

Amyloid Precursor Protein Rabbit mAb

Catalog No: #52056

Package Size: #52056-1 50ul #52056-2 100ul

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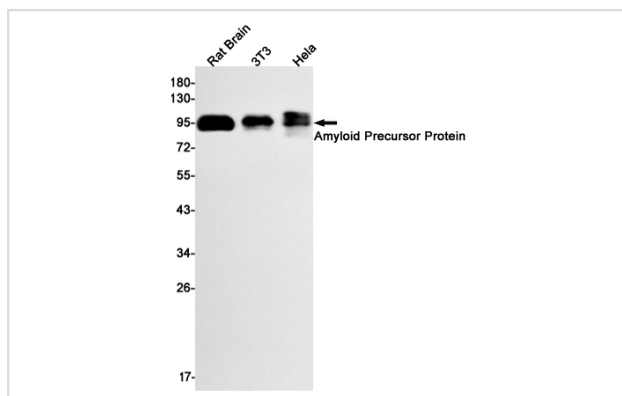
Description

Product Name	Amyloid Precursor Protein Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S05-3E3
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human Amyloid Precursor Protein
Conjugates	Unconjugated
Modification	Unmodification
Other Names	ABPP;APPI;Alzheimer disease amyloid protein;Amyloid precursor protein
Accession No.	Swiss-Prot:P05067GenelD:351
Uniprot	P05067
GenelD	351
Calculated MW	Calculated MW: 87 kDa; Observed MW: 100 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Application Details

WB: 1/1000;

Images



Western blot detection of Amyloid Precursor Protein in Rat Brain, 3T3, HeLa cell lysates using Amyloid Precursor Protein Rabbit mAb (1:1000 diluted). Predicted band size: 87 kDa. Observed band size: 100 kDa.

Background

Swiss-Prot Acc.P05067. 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 Cu²⁺-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 Cu²⁺ ions for GPC1 which are required for release of nitric oxide (NO) and subsequent degradation of the heparan sulfate chains on GPC1.

Note: This product is for in vitro research use only