Recombinant beta Amyloid Antibody

Rabbit Monoclonal Antibody [Clone APP/9926R]

Catalog No	Format	Size
351-RBM14-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
351-RBM14-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
351-RBM14-P1ABX	Purified Ab WITHOUT BSA or Azide at 1.0mg/ml	100 ug

Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

Clone	APP/9926R
Immunogen	Recombinant fragment (around aa1-17) of the human Amyloid, beta protein (exact sequence is proprietary)
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	86.94kDa
Cellular Localization	Cell membrane, Cell projection, Cell surface, Clathrin-coated pit, Cytoplasm, Cytoplasmic vesicle, Early endosome, Endoplasmic reticulum, Golgi apparatus, Growth cone, Membrane, Nucleus, Perikaryon, Secreted
Species Reactivity	Human
Positive Control	Expressed in the brain and in cerebrospinal fluid (at protein level) (PubMed:2649245)

**Optimal dilution for a specific application should be determined.*

Product Images for Recombinant beta Amyloid Antibody

Specificity & Comments

Functions as a cell surface receptor and performs physiological functions on the surface of neurons relevant to neurite growth, neuronal adhesion and axonogenesis. Interaction between APP molecules on neighboring cells promotes synaptogenesis (PubMed:25122912). Involved in cell mobility and transcription regulation through protein-protein interactions. Can promote transcription activation through binding to APBB1-KAT5 and inhibits Notch signaling through interaction with Numb. Couples to apoptosis-inducing pathways such as those mediated by G(o) and JIP. Inhibits G(o) alpha ATPase activity (By similarity). Acts as a kinesin I membrane receptor, mediating the axonal transport of beta-secretase and presenilin 1 (By similarity). By acting as a kinesin I membrane receptor, plays a role in axonal anterograde transport of cargo towards synapses in axons (PubMed:17062754, PubMed:23011729). Involved in copper homeostasis/oxidative stress through copper ion reduction. In vitro, copper-metallated APP induces neuronal death directly or is potentiated through Cu(2+)-mediated low-density lipoprotein oxidation. Can regulate neurite outgrowth through binding to components of the extracellular matrix such as heparin and collagen I and IV. The splice isoforms that contain the BPTI domain possess protease inhibitor activity. Induces a AGER-dependent pathway that involves activation of p38 MAPK, resulting in internalization of amyloid-beta peptide and leading to mitochondrial dysfunction in cultured cortical neurons. Provides Cu(2+) ions for GPC1 which are required for release of nitric oxide (NO) and subsequent degradation of the heparan sulfate chains on GPC1., Amyloid-beta peptides are lipophilic metal chelators with metal-reducing activity. Bind transient metals such as copper, zinc and iron. In vitro, can reduce Cu(2+) and Fe(3+) to Cu(+) and Fe(2+), respectively. Amyloid-beta peptides bind to lipoproteins and apolipoproteins E and J in the CSF and to HDL particles in plasma, inhibiting metal-catalyzed oxidation of lipoproteins. Promotes both tau aggregation and TPK II-mediated phosphorylation. Interaction with overexpressed HADH2 leads to oxidative stress and neurotoxicity. Also binds GPC1 in lipid rafts., More effective reductant than amyloid-beta protein 40. May activate mononuclear phagocytes in the brain and elicit inflammatory responses., Appicans elicit adhesion of neural cells to the extracellular matrix and may regulate neurite outgrowth in the brain., The gamma-CTF peptides as well as the caspase-cleaved peptides, including C31, are potent enhancers of neuronal apoptosis.

Supplied As

200ug/ml of Ab produced in a mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.