



**Biotin Conjugated Mouse Anti- Amyloid Beta Peptide 42 Monoclonal Antibody Datasheet**

**Product Name:** Biotin conjugated mAb anti- Amyloid Beta Peptide 42      **Clone No.:** CA9 10H11

**Catalogue No.:** MO-M40093TB      **Quantity:** 0.1 mL/vial

**Description:** Biotin conjugated mouse monoclonal antibody to **C-terminal** of amyloid beta peptide 42 (A $\beta$ 42)

**Purification:** Protein G affinity purified

**Product Type**      **Tracer** antibody in matched antibody pair, biotin conjugated.

**Target Protein:** C-terminal of amyloid beta peptide 42

**Immunogen:** KLH conjugated to a short peptide (MVGGVVIA) with amino acid sequence corresponding to the C-terminal of A $\beta$ 42

**Fusion Myeloma:** Sp2/0-Ag14

**Specificity:** This antibody recognizes the C-terminal sequence (MVGGVVIA) of A $\beta$ 42 and full length A $\beta$ 42.

**Cross- Reactivity:** The antibody does not cross react with amyloid beta peptide 40 in dot blotting and ELISA. Cross-reactivity to amyloid beta peptide 43 is less than 1% in ELISA.

**Species Reactivity:** Human and other primates; mouse, rat

**Host / Isotype:** Mouse, IgG2b Kappa

**Storage Buffer Formulation:** 0.01M PBS, pH 7.0  $\pm$  0.1 in 1% gelatin and 0.1% proclin-300

**Storage:** Store at -20°C. Avoid repeated freeze and thaw cycles.

**Research Area:** Aging and neurodegenerative diseases

**Background:** Amyloid beta peptide 42 (A $\beta$ 42) is best known for its role in the formation of senile plaques in the brain of patients with Alzheimer’s disease. A $\beta$ 42 and A $\beta$ 40 are the two major amyloid peptides that are produced after cleavage of amyloid precursor protein by secretases. A $\beta$ 42 (42 amino acids) is very fibrillogenic. The beta pleated structure of A $\beta$ 42 constitutes the initial and key component of the insoluble amyloid fibril in senile plaque. It is widely accepted that A $\beta$ 42 contributes to the pathogenesis of Alzheimer’s disease. One proposition is that the deposition of amyloid fibril onto the brain tissue results in Alzheimer’s disease. Another is that the neurotoxicity of A $\beta$ 42 oligomer is the cause of the disease.

**Applications:**      **ELISA:** In combination with capturer anti-amyloid peptide N-terminal antibody (mAb clone NT 4A2, Cat. No.: MO-M40094E) and avidin-HRP conjugate, this biotin conjugated antibody can detect A $\beta$ 42 in Sandwich ELISA assay.

**References:** If research is published using this product, please inform Anogen in order to cite the reference on this datasheet. Anogen will provide one unit of product in the same category as gratitude.

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