[CLAIMS]

[Claim 1]

A method for producing a cell population comprising cardiomyocytes, comprising

(1-1) a step of bringing a receptor-type tyrosine kinase inhibitor into contact with a cell population containing cardiomyocytes or cardiac progenitor cells, and other cells, the cell population being obtained by culturing pluripotent stem cells in a medium for cardiomyocyte differentiation, wherein the receptor-type tyrosine kinase inhibitor excludes EGF receptor inhibitors and FGF receptor inhibitors, or

(1-2) a step of bringing an FGF receptor inhibitor into contact with a cell population containing cardiomyocytes or cardiac progenitor cells, and other cells, the cell population being obtained by culturing pluripotent stem cells in a medium for cardiomyocyte differentiation, wherein the cell population is contacted with the FGF receptor inhibitor on or after 8 days from the start of differentiation induction of pluripotent stem cells, and

(2) a step of culturing the cell population, wherein the other cells comprise smooth muscle-like cells, endoderm lineage cells or endothelium-like cells.

[Claim 2]

The method according to claim 1, wherein the cell population is contacted with the receptor-type tyrosine kinase inhibitor in the step (1-1) on or after 4 days from the start of differentiation induction of pluripotent stem cells.

[Claim 3]

The method according to claim 1 or 2, wherein the cell population is contacted with the receptor-type tyrosine kinase inhibitor in step (1-1) or the FGF

receptor inhibitor in step (1-2) for not less than one day.

[Claim 4]

The method according to any one of claims 1 to 3, wherein the receptor-type tyrosine kinase inhibitor is at least one inhibitor against a receptor-type tyrosine kinase selected from the group consisting of a VEGF receptor, a PDGF receptor, and an HGF receptor.

[Claim 5]

The method according to any one of claims 1 to 4, wherein the receptor-type tyrosine kinase inhibitor is at least one member selected from the group consisting of N-[5-({2-[(cyclopropanecarbonyl)amino]imidazo[1,2-b]pyridazin-6-yl}oxy)-2-methylphenyl]-1,3-dimethyl-1H-pyrazole-5-carboxamide, N-{4-[(6,7-dimethoxyquinolin-4-yl)oxy]-3-fluorophenyl}-N'-(4-fluorophenyl)cyclopropane-1,1-dicarboxamide, AMG337, Foretinib, ZM323881, CP-673451, Crenolanib, and Crizotinib, or wherein the FGF receptor inhibitor is ASP5878 and/or BGJ398.

[Claim 6]

The method according to any one of claims 1 to 5, wherein the pluripotent stem cells are induced pluripotent stem cells.

[Claim 7]

A method for purifying cardiomyocytes in a cell population containing cardiomyocytes or cardiac progenitor cells, and other cells, the cell population being obtained by culturing pluripotent stem cells in a medium for cardiomyocyte differentiation, comprising

(1-1) a step of bringing a receptor-type tyrosine kinase inhibitor into contact with the cell population, wherein the receptor-type tyrosine kinase inhibitor

excludes EGF receptor inhibitors and FGF receptor inhibitors, or

(1-2) a step of bringing an FGF receptor inhibitor into contact with the cell population, wherein the cell population is contacted with the FGF receptor inhibitor on or after 8 days from the start of differentiation induction of pluripotent stem cells, and

(2) a step of culturing the cell population, wherein the other cells comprise smooth muscle-like cells, endoderm lineage cells or endothelium-like cells.