

Code No. 10323

Anti-Human

Amyloidβ (N) (82E1) Mouse IgG MoAb

Volume : 50 μg

Introduction

: Alzheimer's disease (AD) is characterized by the presence of extracellular plaques and intracellular neurofibrillary tangles (NFTs) in the brain. The major protein component of these plaques is beta amyloid peptide (A β), a 40 to 43 amino acid peptide cleaved from amyloid precursor protein by beta-secretase and a putative γ secretase. Increased release of the 'longer forms' of A β peptide, A β 42 or A β 43, which have a greater tendency to aggregate than A β 40, occurs in individuals expressing certain genetic mutations, expressing certain ApoE alleles, or may involve other, still undiscovered, factors, Many researchers theorize that it is this increased release of A β 42/A β 43 which leads to the abnormal deposition of A β and the associated neurotoxicity in the brains of affected individuals.

This antibody specifically reacts human Aβ N-terminal end, therefore it is very useful

to detect APP fragments generated by β -secretase cleavage.

Antigen : Synthetic peptide of a part of human Amyloidβ (1-16) (DAEFRHDSGYEVHHQK)

Source: Mouse-Mouse hybridoma

 $(X63 - Ag 8.653 \times BALB/c mouse spleen cells)$

Clone : 82E1 Subclass : IgG₁

Purification: Affinity purified with antigen peptide

Form : Lyophilized product from PBS containing 1 % BSA and 0.05 % NaN₃

How to use : 0.5 mL deionized water will be added to the product, then its concentration comes to

100 μg/mL

Stability: Lyophilized product, 5 years at 2 – 8 °C

: Solution, 2 years at -20 °C

Application

: This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after formic acid treatment*1 by several techniques such as Avidin Biotin Complex (ABC) Method. The optimal concentration is about 1 µg/mL, however, the concentration should be optimized by each laboratory.

*1: rinsing by running water after formic acid treatment for 5 minutes following

de-paraffin.

: This antibody can be used for western blotting in concentration of about 1 µg/mL

: This antibody can be used for immuno-precipitation by 3 - 5 µg/test.

Specificity: Human Amyloidβ N-terminal end specific.

Reacts with both soluble and fibrillar Aβ at the comparable level.

Not react with non-cleaved APP.

Reference

: Horikoshi Y, Sakaguchi G, Becker AG, Gray AJ, Duff K, Aisen PS, Yamaguchi H, Maeda M, Kinoshita N, Matsuoka Y. Development of Abeta terminal end-specific antibodies and sensitive ELISA for Abeta variant. Biochem Biophys Res Commun. 2004 Jul 2;319(3):733-7.

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