

ABSTRACT

An object of the present invention is to provide a production method and a culture method of a three-dimensional cell culture containing human-derived neurons, human-derived astrocytes, and human-derived microglia capable of mimicking human brain functions; a three-dimensional cell culture containing human-derived neurons, human-derived astrocytes, and human-derived microglia capable of mimicking human brain functions; and an evaluation method of a test substance using the three-dimensional cell culture. According to the present invention, there is provided a production method of a three-dimensional cell culture, the production method including a step of adding, prior to co-culture of cells, human-derived astrocytes, human-derived neurons, and human-derived microglia to a culture vessel, and a step of co-culturing the astrocytes, the neurons, and the microglia in the culture vessel, in which a proportion of the astrocytes among all cells added to the culture vessel is 30% or more.