Abstract

METHOD FOR PRODUCING CEREBELLAR PROGENITOR TISSUE

The present invention provides a method for producing a human cell aggregate containing a midbrain-hindbrain boundary neural progenitor tissue, including subjecting an aggregate of human pluripotent stem cells to suspension culturing in a serum-free medium containing insulin, and treating, in the suspension culturing, the aggregate of human pluripotent stem cells or a human cell aggregate derived therefrom with a ROCK inhibitor, a TGFβ signal inhibitor, and a first fibroblast growth factor. Furthermore, the human cell aggregate containing the midbrain-hindbrain boundary neural progenitor tissue is subjected to suspension culturing in a serum-free medium to induce formation of a neuroepithelial structure by neural progenitor in the neural progenitor tissue, whereby the human cell aggregate containing the cerebellar plate tissue can be obtained.

Fig. 15