CLAIMS

[Claim 1]

A method for producing a primed pluripotent stem cell, comprising:

(1) a step of preparing a primate naive pluripotent stem cell, and

(2) a step of inducing a primed pluripotent stem cell from the naive pluripotent stem cell prepared in step (1).

[Claim 2]

The method according to claim 1, comprising a step of collecting the primed pluripotent stem cell obtained in step (2).

[Claim 3]

The method according to claim 1 or 2, wherein step (1) is a step of producing a naive pluripotent stem cell from a somatic cell without transitioning through a primed pluripotent stem cell.

[Claim 4]

The method according to claim 3, comprising a step of introducing a reprogramming factor and a miRNA belonging to the let-7-5p miRNA family into a somatic cell.

[Claim 5]

The method according to claim 4, wherein the miRNA belonging to the let-7-5p miRNA family is at least one type of miRNA selected from the group consisting of miR-98-5p, let-7a-5p, let-7b-5p, let-7c-5p, let-7e-5p, let-7f-5p, let-7g-5p and let-7i-5p.

[Claim 6]

The method according to any one of claims 3 to 5, comprising a step of introducing a bone morphogenetic protein into a cell.

[Claim 7]

The method according to any one of claims 3 to 6, comprising a step of activating a bone morphogenetic protein in a cell.

[Claim 8]

The method according to any one of claims 3 to 7, comprising a step of introducing a viral vector having a reprogramming factor into a somatic cell.

[Claim 9]

The method according to claim 1 or 2, wherein step (1) is a step of culturing a primate primed pluripotent stem cell to produce a naive pluripotent stem cell.

[Claim 10]

The method according to claim 9, wherein the culturing is carried out for 14 days or longer.

[Claim 11]

The method according to claim 9 or 10, comprising a step of sorting a CD320-positive cell from the cell population.

[Claim 12]

The method according to any one of claims 1 to 11, wherein step (2) comprises a step of culturing the naive pluripotent stem cell prepared in step (1) for 4 days or longer in medium containing bFGF.

[Claim 13]

The method according to any one of claims 1 to 12, wherein step (2) is culturing under a feeder-free condition.

[Claim 14]

The method according to any one of claims 1 to 13, wherein the entire culturing period is under feeder-free and xeno-free conditions.

[Claim 15]

The method according to any one of claims 1 to 14, wherein the pluripotent stem cell is an induced pluripotent stem cell.

[Claim 16]

A primed pluripotent stem cell obtained by the method according to any one of claims 1 to 15.

[Claim 17]

A method for producing a cell or an organoid, comprising a step of inducing differentiation of the primed pluripotent stem cell according to claim 16.

[Claim 18]

The method according to claim 17, wherein the cell is selected from the group consisting of a neural crest cell, a neural progenitor cell, a neuron, a hematopoietic progenitor cell, a platelet, a T cell, an epiblast-like cell, a primordial germ cell and a myocardial cell.

[Claim 19]

The method according to claim 17, wherein the organoid is a cerebral cortex organoid.

[Claim 20]

A method for increasing the differentiation potency of a pluripotent stem cell, comprising:

(1) a step of inducing a naive pluripotent stem cell from a primate primed pluripotent stem cell, and

(2) a step of inducing a primed pluripotent stem cell from the naive pluripotent stem cell induced in step (1).