CLAIMS

[Claim 1]

A Form-I crystal of 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide, showing diffraction peaks in its X-ray powder diffraction spectrum at least at the following angles of diffraction 2θ: 9.4 degrees, 9.8 degrees, 17.2 degrees and 19.4 degrees, wherein the X-ray powder diffraction diagram is obtained by using Cu Kα radiation.

[Claim 2]

A Form-II crystal of 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide, showing diffraction peaks in its X-ray powder diffraction spectrum at least at the following angles of diffraction 2θ: 9.0 degrees, 12.9 degrees, 20.7 degrees and 22.6 degrees, wherein the X-ray powder diffraction diagram is obtained by using Cu Kα radiation.

[Claim 3]

A Form-III crystal of 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide, showing diffraction peaks in its X-ray powder diffraction spectrum at least at the following angles of diffraction 2θ: 9.3 degrees, 9.7 degrees, 16.8 degrees 20.6 degrees and 23.5 degrees, wherein the X-ray powder diffraction diagram is obtained by using Cu Kα radiation.

[Claim 4]

A pharmaceutical composition comprising the crystal of any one of claims 1 to 3 as an active ingredient.

[Claim 5]

A PGI2 receptor agonist agent comprising the crystal of any one of claims 1 to 3 as an active ingredient.

[Claim 6]

A ~~preventive or~~ therapeutic agent for treatment of a condition selected from the group consisting of~~transient ischemic attack,~~ diabetic neuropathy, diabetic gangrene, peripheral circulatory disturbance, chronic arterial occlusion, intermittent claudication~~connective tissue disease, reocclusion / restenosis after percutaneous transluminal coronary angioplasty (PTCA), arteriosclerosis~~, thrombosis, ~~hypertension,~~ pulmonary hypertension, myocardial infarction~~ischemic disorder~~, angina, glomerulonephritis, diabetic nephropathy, chronic renal failure, ~~allergy,~~ bronchial asthma, interstitial pneumonia (pulmonary fibrosis), scleroderma, chronic obstructive pulmonary disease~~ulcer, pressure ulcer (bedsore), restenosis after coronary intervention such as atherectomy and stent implantation, thrombocytopenia by dialysis, the diseases in which fibrosis of organs or tissues is involved, erectile dysfunction~~, inflammatory bowel disease, tubulointerstitial nephritis~~gastritis, gastric ulcer, ischemic ophthalmopathy, sudden hearing loss, avascular necrosis of bone, intestinal damage caused by administration of a non-steroidal anti-inflammatory agent~~,

and symptoms associated with lumbar spinal canal stenosis, wherein the therapeutic agent comprises~~ing~~ the crystal of any one of claims 1 to 3 as an active ingredient.

[Claim 7]

The therapeutic agent according to claim 6, wherein the condition is pulmonary hypertension~~An accelerating agent for angiogenic therapy in gene therapy or autologous bone marrow transplantation, comprising the crystal of any one of claims 1 to 3 as an active ingredient~~.

[Claim 8]

The therapeutic agent according to claim 6, wherein the condition is circulatory disturbance~~An accelerating agent for angiogenesis in restoration of peripheral artery or angiogenic therapy, comprising the crystal of any one of claims 1 to 3 as an active ingredient~~.

[~~e~~Claim 9]

The therapeutic agent according to claim 6, wherein the condition is chronic arterial occlusion~~A method for producing a Form-I crystal of 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide, characterized in that 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide is dissolved in an alcoholic solvent or a mixed solvent of an alcoholic solvent and a ketone solvent while heating, and subsequently is crystallized by cooling the solution gradually~~.

[~~e~~Claim 10]

The therapeutic agent according to claim 6, wherein the condition is intermittent claudication~~A method for producing a Form-II crystal of 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide, characterized in that 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide is crystallized from an alcoholic solvent, a ketone solvent, a saturated hydrocarbon solvent, an ether solvent, and water or a mixed solvent thereof~~.

[~~e~~Claim 11]

The therapeutic agent according to claim 6, wherein the condition is symptoms associated with spinal canal stenosis~~A method for producing a Form-III crystal of 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide characterized in that 2-{4-[N-(5,6-diphenylpyrazin-2-yl)-N-isopropylamino]butyloxy}-N-(methylsulfonyl)acetamide is crystallized from an ester solvent or an aromatic hydrocarbon solvent~~.

[Claim 12]

The therapeutic agent according to claim 6, wherein the condition is pulmonary fibrosis.

[Claim 13]

The therapeutic agent according to claim 6, wherein the condition is scleroderma.

[Claim 14]

The therapeutic agent according to claim 6, wherein the condition is chronic renal failure.

[Claim 15]

The therapeutic agent according to claim 6, wherein the condition is tubulointerstitial nephritis.

[Claim 16]

Use of the crystal of any one of claims 1 to 3 in the manufacture of a formulation for the treatment of diabetic neuropathy, diabetic gangrene, peripheral circulatory disturbance, chronic arterial occlusion, intermittent claudication, thrombosis, pulmonary hypertension, myocardial infarction, angina, glomerulonephritis, diabetic nephropathy, chronic renal failure, bronchial asthma, interstitial pneumonia (pulmonary fibrosis), scleroderma, chronic obstructive pulmonary disease, inflammatory bowel disease, tubulointerstitial nephritis, or symptoms associated with lumbar spinal canal stenosis.