

SCREENING METHOD USING INDUCED NEURONS

ABSTRACT

An object of the present invention is to provide a method for screening for a prophylactic or therapeutic agent for tauopathy capable of blocking the propagation of tau-mediated neurodegeneration.

A method for screening for a prophylactic or therapeutic agent for tauopathy, comprising the following steps (1) to (3):

- (1) contacting neurons having a mutant MAPT gene with a test substance;
- (2) measuring any one index selected from the group consisting of the following (a) to (e) in the neurons:
 - (a) the amount of a tau oligomer in a culture supernatant,
 - (b) the amount of an intracellular tau oligomer,
 - (c) the frequency of depolarization,
 - (d) an intracellular calcium ion concentration, and
 - (e) the number of living cells; and
- (3) selecting the test substance as a prophylactic or therapeutic agent for tauopathy when the value of (a), (b), (c), or (d) measured in the step (2) after the contact with the test substance in the step (1) is lower than the value obtained without the contact with the test substance in the step (1), and/or when the value of (e) measured in the step (2) after the contact with the test substance in the step (1) is higher than the value obtained without the contact with the test substance in the step (1).

[Figure 16]