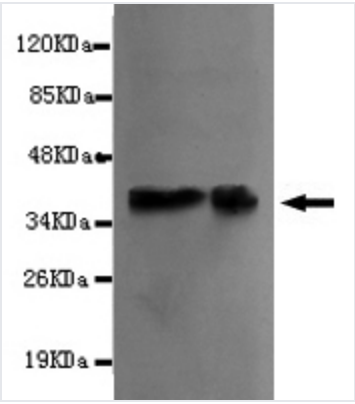
PPP1CA Antibody

PRODUCT OVERVIEW

Product Name	PPP1CA, Antibody
Full Product Name	PPP1CA Antibody
Product Gene Name	anti-PPP1CA antibody
Product Synonym Names	Mouse monoclonal IgG to PPP1CA
Species Reactivity	Human
Form/Format	Liquid
Purity/Purification	Protein G-Sepharose affinity purified.
Preparation and Storage	Aliquot and store at-20 degree C. Avoid repeated freeze/thaw cycles.
Molecular Weight	32,595 Da
OMIM	176875
3D Structure	ModBase 3D Structure for P62136
Immunogen	Recombinant fragment of human PPP1CA (N-terminus).
Preservative	0.02% Sodium Azide and 50% glycerol, 1% BSA, PBS, pH7.4.
Cellular Localization	Cytoplasm; Nucleus
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-PPP1CA antibody	ELSIA (EIA), Western Blot (WB)
Application Notes for anti-PPP1CA antibody	ELISA: 1:5000-1:20000 WB: 1:100-1:2000
Related Product Information for anti-PPP1CA antibody	The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription.
Other Notes	Small volumes of anti-PPP1CA 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.
Searchable Terms for PPP1CA purchase	MBS8526887 is an antibody targeting PPP1CA. Also known as PPP1CA Antibody. Reactive in Human.



Testing Data of anti-PPP1CA antibody
PPP1CA (N-terminus) antibody at 1/1000 dilution. Lane1: HepG2 whole cell lysate 40ug/Lane. Lane2: Hela whole cell lysate 40ug/Lane. Predicted band size: 37KDa. Observed band size: 37KDa.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PPP1CA. It may not necessarily be applicable to this product.

NCBI GI #	56790945
NCBI GeneID	5499
NCBI Accession #	NP_001008709.1
UniProt Primary Accession #	P62136
UniProt Secondary Accession #	P08129; P20653; P22802; Q07161; A6NNR3; B2R908
UniProt Related Accession #	P62136
GenBank Nucleotide #	NM_001008709.1
NCBI Official Full Name	serine/threonine-protein phosphatase PP1-alpha catalytic subunit isoform 3
NCBI Official Synonym Full Names	protein phosphatase 1 catalytic subunit alpha
NCBI Official Symbol	PPP1CA
NCBI Official Synonym Symbols	PP1A; PP-1A; PPP1A; PP1alpha
UniProt Protein Name	Serine/threonine-protein phosphatase PP1-alpha catalytic subunit
Protein Family	Serine/threonine-protein phosphatase
UniProt Gene Name	PPP1CA
UniProt Synonym Gene Names	PPP1A; PP-1A
NCBI Protein Information	serine/threonine-protein phosphatase PP1-alpha catalytic subunit
NCBI Summary for PPP1CA	The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Increased PP1 activity has been observed in the end stage of heart failure. Studies in both human and mice suggest that PP1 is an important regulator of cardiac function. Mouse studies also suggest that PP1 functions as a suppressor of learning and memory. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

UniProt Comments for PPP1CA	Protein phosphatase that associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. May play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca2+/calmodulin dependent protein kinase II. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase. Regulates NEK2 function in terms of kinase activity and centrosome number and splitting, both in the presence and absence of radiation-induced DNA damage. Regulator of neural tube and optic fissure closure, and enteric neural crest cell (ENCCs) migration during development. In balance with CSNK1D and CSNK1E, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. May dephosphorylate CSNK1D and CSNK1E. Dephosphorylates the 'Ser-418' residue of FOXP3 in regulatory T-cells (Treg) from patients with rheumatoid arthritis, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:23396208). Dephosphorylates CENPA (PubMed:25556658). Dephosphorylates the 'Ser-139' residue of ATG16L1 causing dissociation of ATG12-ATG5-ATG16L1 complex, thereby inhibiting autophagy (PubMed:26083323).
Research Articles on PPP1CA	**1.** human plasma protects against endothelial cell apoptosis through sustained BAD phosphorylation, which is achieved by, at least in part, a novel interaction between PP1 with PAI1.
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