[0005]

The present inventors have conducted an intensive search and succeeded in providing 1-(4-methoxybutyl)-N-(2-methylpropyl)-N-[(3S,5R)-5-(morpholin-4-ylcarbonyl)piperidin-3-yl]-1H-benzimidazole-2-carboxamide hydrochloride as a stable crystal having low hygroscopicity and high melting point. They have found that the crystal is sufficiently satisfactory as a medicament, and completed the present invention based on these findings.

[0006]

Accordingly, the present invention relates to

(1) a crystal of 1-(4-methoxybutyl)-N-(2-methylpropyl)-N-[(3S,5R)-5-(morpholin-4-ylcarbonyl)piperidin-3-yl]-1H-benzimidazole-2-carboxamide hydrochloride having an powder X-ray diffraction pattern showing characteristic peaks at interplanar spacings (d) of around 26.43±0.2, 7.62±0.2 and 4.32±0.2 angstroms (hereinafter sometimes to be abbreviated as the crystal of the present invention),

(2) a crystal of 1-(4-methoxybutyl)-N-(2-methylpropyl)-N-[(3S,5R)-5-(morpholin-4-ylcarbonyl)piperidin-3-yl]-1H-benzimidazole-2-carboxamide hydrochloride having an powder X-ray diffraction pattern showing characteristic peaks at interplanar spacings (d) of around 26.43±0.2, 7.62±0.2, 4.32±0.2, 3.08±0.2, 2.59±0.2 and 2.33±0.2 angstroms (hereinafter sometimes to be abbreviated as “type B crystal”),

(3) a medicament comprising the crystal of the aforementioned (1) or (2),

(4) the medicament of the aforementioned (3), which is a rennin inhibitor,

(5) the medicament of the aforementioned (3), which is a prophylactic or therapeutic agent for a circulatory disease,

(6) the medicament of the aforementioned (3), which is a prophylactic or therapeutic agent for hypertension and/or various organ disorders caused by hypertension,

(7) the medicament of the aforementioned (3), which is a

Claims

1. A crystal of 1-(4-methoxybutyl)-N-(2-methylpropyl)-N-[(3S,5R)-5-(morpholin-4-ylcarbonyl)piperidin-3-yl]-1H-benzimidazole-2-carboxamide hydrochloride having an powder X-ray diffraction pattern showing characteristic peaks at interplanar spacings (d) of around 26.43±0.2, 7.62±0.2 and 4.32±0.2 angstroms.

2. A crystal of 1-(4-methoxybutyl)-N-(2-methylpropyl)-N-[(3S,5R)-5-(morpholin-4-ylcarbonyl)piperidin-3-yl]-1H-benzimidazole-2-carboxamide hydrochloride having an powder X-ray diffraction pattern showing characteristic peaks at interplanar spacings (d) of around 26.43±0.2, 7.62±0.2, 4.32±0.2, 3.08±0.2, 2.59±0.2 and 2.33±0.2 angstroms.

3. A medicament comprising the crystal of claim 1 or 2.

4. The medicament of claim 3, which is a rennin inhibitor.

5. The medicament of claim 3, which is a prophylactic or therapeutic agent for a circulatory disease.

6. The medicament of claim 3, which is a prophylactic or therapeutic agent for hypertension and/or various organ disorders caused by hypertension.

7. The medicament of claim 3, which is a prophylactic or therapeutic agent for a renal disease.