imidazo[1,2-a]pyridin-8-yl)pyrimidin-2-amine (the compound as shown in Formula II), comprising:



13. A pharmaceutical composition, comprising a therapeutically effective amount of the crystal form according to any one of claims 4-10, and pharmaceutically acceptable excipients, auxiliaries and /or carriers.

14. A pharmaceutical composition, comprising a therapeutically effective amount of the compound and /or the crystal form thereof according to claim 11, and

pharmaceutically acceptable excipients, auxiliaries and /or carriers.

15. Use of the salt and /or the crystal form according to any one of claims 1-11 or the pharmaceutical composition according to any one of claims 13-14 in the manufacture of a medicament for the treatment of a disease, disorder or condition in a patient, wherein, the disease, disorder or condition is mediated by CDK, such as CDK4 and /or CDK6.

16. The use according to claim 15, wherein the disease, disorder or condition is a cancer and /or proliferative disease.

17. The use according to claim 15 or 16, wherein the disease, disorder or condition is breast cancer, lung cancer, melanoma, colon cancer, liver cancer, pancreatic cancer, brain cancer, kidney cancer, ovarian cancer, gastric cancer, skin cancer, bone cancer, glioma, lymphoma, neuroblastoma, hepatocellular carcinoma, papillary renal cell carcinoma and /or squamous cell carcinoma of the head and neck.