

PRODUCTION METHOD OF NERVE CELLS DAMAGED BY OXIDATIVE STRESS AND APPLICATIONS THEREOF

ABSTRACT

An object of the present invention is to provide a method for producing nerve cells damaged by oxidative stress from a human-derived pluripotent stem cell; a culturing method for cells that allows nerve cells damaged by oxidative stress to be produced from a human-derived pluripotent stem cell; nerve cells damaged by oxidative stress; an evaluation method for a test substance, a screening method for a drug for prevention and/or treatment of a neurodegenerative disease, a screening method for a necroptosis inhibitor, and a screening method for a ferroptosis inhibitor, which use the nerve cells.

According to the present invention, there is provided a production method of nerve cells damaged by oxidative stress, the method including a step a of seeding nerve cells obtained by differentiation from a human-derived pluripotent stem cell, at a cell density of 20.0×10^4 cells/cm² or less by using a culture medium that substantially does not contain an antioxidant and substantially does not contain an oxidant and a step b of culturing the nerve cells by using the culture medium that substantially does not contain an antioxidant and substantially does not contain an oxidant.

[No Suitable Figure]