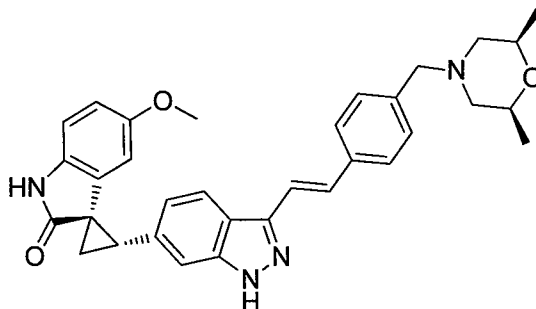


CLAIMS

1. A fumarate salt of compound (I) represented by the following structural formula:

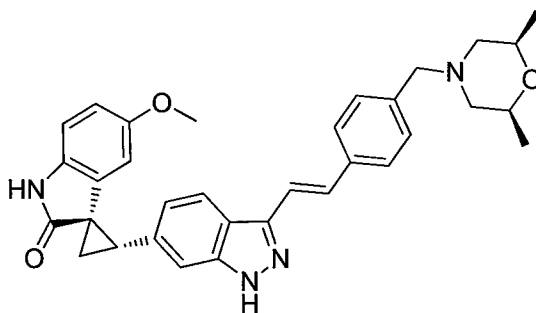


Compound (I)

- wherein the molar ratio between compound (I) and fumaric acid is 1:1.
2. The fumarate salt of claim 1, wherein at least 80% by weight of the salt is in a single crystalline form.
3. The fumarate salt of claim 1 or 2, wherein at least 99% by weight of the salt is in a single crystalline form.
4. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 9.7° , 16.7° , and $20.1^\circ \pm 0.2$ in 2θ .
5. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 8.2° , 9.7° , 16.7° , and $20.1^\circ \pm 0.2$ in 2θ .
6. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 8.2° , 9.7° , 10.7° , 11.5° , 14.9° , 16.7° , 20.1° , and $23.5^\circ \pm 0.2$ in 2θ .
7. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 8.2° , 9.7° , 10.7° , 11.5° , 13.6° , 14.9° , 16.7° , 18.1° , 18.8° , 20.1° , 23.5° , and $24.5^\circ \pm 0.2$ in 2θ .

8. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form B, characterized by an X-ray powder diffraction pattern which comprises peaks at 11.9° and $14.9^{\circ} \pm 0.2$ in 2θ .
9. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form B, characterized by an X-ray powder diffraction pattern which comprises peaks at 11.9° , 14.9° , 18.7° , and $21.5^{\circ} \pm 0.2$ in 2θ .
10. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form B, characterized by an X-ray powder diffraction pattern which comprises peaks at 5.5° , 5.9° , 11.9° , 14.9° , 16.7° , 17.4° , 18.7° , 21.5° , and $23.4^{\circ} \pm 0.2$ in 2θ .
11. The fumarate salt of any one of claims 1-3, wherein at least 75-80% by weight of the fumarate salt is single crystalline form C, characterized by an X-ray powder diffraction pattern which comprises peaks at 16.8° , 16.9° , and $19.9^{\circ} \pm 0.2$ in 2θ .
12. The fumarate salt of any one of claims 1-3, wherein at least 75-80% by weight of the fumarate salt is single crystalline form C, characterized by an X-ray powder diffraction pattern which comprises peaks at 9.8° , 16.8° , 16.9° , 19.9° , and $23.5^{\circ} \pm 0.2$ in 2θ .
13. The fumarate salt of any one of claims 1-3, wherein at least 75-80% by weight of the fumarate salt is single crystalline form C, characterized by an X-ray powder diffraction pattern which comprises peaks at 9.7° , 9.8° , 11.7° , 15.1° , 16.8° , 16.9° , 19.9° , 23.5° , and $23.7^{\circ} \pm 0.2$ in 2θ .
14. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form D, characterized by an X-ray powder diffraction pattern which comprises peaks at 9.6° , 12.8° , 16.0° , and $22.0^{\circ} \pm 0.2$ in 2θ .
15. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form D, characterized by an X-ray powder diffraction pattern which comprises peaks at 9.6° , 12.8° , 16.0° , 16.9° , 21.2° , and $22.0^{\circ} \pm 0.2$ in 2θ .

16. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form D, characterized by an X-ray powder diffraction pattern which comprises peaks at 9.6°, 12.8°, 16.0°, 16.9°, 20.8°, 21.2°, 21.5°, and 22.0° ± 0.2 in 2θ.
17. The fumarate salt of any one of claims 1-3, wherein at least 90% by weight of the fumarate salt is single crystalline form D, characterized by an X-ray powder diffraction pattern which comprises peaks at 9.6°, 11.7°, 12.0°, 12.8°, 16.0°, 16.6°, 16.9°, 18.1°, 19.2°, 19.8°, 20.7°, 20.8°, 21.2°, 21.5°, 22.0°, 22.5°, 24.0°, 26.0°, and 29.8° ± 0.2 in 2θ.
18. The fumarate salt of any one of claims 1-7, wherein at least 90% by weight of the fumarate salt is single crystalline form A, characterized by differential scanning calorimeter (DSC) peak phase transition temperatures of 112 °C and 158 °C.
19. The fumarate salt of any one of claims 1-3 and 8-10, wherein at least 90% by weight of the fumarate salt is single crystalline form B, characterized by differential scanning calorimeter (DSC) peak phase transition temperatures of 58 °C and 162 °C.
20. The fumarate salt of any one of claims 1-3 and 11-13, wherein at least 90% by weight of the fumarate salt is single crystalline form C, characterized by differential scanning calorimeter (DSC) peak phase transition temperatures of 62 °C and 156 °C.
21. The fumarate salt of any one of claims 1-3 and 14-17, wherein at least 90% by weight of the fumarate salt is single crystalline form D, characterized by differential scanning calorimeter (DSC) peak phase transition temperature of 219°C.
22. A maleate salt of compound (I) represented by the following structural formula:



Compound (I)

wherein the molar ratio between compound (I) and maleic acid is 1:1.

23. The maleate salt of claim 22, wherein at least 90% by weight of the salt is in a single crystalline form.
24. The maleate salt of claim 22 or 23, wherein at least 99% by weight of the salt is in a single crystalline form.
25. The maleate salt of any one of claims 22-24, wherein at least 90% by weight of the maleate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 11.5° , 12.6° , 14.9° , and $15.1^\circ \pm 0.2$ in 2θ .
26. The maleate salt of any one of claims 22-24, wherein at least 90% by weight of the maleate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 10.8° , 11.5° , 12.4° , 12.6° , 14.9° , 15.1° , and $17.1^\circ \pm 0.2$ in 2θ .
27. The maleate salt of any one of claims 22-24, wherein at least 90% by weight of the maleate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 5.8° , 10.8° , 11.5° , 12.4° , 12.6° , 14.9° , 15.1° , 17.1° , 18.6° , 23.5° , and $26.1^\circ \pm 0.2$ in 2θ .
28. The maleate salt of any one of claims 22-24, wherein at least 90% by weight of the maleate salt is single crystalline form A, characterized by an X-ray powder diffraction pattern which comprises peaks at 5.5° , 5.8° , 10.8° , 11.5° , 12.4° , 12.6° , 14.1° , 14.9° , 15.1° , 16.7° , 17.1° , 17.8° , 18.6° , 19.5° , 19.9° , 21.9° , 22.2° , 23.0° , 23.3° , 23.5° , 23.9° , and $26.1^\circ \pm 0.2$ in 2θ .
29. The maleate salt of any one of claims 22-28, wherein at least 90% by weight of the maleate salt is single crystalline form A, characterized by differential scanning calorimeter (DSC) peak phase transition temperature of 219°C .

30. A pharmaceutical composition comprising the fumarate salt of any one of claims 1-21 or the maleate salt of any one of claims 22-29, and a pharmaceutically acceptable carrier or diluent, wherein at least 80% by weight of the salt is crystalline.
31. A salt of any one of claims 1-29 or a pharmaceutically composition thereof for use in the treatment of cancer, preferably, the cancer is selected from the group consisting of lung cancer, breast cancer, colon cancer, neuroblastoma, prostate cancer, melanoma, glioblastoma multiforme, ovarian cancer, lymphoma, leukemia, osteosarcoma, germinoma, glioma, fibrosarcoma, gastrointestinal sarcoma, fibrous histiocyte, round cell sarcoma, synovial sarcoma, cervical cancer, anogenital cancer, head and neck cancer, and oropharyngeal cancer.
32. The salt for use of claim 31, wherein the cancer is selected from the group consisting of lung cancer, breast cancer and colon cancer, preferably, the cancer is breast cancer.
33. Use of the salt of any one of claims 1-29 or the pharmaceutically composition of claim 30 in the preparation of a medicament for treating cancer, preferably, the cancer is selected from the group consisting of lung cancer, breast cancer, colon cancer, neuroblastoma, prostate cancer, melanoma, glioblastoma multiforme, ovarian cancer, lymphoma, leukemia, osteosarcoma, germinoma, glioma, fibrosarcoma, gastrointestinal sarcoma, fibrous histiocyte, round cell sarcoma, synovial sarcoma, cervical cancer, anogenital cancer, head and neck cancer, and oropharyngeal cancer.
34. The use of claim 33, wherein the cancer is selected from the group consisting of lung cancer, breast cancer and colon cancer, preferably, the cancer is breast cancer.