Cell Cultures from Animal Models of Alzheimer’s Disease for Screening and Testing Drug Efficacy

FEATURES

An estimated 4.5 million Americans suffer from Alzheimer’s disease. Animal models of Alzheimer’s disease, especially transgenic mice, provide opportunities to screen for drugs against Alzheimer’s disease. However, several months are required for these animals to develop Alzheimer’s disease pathology. The delay in assessing efficacy of test compounds results in increased costs. **The invention provides a method of screening therapeutic compounds (drugs) for use in the treatment or prevention of Alzheimer’s disease and beta-amyloid associated diseases.** An *in vitro* neuronal cell culture system derived from transgenic mouse models of Alzheimer’s disease or cell cultures treated with exogenous beta-amyloid is used to screen the therapeutic compounds. The effects of the test compounds on the cell culture system can be quantitatively assessed to determine if the compound alters biochemical, electrophysiological, optical, and/or immunocytochemical properties of the cells. The cell culture system is advantageous for drug screening, because it is a rapid and efficient means of testing drug efficacy.

BENEFITS

- Rapid
- Efficient
- Reproducible
- Cost-effective

INTELLECTUAL PROPERTY STATUS


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