



Product Information Sheet

Polyclonal Anti- Amyloid precursor protein, *APP (Magnetic Bead Conjugate)*

Catalogue No. PA1362-M

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human APP (18-32 aa), identical to the related mouse and rat sequence.

Lot No. 01311121-86227

Purity

Immunogen affinity purified.

Ig type rabbit IgG

Size 100µg/vial

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Specificity

Human, rat.

No cross reactivity with other proteins.

Storage

Store at 4°C for frequent use.

Recommended application

ImmunoPrecipitation (IP)

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation.

BACKGROUND

Amyloid precursor protein (APP) is an integral membrane protein expressed in many tissues and concentrated in the synapses of neurons. Its primary function is not known, though it has been implicated as a regulator of synapse formation, neural plasticity and iron export. APP is best known and most commonly studied as the precursor molecule whose proteolysis generates beta amyloid (A β), a 39- to 42-amino acid peptide whose amyloid fibrillar form is the primary component of amyloid plaques found in the brains of Alzheimer's disease patients. APP undergoes posttranslational proteolytic processing by alpha-, beta-, and gamma-secretases. Alpha-secretase generates soluble amyloid protein, while beta- and gamma-secretases generate APP components with amyloidogenic features. These 2 processing pathways are mutually exclusive.

REFERENCE

- 1.PDB 1RW6; Wang Y, Ha Y (August 2004). "The X-ray structure of an antiparallel dimer of the human amyloid precursor protein E2 domain". Mol. Cell 15 (3): 343–53.
- 2.Priller C, Bauer T, Mitteregger G, Krebs B, Kretschmar HA, Herms J (July 2006). "Synapse formation and function is modulated by the amyloid precursor protein". J. Neurosci. 26 (27): 7212–21.
- 3.Turner PR, O'Connor K, Tate WP, Abraham WC (May 2003). "Roles of amyloid precursor protein and its fragments in regulating neural activity, plasticity and memory". Prog. Neurobiol. 70 (1): 1–32.
- 4.Duce JA et al. (2010). "Iron-Export Ferroxidase Activity of β - Amyloid Precursor Protein Is Inhibited by Zinc in Alzheimer's Disease". Cell 142 (6): 857–67.

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