Datasheet for ABIN7144043

anti-APP antibody (AA 18-270) (Biotin)

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Overview

Quantity:	100 µg
Target:	APP
Binding Specificity:	AA 18-270
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This APP antibody is conjugated to Biotin
Application:	ELISA

Product Details

Immunogen:	Recombinant Human Amyloid-beta A4 protein (18-270AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	APP
Alternative Name:	APP (APP Products)
Background:	Background: 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 By similarity. 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. Ref.38 Ref.65 Ref.67 Ref.90 Ref.91 Beta-amyloid peptides are lipophilic metal chelators with metal-reducing activity. Bind transient metals such as copper, zinc and iron. In vitro, can reduce Cu2+ and Fe3+ to Cu+ and Fe2+, respectively. Beta-amyloid 42 is a more effective reductant than beta-amyloid 40. Beta-amyloid peptides bind to lipoproteins and apolipoproteins E and J in the CSF and to HDL particles in plasma, inhibiting metal-catalyzed oxidation of lipoproteins. Beta-APP42 may activate mononuclear phagocytes in the brain and elicit inflammatory responses. Promotes both tau aggregation and TPK II-mediated phosphorylation. Interaction with Also bind GPC1 in lipid rafts. Aliases: A4 antibody, A4_HUMAN antibody, AAA antibody, ABETA antibody, ABPP antibody, AICD-50 antibody, AICD-57 antibody, AICD-59 antibody, AID(50) antibody, AID(57) antibody, AID(59) antibody, Alzheimer disease amyloid protein antibody, Amyloid intracellular domain 50 antibody, Amyloid intracellular domain 57 antibody, Amyloid intracellular domain 59 antibody, APP antibody, APPI antibody, Beta amyloid protein 42 antibody, Beta APP42 antibody, Beta-APP40 antibody, Beta-APP42 antibody, C31 antibody, Cerebral vascular amyloid peptide antibody, CVAP antibody, Gamma-CTF(50) antibody, Gamma-CTF(57) antibody, Gamma-CTF(59) antibody, PN-II antibody, PreA4 antibody, Protease nexin-II antibody, S-APP-alpha antibody, S-APP-beta antibody
UniProt:	P05067
Pathways:	Caspase Cascade in Apoptosis, EGFR Signaling Pathway, Transition Metal Ion Homeostasis, Skeletal Muscle Fiber Development, Toll-Like Receptors Cascades, Feeding Behaviour

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.