Claims

1. A method of purifying a retinal pigment epithelial cell, comprising the steps of:
(1) recovering a cell population obtained by differentiation induction of pluripotent stem cells on laminin or a fragment thereof by treating with a cell separating solution, wherein the cell population contains retinal pigment epithelial cells which are present on the laminin or the fragment thereof under a jelly-like substance containing other visual cells without forming a mixture with the jelly-like substance;
(2) dissociating adhesion between retinal pigment epithelial cells of the cell population;
(3) introducing the cell population obtained in (2) on a filter; and
(4) obtaining retinal pigment epithelial cells that passed the filter.

2. The method according to claim 1, wherein the laminin or a fragment thereof is a laminin-E8 fragment.

3. The method according to claim 1 or 2, further comprising a step of removing the cell separating solution and the residual impurities thereof, and matrix components together with the supernatant from the cell population by centrifugation between steps (2) and (3).

4. The method according to any one of claims 1 to 3, wherein the step of dissociating adhesion between retinal pigment epithelial cells is reciprocating pipetting of the cell population several times.

5. The method according to any one of claims 1 to 4, wherein the cell separating solution comprises trypsin.

6. The method according to any one of claims 1 to 5, wherein the filter has a pore size of 20 - 70 μm.

7. A method of producing retinal pigment epithelial cells from a pluripotent stem cell, comprising the steps of:
(1) inducing differentiation of pluripotent stem cells on laminin or a fragment thereof into a cell population containing retinal pigment epithelial cells;
(2) recovering the cell population by treating with a cell separating solution;
(3) dissociating adhesion between retinal pigment epithelial cells of the cell population; and
(4) introducing the cell population obtained in (3) on a filter to obtain retinal pigment epithelial cells that passed the filter.

8. The method according to claim 7, wherein the laminin or a fragment thereof is a laminin-E8 fragment.

9. The method according to claim 7 or 8, further comprising a step of removing the cell separating solution and the residual impurities thereof, and matrix components together with the supernatant from the cell population by centrifugation between steps (3) and (4).

10. The method according to any one of claims 7 to 9, wherein the step of dissociating adhesion between retinal pigment epithelial cells is reciprocating pipetting of the cell population several times.

11. The method according to any one of claims 7 to 10, wherein the cell separating solution comprises trypsin.

12. The method according to any one of claims 7 to 11, wherein the filter has a pore size of 20 - 70 μm.