

Product datasheet for **TA383743M**

Amyloid Precursor Protein (APP) Rabbit Monoclonal Antibody [Clone ID: R01-9E9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R01-9E9
Applications:	IP, WB
Recommended Dilution:	WB: 1/1000 IP: 1/20
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human Amyloid Precursor Protein
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 87 kDa; Observed MW: 100 kDa
Gene Name:	amyloid beta precursor protein
Database Link:	Entrez Gene 351 Human P05067



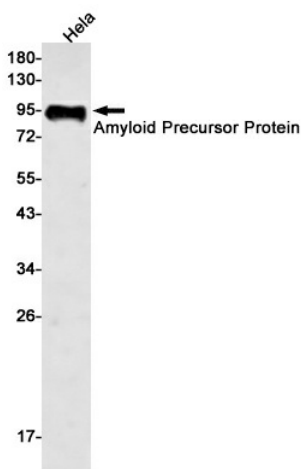
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Background:

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. 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. Acts as a kinesin I membrane receptor, mediating the axonal transport of beta-secretase and presenilin 1. 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.

Synonyms:

A4; AAA; ABPP; AD1; APPI; CTFgamma; CVAP; OTTHUMP00000096096; PN-II; PN2; PreA4

Product images:

Western blot analysis of Amyloid Precursor Protein in HeLa lysates using Amyloid Precursor Protein antibody.