

Rabbit Phospho-APP (S730) Polyclonal Antibody | anti-APP antibody

Phospho-APP (S730) Antibody

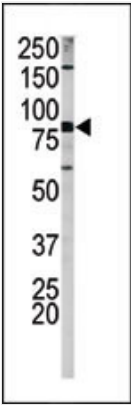
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA286561	Rabbit	Human (Predicted Reactivity: Monkey, Mouse, Pig, Rat)	ELISA, Western Blot

PRODUCT SYNONYMS

Phospho-APP (S730); Polyclonal Antibody; Phospho-APP (S730) Antibody; Amyloid beta A4 protein; ABPP; APPI; APP; Alzheimer disease amyloid protein; Cerebral vascular amyloid peptide; CVAP; PreA4; Protease nexin-II; PN-II; N-APP; Soluble APP-alpha; S-APP-alpha; Soluble APP-beta; S-APP-beta; C99; Beta-amyloid protein 42; Beta-APP42; Beta-amyloid protein 40; Beta-APP40; C83; P3(42); P3(40); C80; Gamma-secretase C-terminal fragment 59; Amyloid intracellular domain 59; AICD-59; AID(59); Gamma-CTF(59); Gamma-secretase C-terminal fragment 57; Amyloid intracellular domain 57; AICD-57; AID(57); Gamma-CTF(57); Gamma-secretase C-terminal fragment 50; Amyloid intracellular domain 50; AICD-50; AID(50); Gamma-CTF(50); C31; A4; AD1; anti-APP antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Monkey, Mouse, Pig, Rat)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This APP Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S730 of human APP.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Length	746
Applicable Applications for anti-APP antibody	ELISA, WB (Western Blot)
Tissue Location	Expressed in all fetal tissues examined with highest levels in brain, kidney, heart and spleen. Weak expression in liver. In adult brain, highest expression found in the frontal lobe of the cortex and in the anterior perisylvian cortex-opercular gyri. Moderate expression in the cerebellar cortex, the posterior perisylvian cortex-opercular gyri and the temporal associated cortex. Weak expression found in the striate, extra- striate and motor cortices. Expressed in cerebrospinal fluid, and plasma. Isoform APP695 is the predominant form in neuronal tissue, isoform APP751 and isoform APP770 are widely expressed in non- neuronal cells. Isoform APP751 is the most abundant form in T- lymphocytes. Appican is expressed in astrocytes.
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



WB (Western Blot)
The anti-Phospho-APP-S730 Pab is used in Western blot to detect Phospho-APP-S730 in Jurkat tissue lysate.

ADDITIONAL INFORMATION

Related Product Information for anti-APP antibody	Background: APP is a cell surface receptor and transmembrane precursor protein that is cleaved by secretases to form a number of peptides. Some of these peptides are secreted and can bind to the acetyltransferase complex APBB1/TIP60 to promote transcriptional activation, while others form the protein basis of the amyloid plaques found in the brains of patients with Alzheimer disease. Mutations in this gene have been implicated in autosomal dominant Alzheimer disease and cerebroarterial amyloidosis (cerebral amyloid angiopathy). Function: 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. 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 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. N-APP binds TNFRSF21 triggering caspase activation and degeneration of both neuronal cell bodies (via caspase-3) and axons (via caspase-6).
Product Categories/Family for anti-APP antibody	Neuroscience; Phospho Antibodies
References	1. Borroni, B., et al., Arch. Neurol. 60(12):1740-1744 (2003). 2. Lleo, A., et al., J. Biol. Chem. 278(48):47370-47375 (2003). 3. Zhou, Y., et al., Science 302(5648):1215-1217 (2003). 4. Murakami, K., et al., J. Biol. Chem. 278(46):46179-46187 (2003). 5. Kim, J.Y., et al., Biochem. Biophys. Res. Commun. 310(3):904-909 (2003).

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502167
NCBI GeneID	351
NCBI Accession #	NP_000475.1 ; NP_001129488.1 ; NP_001129601.1 ; NP_001129602.1 ; NP_001129603.1 ; NP_001191230.1 ; NP_001191231.1 ; NP_001191232.1 ; NP_958816.1 ; NP_958817.1
NCBI GenBank Nucleotide #	NM_000484.3

UniProt Accession #	P05067; P09000; P78438; Q13764; Q13778; Q13793; Q16011; B2R5V1; B4DII8; D3DSD1; D3DSD2; D3DSD3
Molecular Weight	86943
NCBI Official Full Name	amyloid beta A4 protein isoform a
NCBI Official Synonym Full Names	amyloid beta (A4) precursor protein
NCBI Official Symbol	APP
NCBI Official Synonym Symbols	AAA; AD1; PN2; ABPP; APP1; CVAP; ABETA; PN-II; CTFgamma
NCBI Protein Information	amyloid beta A4 protein
UniProt Protein Name	Amyloid beta A4 protein
UniProt Gene Name	APP
UniProt Synonym Gene Names	A4; AD1; APP; CVAP; PN-II; S-APP-alpha; S-APP-beta; AICD-59; AID(59); AICD-57; AID(57); AICD-50; AID(50)
UniProt Entry Name	A4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/phospho-app-s730-antibody-western-blot-elisa/286561>