C-TERMINAL FRAGMENT OF APOLIPOPROTEIN E AND APPLICATION THEREOF IN INHIBITING γ-SECRETASE ACTIVITY

ABSTRACT

The present invention relates to a C-terminal fragment (such as ApoE CT) of apolipoprotein E (ApoE) and modified ApoE2 and an application of the fragment in inhibiting γ-secretase activity. In one aspect, the present invention provides an isolated ApoE construct, which contains an ApoE polypeptide, the ApoE polypeptide: (1) contains a fragment from an amino acid sequence as shown by SEQ ID NO: 12, a first amino acid residue at a N-terminal of the fragment being an amino acid residue at any position between positions 215-221 of SEQ ID NO: 12, and a last amino acid residue at a C-terminal of the fragment being an amino acid residue at any position between positions 274-299 of SEQ ID NO: 12; or (2) the amino acid sequence has at least about 70% sequence identity with the fragment of (1), and retains at least about 50% of inhibition of the fragment of (1) against γ-secretase enzymatic digestion activity. The present invention further provides an encoding sequence, nucleic acid construct, host cell, construction method, pharmaceutical composition, and application of a protein portion of the ApoE construct.

(No Suitable Fig.)