

ABSTRACT

An object of the present invention is to provide a cerebral organoid derived from a human pluripotent stem cell, a cell aggregate including a cerebral cortical cell, and a method for producing any of them, each being useful for regenerative therapy. The method of the present invention for producing a cerebral organoid is a method for producing a cerebral organoid from a pluripotent stem cell in the absence of a sustentacular cell, and comprises: (1) a step of culturing the pluripotent stem cell in a culture solution, wherein the culture solution is substantially free of bFGF and provokes substantially no TGF β signal; and (2) a step of inducing the cell obtained in step (1) to differentiate into a neural cell.