

Code No. 11115

**Anti-Human  
Amyloid $\beta$  (38-42) (44A3) Mouse IgG MoAb**Volume : 50  $\mu$ g

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**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 $\beta$ ), a 40 to 43 amino acid peptide cleaved from amyloid precursor protein by  $\beta$ -secretase and a putative  $\gamma$ -secretase. Increased release of the 'longer forms' of A $\beta$  peptide, A $\beta$ 42 or A $\beta$ 43, which have a greater tendency to aggregate than A $\beta$ 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 $\beta$ 42/A $\beta$ 43 which leads to the abnormal deposition of A $\beta$  and the associated neurotoxicity in the brains of affected individuals.

**Antigen** : Synthetic peptide of human Amyloid $\beta$ (38-42) (GVVIA)

**Source** : Mouse-Mouse hybridoma  
(X63 – Ag 8.653 x BALB/c mouse spleen cells, supernatant)

**Clone** : 44A3      **Subclass** : IgG<sub>2b</sub>

**Purification** : Affinity purified with protein A

**Form** : Lyophilized product in PBS containing 1 % BSA and 0.05 % NaN<sub>3</sub>

**How to use** : 1.0 mL deionized water will be added to the product, then its concentration comes to 50  $\mu$ g/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 5 $\mu$ g/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 5 $\mu$ g/mL.

: This antibody can be used for immune-precipitation by 10 $\mu$ g/test.

**Specificity** : Human Amyloid $\beta$  (1-42) specific.  
Not detect Human Amyloid $\beta$  (1-40) or Amyloid $\beta$  (1-43) at the same level in western blotting.  
Reacts with Mouse and Rat.

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*For research use only, not for use in diagnostic procedures.*