12. The cell culture device according to any one of claims 1 to 11, further comprising:

a cell supply portion which supplies cells cultured in the culture container to the first flow path.

13. The cell culture device according to claim 11, further comprising:

a cell supply portion which is connected to a downstream side of the second stirring portion in the fifth flow path and supplies cells cultured in the culture container to the first flow path via the fifth flow path; and

a third stirring portion which is provided on a downstream side of a region, to which the cell supply portion is connected, in the fifth flow path and stirs a fluid flowing in.

14. The cell culture device according to any one of claims 1 to 13, further comprising:

a freezing portion which is connected to a third region positioned within the first flow path between the second outflow port and the first outflow port, and freezes cells.

15. The cell culture device according to any one of claims 1 to 14, further comprising:

a pressure adjustment mechanism which adjusts a pressure within the culture container.

16. A cell culture method in which the cell culture device according to any one of claims 1 to 15 is used, the method comprising:

a medium exchange process of exchanging a used medium which has been used for culture of cells within the culture container with a new medium; and

a division process of dividing a cell aggregation formed through culturing cells in the culture container,

wherein the medium exchange process includes

a step of storing the cells cultured in the culture container in the first storage container together with a used medium,

a step of removing the used medium from a mixture containing the cells and the used medium which have been stored in the first storage container,

a step of supplying a new medium to the cells stored in the first storage container from the medium supply portion, and