CLAIMS

1. Benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide.

2. A method of producing benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the step of adding 2-[[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide to an organic solvent solution containing benzenesulfonic acid.

3. A method of producing benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the step of adding at least either of benzenesulfonic acid and its hydrate to an organic solvent solution containing 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide.

4. The production method according to claim 2 or 3, wherein the organic solvent is a non-protonic polar solvent or cyclic ether.

5. The production method according to claim 4, wherein the non-protonic polar solvent is dimethylsulfoxide or N,N-dimethylformamide.

6. The production method according to claim 4, wherein the cyclic ether is tetrahydrofuran.

7. A crystal of benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide.

8. An α-form crystal of benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl)

amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide having characteristic peaks at 4.4 angstroms, 3.8 angstroms and 2.3 angstroms as a d value of powder X-ray diffraction pattern.

9. A method of producing an α-form crystal of benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the steps of: adding 2-[[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide to an organic solvent solution containing benzenesulfonic acid and capable of dissolving benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide; and sequentially adding a solvent that substantially fails to dissolve benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 –pyridinecarboxamide at room temperature to the reaction solution, wherein the organic solvent capable of dissolving benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide is a non-protonic polar solvent and wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is water, a lower alkyl alcohol, a lower alkyl ketone or a lower alkylcarboxylic acid ester.

10. A method of producing an α-form crystal of benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the steps of: adding at least either of benzenesulfonic acid and its hydrate to an organic solvent solution containing 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 –pyridinecarboxamide and capable of dissolving benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide; and sequentially adding a solvent that substantially fails to dissolve benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl]

methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 –pyridinecarboxamide at room temperature to the reaction solution, wherein the organic solvent capable of dissolving benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide is a non-protonic polar solvent and wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is water, a lower alkyl alcohol, a lower alkyl ketone or a lower alkylcarboxylic acid ester.

~~11. The production method according to claim 9 or 10, wherein the organic solvent capable of dissolving benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide is a non-protonic polar solvent.~~

1112. The production method according to claim 9 or 1011, wherein the non-protonic polar solvent is dimethylsulfoxide or N,N-dimethylformamide.

~~13. The production method according to claim 9 or claim 10, wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is water, a lower alkyl alcohol, a lower alkyl ketone or a lower alkylcarboxylic acid ester.~~

1214. The production method according to claim 9 or claim 10, wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is water, ethanol, acetone or ethyl acetate.

1315. The production method according to claim 9 or claim 10, wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 -

[(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is ethanol.

1416. A method of producing an α-form crystal of benzenesulfonate of 2-[[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the step of adding a solvent that substantially fails to dissolve benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 –pyridinecarboxamide at room temperature to an organic solvent solution containing benzenesulfonate of 2-[[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 –pyridinecarboxamide and capable of dissolving benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide.

~~17. The production method according to claim 16~~, wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is water, a lower alkyl alcohol, a lower alkyl ketone or a lower alkylcarboxylic acid ester and wherein the organic solvent capable of dissolving benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide is a non-protonic polar solvent.

1518. The production method according to claim 1417, wherein the non-protonic polar solvent is dimethylsulfoxide or N,N-dimethylformamide.

~~19. The production method according to claim 16, wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is water, a lower alkyl alcohol, a lower alkyl ketone or a lower alkylcarboxylic acid ester.~~

1620. The production method according to claim 1416, wherein the solvent that substantially fails to dissolve benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide at room temperature is water, ethanol, acetone or ethyl acetate.

1721. A method of producing an α-form crystal of benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the steps of: adding and dissolving benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide in a warmed lower alcohol; and sequentially cooling the lower alcohol solution.

2218. The production method according to claim 2117, wherein the lower alcohol is methanol or ethanol.

2319. A β-form crystal of benzenesulfonate of 2 - [[[2 - [(hydroxyacetyl) amino] - 4 - pyridinyl] methyl] thio] - N - [4 - (trifluoromethoxy) phenyl] - 3 - pyridinecarboxamide having characteristic peaks at 8.1 angstroms, 6.8 angstroms, 4.1 angstroms and 4.0 angstroms as a d value of powder X-ray diffraction pattern.

2420. A method of producing a β-form crystal of benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the step of adding 2-[[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide to a cyclic ether solution containing benzenesulfonic acid.

2521. A method of producing a β-form crystal of benzenesulfonate of 2- [[[2 - [(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide, comprising the step of adding at least either of

benzenesulfonic acid and its hydrate to a cyclic ether solution containing 2- [[[2 -[(hydroxyacetyl) amino]- 4 -pyridinyl] methyl] thio]- N -[4 -(trifluoromethoxy) phenyl]- 3 -pyridinecarboxamide.

~~26~~22. The production method according to claim ~~24~~20 or ~~25~~21, wherein the cyclic ether is tetrahydrofuran.

~~27~~23. A pharmaceutical containing as an active ingredient, at least one selected from the group consisting of the benzenesulfonate, a crystal of the same, and an α-form crystal and a β-form crystal thereof according to claim 1, claim 7, claim 8 or claim ~~23~~19.

~~28~~24. An oral or parenteral agent containing as an active ingredient, at least one selected from the group consisting of the benzenesulfonate, a crystal of the same, and an α-form crystal and a β-form crystal thereof according to claim 1, claim 7, claim 8 or claim ~~23~~19.