Claims

1. A method of producing a cell sheet comprising the following steps

(1) seeding and culturing retinal pigment epithelial cells on a collagen gel to form a cell sheet composed of the retinal pigment epithelial cells, and

(2) degrading the collagen gel with collagenase to detach the cell sheet composed of the retinal pigment epithelial cells.

2. The production method of the cell sheet according to claim 1, wherein the retinal pigment epithelial cells are cells obtained by inducing differentiation of stem cells or progenitor cells.

3. The production method of the cell sheet according to claim 2, wherein the stem cells are ES cells or iPS cells.

4. The production method of the cell sheet according to claim 1, wherein the concentration of collagen in the collagen gel is 0.1% - 0.5%.

5. The production method of the cell sheet according to any one of claims 1 to 4, further comprising the following step (3):

(3) confirming the presence or absence of a basement membrane on the contact surface between the detached cell sheet and the collagen gel.

6. A cell sheet produced by the method according to any one of claims 1 to 5.

7. A cell sheet for transplantation, comprising a cell layer formed with retinal pigment epithelial cells obtained by inducing differentiation of stem cells or progenitor cells ex vivo, and a basement membrane secreted from the cells.

8. A cell sheet for screening, comprising a cell layer formed with retinal pigment epithelial cells obtained by inducing differentiation of stem cells or progenitor cells ex vivo, and a basement membrane secreted from said cells.

Claims

1. A method of producing a cell sheet comprising the following steps
(1) seeding and culturing retinal pigment epithelial cells on a tendon-derived collagen gel to form a cell sheet composed of the retinal pigment epithelial cells, and
(2) degrading the tendon-derived collagen gel with collagenase to detach the cell sheet composed of the retinal pigment epithelial cells.

2. The production method of the cell sheet according to claim 1, wherein the retinal pigment epithelial cells are cells obtained by inducing differentiation of stem cells or progenitor cells.

3. The production method of the cell sheet according to claim 2, wherein the stem cells are ES cells or iPS cells.

4. The production method of the cell sheet according to claim 1, wherein the concentration of collagen in the tendon-derived collagen gel is 0.1% - 0.5%.

5. The production method of the cell sheet according to any one of claims 1 to 4, further comprising the following step (3):
(3) confirming the presence or absence of a basement membrane on the contact surface between the detached cell sheet and the tendon-derived collagen gel.

6. The production method of the cell sheet according to any one of claims 1 to 5, wherein the tendon-derived collagen gel is derived from swine.

7. A cell sheet produced by the method according to any one of claims 1 to 6.