

[ABSTRACT]

There are provided a neurite outgrowth promotion kit containing a γ -secretase inhibitor or a GADD45G expression vector, in which the neurite outgrowth promotion kit is used for significantly promoting neurite outgrowth of nerve cells as compared with a control, by acting on a neurosphere to induce differentiation of the neurosphere into nerve cells; a method for producing a neurosphere for treatment of spinal cord injury, which includes a step of using the above-described neurite outgrowth promotion kit on a neurosphere derived from a pluripotent stem cell; a neurosphere for treatment of spinal cord injury; and a method for selecting a neurosphere for treatment of spinal cord injury and a method for screening a neurite outgrowth-promoting agent.

[No suitable figure]