【CLAIMS】

【Claim 1】

A medium composition for culturing porcine pluripotent stem cells, comprising LDN-193189,

wherein the medium composition for culturing porcine pluripotent stem cells is used for feeder cell-free culture,

wherein the feeder cell-free culture is culturing cells in a culture vessel coated with fibronectin, laminin, poly-L-lysine, type 1 collagen or Matrigel®.

【Claim 2】

The medium composition for culturing porcine pluripotent stem cells according to claim 1, wherein the LDN-193189 has a concentration of 10 nM to 1000 nM.

【Claim 3】

The medium composition for culturing porcine pluripotent stem cells according to claim 1, wherein the porcine pluripotent stem cells are porcine embryonic stem cells or porcine induced pluripotent stem cells.

【Claim 4】

The medium composition for culturing porcine pluripotent stem cells according to claim 1, wherein the medium composition for culturing porcine pluripotent stem cells further comprises FGF2, activin A, CHIR99021, and IWR-1.

【Claim 5】

The medium composition for culturing porcine pluripotent stem cells according to claim 4, wherein the concentration of FGF2 is 0.1 ng/ml to 100 ng/ml, the concentration of activin A is 0.1 ng/ml to 10 ng/ml, the concentration of CHIR99021 is 0.1 μM to 4.5 μM, and the concentration of IWR-1 is 0.1 μM to 5 μM.

【Claim 6】

The medium composition for culturing porcine pluripotent stem cells according to claim 1, wherein the medium composition for culturing porcine pluripotent stem cells promotes proliferation of stem cells and inhibits apoptosis.

【Claim 7】

The medium composition for culturing porcine pluripotent stem cells according to claim 1, wherein the medium composition for culturing porcine pluripotent stem cells increases the number of stem cell colonies and the size of the colonies.

【Claim 8】

The medium composition for culturing porcine pluripotent stem cells according to claim 1, wherein the medium composition for culturing porcine pluripotent stem cells enhances stemness/pluripotency of stem cells.

【Claim 9】

The medium composition for culturing porcine pluripotent stem cells according to claim 1, wherein the medium composition for culturing porcine pluripotent stem cells comprises 0.1 to 3% by weight of serum-free or serum components.

【Claim 10】

A composition for addition to a porcine pluripotent stem cell culture medium, wherein the composition comprises LDN-193189 as an active ingredient,

wherein the composition is for use in a feeder cell-free culture,

wherein the feeder cell-free culture is culturing the cells in a culture vessel coated with fibronectin, laminin, poly-L-lysine, type 1 collagen or Matrigel®.

【Claim 11】

The composition for addition to a porcine pluripotent stem cell culture medium according to claim 10, wherein the LDN-

193189 has a concentration of 10 nM to 1000 nM.

【Claim 12】

A method of culturing porcine pluripotent stem cells, comprising treating porcine pluripotent stem cells with the medium composition for culturing porcine pluripotent stem cells according to claim 1 and culturing them,

wherein the porcine pluripotent stem cells are porcine embryonic stem cells or porcine induced pluripotent stem cells,

wherein the porcine pluripotent stem cells are cultured in feeder cell-free culture,

wherein the feeder cell-free culture is culturing the cells in a culture vessel coated with fibronectin, laminin, poly-L-lysine, type 1 collagen or Matrigel®.