Amyloid-Beta (APP) Antibody – Polyclonal

PRODUCT OVERVIEW

Product Name	Amyloid-beta (APP), Polyclonal Antibody
Full Product Name	Amyloid-beta Polyclonal Antibody
Product Gene Name	anti-APP antibody
Clonality	Polyclonal
Molecular Weight	84,521 Da
OMIM	104300
3D Structure	ModBase 3D Structure for P05067
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for anti-APP antibody	MBS8521207 is an antibody targeting APP. Also known as Amyloid-beta Polyclonal Antibody.
Other Notes	Small volumes of anti-APP antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for APP. It may not necessarily be applicable to this product.

NCBI GI #	4502167
NCBI GeneID	351
NCBI Accession #	NP_000475.1
UniProt Primary Accession #	P05067
UniProt Secondary Accession #	P09000; P78438; Q13764; Q13778; Q13793; Q16011; B2R5V1; B4DII8; D3DSD1; D3DSD2; D3DSD3
UniProt Related Accession #	P05067
GenBank Nucleotide #	NM_000484.3
NCBI Official Full Name	amyloid-beta A4 protein isoform a
NCBI Official Synonym Full Names	amyloid beta precursor protein
NCBI Official Symbol	APP
NCBI Official Synonym Symbols	AAA; AD1; PN2; ABPP; APPI; CVAP; ABETA; PN-II; preA4; CTFgamma
UniProt Protein Name	Amyloid-beta A4 protein
UniProt Synonym Protein Names	ABPP; APPI; APP
Protein Family	Amyloid beta A4 protein
UniProt Gene Name	APP
UniProt Synonym Gene Names	A4; AD1; APP; CVAP; PN-II; S-APP-alpha; S-APP-beta; Beta-CTF; Abeta42; Abeta40; Alpha-CTF; AICD-59; AID(59); AICD-57; AID(57); AICD-50; AID(50)
NCBI Protein Information	amyloid-beta A4 protein

NCBI Summary for APP	This gene encodes 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. In addition, two of the peptides are antimicrobial peptides, having been shown to have bacteriocidal and antifungal activities. Mutations in this gene have been implicated in autosomal dominant Alzheimer disease and cerebroarterial amyloidosis (cerebral amyloid angiopathy). Multiple transcript variants encoding several different isoforms have been found for this gene. [provided by RefSeq, Aug 2014]
UniProt Comments for APP	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.
Research Articles on APP	**1.** These results confirm the involvement of amyloid precursor protein (APP) in synaptogenesis and provide evidence to suggest that human APP overexpression specifically disturbs the structural and functional organization of active zone and results in altered Bruchpilot distribution and lowered probability of spontaneous neurotransmitter release.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-antibody/amyloid-beta/8521207