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(54) Title: GENETIC SEQUENCES AND PROTEINS RELATED TO ALZHEIMER'S DISEASE, AND USES THEREFOR

(57) Abstract

The present invention describes the identification, isolation, sequencing and characterization of two human presenilin genes, PS-1 and PS-2, mutations which lead to Familial Alzheimer's Disease. Also identified are presenilin gene homologues in mice, *C. elegans* and *D. melanogaster*. Nucleic acids and proteins comprising or derived from the presenilins are useful in screening and diagnosing Alzheimer's Disease, in identifying and developing therapeutics for treatment of Alzheimer's Disease, and in producing cell lines and transgenic animals useful as models of Alzheimer's Disease.