CLAIMS

1. A method for culturing a stem cell having pluripotency, the method comprising:
performing cell culture in the presence of a substance that can inhibit cell-cell adhesion.

2. A method for removing a cell deviated from an undifferentiated state, the cell being a cell that has emerged or may possibly emerge during culture of a stem cell having pluripotency, the method comprising:
performing cell culture in the presence of a substance that can inhibit cell-cell adhesion.

3. A method for maintaining an undifferentiated state of a stem cell having pluripotency, the method comprising:
performing cell culture in the presence of a substance that can inhibit cell-cell adhesion.

4. The method according to any one of claims 1 to 3, wherein
the stem cell having pluripotency is a human pluripotent stem cell.

5. The method according to claim 4, wherein
the human pluripotent stem cell is either a human iPS cell or a human ES cell.

6. The method according to any one of claims 1 to 5, wherein
the substance that can inhibit cell-cell adhesion is a substance having an E-cadherin function inhibitory activity.

7. The method according to claim 6, wherein
the substance that can inhibit cell-cell adhesion further has an ability to bind to a cell surface.

8. The method according to any one of claims 1 to 7, wherein
the substance that can inhibit cell-cell adhesion is hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum.

9. The method according to any one of claims 1 to 8, wherein
the substance that can inhibit cell-cell adhesion is a complex composed of two or three components selected from the group consisting of three hemagglutinin subcomponents HA1, HA2, and HA3 of the neurotoxin complex of Clostridium botulinum.

10. The method according to claim 9, wherein
the subcomponent HA3 of the complex is of Clostridium botulinum type A or Clostridium botulinum type B.

11. The method according to any one of claims 1 to 10, wherein
the culture is subculture.

12. A composition for the method according to any one of claims 1 to 11, the composition comprising:
a substance that can inhibit cell-cell adhesion.

13. A kit comprising:
a medium component for a stem cell having pluripotency; and
a substance that can inhibit cell-cell adhesion.

14. The kit according to claim 13 for the method according to any one of claims 1 to 11.

CLAIMS

1. A method for culturing a stem cell having pluripotency, the method comprising:

culturing the stem cell in a culture medium to form a colony of the stem cell; and

removing a cell deviated from an undifferentiated state, which has emerged in the colony, from the colony (i) by adding hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity to the culture medium, or (ii) by exchanging the culture medium with a culture medium that contains hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity,

wherein the stem cell is a human pluripotent stem cell.

2. A method for removing a cell deviated from an undifferentiated state, the cell being a cell that has emerged during culture of a stem cell having pluripotency, the method comprising:

culturing the stem cell in a culture medium; and

removing a cell deviated from an undifferentiated state from a colony (i) by adding hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity to the culture medium containing the colony in which the cell deviated from the undifferentiated state has emerged by the culture, or (ii) by exchanging the culture medium with a culture medium that contains hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity,

wherein the stem cell is a human pluripotent stem cell.

3. A method for culturing a stem cell having pluripotency, the method comprising:

culturing the stem cell in a culture medium to form a colony of the stem cell;

adding hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity to the culture medium in which the colony is formed, or exchanging the culture medium with a culture medium that contains hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity; and

forming a colony of a cell in an undifferentiated state by culturing the stem cell in the culture medium containing the hemagglutinin,

wherein the stem cell is a human pluripotent stem cell.

4. A method for culturing a stem cell having pluripotency, the method comprising:

adding hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity to a culture medium; and

maintaining an undifferentiated state of the stem cell by culturing the stem cell in the culture medium containing the hemagglutinin,

wherein the stem cell is a human pluripotent stem cell.

5. The method according to any one of claims 1 to 4, wherein

the human pluripotent stem cell is either a human iPS cell or a human ES cell.

6. The method according to any one of claims 1 to 5, wherein

the hemagglutinin is a complex composed of two or three components selected from the group consisting of three hemagglutinin subcomponents HA1, HA2, and HA3 of the neurotoxin complex of Clostridium botulinum.

7. The method according to claim 6, wherein

the subcomponent HA3 of the complex is of Clostridium botulinum type A or Clostridium botulinum type B.

8. The method according to any one of claims 1 to 7, wherein

the culture is subculture.

9. The method according to any one of claims 1 to 8, wherein a concentration of the hemagglutinin in the culture medium is 10 nM or more.

10. A kit comprising:

a medium component for a stem cell having pluripotency; and

hemagglutinin (HA) of a neurotoxin complex of Clostridium botulinum having an E-cadherin function inhibitory activity.

11. The kit according to claim 10 for the method according to any one of claims 1 to 9.