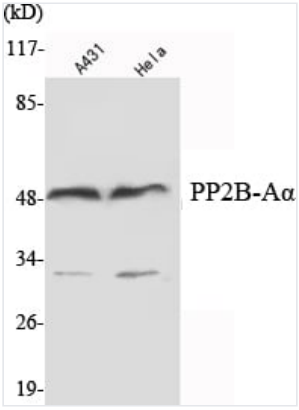
PP2B-AALPHA Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	PP2B-Aalpha, Monoclonal Antibody
Full Product Name	PP2B-Aalpha Monoclonal Antibody
Product Gene Name	anti-PP2B-Aalpha antibody
Product Synonym Names	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform; PPP3CA; CALNA; CNA; Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform; CAM-PRP catalytic subunit; Calmodulin-dependent calcineurin A subunit alpha isoform
Clonality	Monoclonal
Host	Mouse
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Purity/Purification	Affinity purification
Concentration	1mg/ml (lot specific)
Specificity	PP2B-Aalpha Monoclonal Antibody detects endogenous levels of PP2B-Aalpha protein.
Preparation and Storage	Store at -20 degree C/1 year
Molecular Weight	521
OMIM	114105
3D Structure	ModBase 3D Structure for Q08209
Immunogen	Purified recombinant human PP2B-Aalpha protein fragments expressed in E coli.
Modification	Unmodified/Total
Catalytic Activity	A phosphoprotein + H(2)O = a protein + phosphate.
Cofactor	Binds 1 Fe(3+) ion per subunit. Binds 1 zinc ion per subunit.
Function	Calcium-dependent, calmodulin-stimulated protein phosphatase. This subunit may have a role in the calmodulin activation of calcineurin. Dephosphorylates HSPB1 and SSH1.
Online Information	Calcineurin entry Belongs to the PPP phosphatase family. Belongs to the PPP phosphatase family. PP-2B subfamily.
Subcellular Location	Colocalizes with ACTN1 and MYOZ2 at the Z line in heart and skeletal muscle.
Subunit	Composed of two components (A and B), the A component is the catalytic subunit and the B component confers calcium sensitivity. Interacts with TORC2/CRTC2, MYOZ1, MYOZ2 and MYOZ3.
Product Categories/Family for anti-PP2B-Aalpha antibody	Primary Antibodies
Applications Tested/Suitable for anti-PP2B-Aalpha antibody	Western Blot (WB)
Application Notes for anti-PP2B-Aalpha antibody	WB: 1:1000-1:2000

Related Product Information for anti-PP2B-Aalpha antibody	MBS9525196 is an antibody targeting PP2B-Aalpha. Also known as PP2B-Aalpha Monoclonal Antibody. Reactive in Human, Mouse, Rat. Host: Mouse.
Other Notes	Small volumes of anti-PP2B-Aalpha 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.



Western Blot (WB) of anti-PP2B-Aalpha antibody
Western Blot analysis using PP2B-A? Monoclonal Antibody against A431. HeLa cell lysate .

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PP2B-Aalpha. It may not necessarily be applicable to this product.

NCBI GI #	1352673
NCBI GeneID	5530
NCBI Accession #	Q08209.1
UniProt Primary Accession #	Q08209
UniProt Secondary Accession #	Q8TAW9; A1A441; A8K3B7; A8W6Z7; A8W6Z8; B5BUA2
UniProt Related Accession #	Q08209
NCBI Official Full Name	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform
NCBI Official Synonym Full Names	protein phosphatase 3, catalytic subunit, alpha isozyme
NCBI Official Symbol	PPP3CA
NCBI Official Synonym Symbols	CALN; CCN1; CNA1; CALNA; PPP2B; CALNA1
UniProt Protein Name	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform
UniProt Synonym Protein Names	CAM-PRP catalytic subunit; Calmodulin-dependent calcineurin A subunit alpha isoform
UniProt Gene Name	PPP3CA
UniProt Synonym Gene Names	CALNA; CNA
UniProt Entry Name	PP2BA_HUMAN
NCBI Protein Information	serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform; calcineurin A alpha; CAM-PRP catalytic subunit; calmodulin-dependent calcineurin A subunit alpha isoform; protein phosphatase 2B, catalytic subunit, alpha isoform; protein phosphatas

UniProt Comments for PP2B-Aalpha	PPP3CA: a calmodulin-dependent Ser/Thr phosphatase also known calcineurin A alpha. Involved in a wide range of biologic activities, acting as a Ca(2)-dependent modifier of phosphorylation status. Dephosphorylates HSPB1. The calcineurin holoenzyme is composed of catalytic and regulatory subunits of 60 and 18 kD, respectively. . Protein type: Protein phosphatase, Ser/Thr (non-receptor); EC 3.1.3.16 Chromosomal Location of Human Ortholog: 4q24 Cellular Component: nucleoplasm; mitochondrion; cytoplasm; Z disc; cytosol; calcineurin complex; sarcolemma Molecular Function: calmodulin binding; protein dimerization activity; protein binding; enzyme binding; calmodulin-dependent protein phosphatase activity; protein heterodimerization activity; protein serine/threonine phosphatase activity; drug binding; calcium ion binding Biological Process: regulation of synaptic transmission; positive regulation of NFAT protein import into nucleus; T cell activation; response to amphetamine; skeletal muscle fiber development; protein amino acid dephosphorylation; negative regulation of insulin secretion; calcineurin-NFAT signaling pathway; transition between fast and slow fiber; dephosphorylation; protein import into nucleus; calcium ion transport; innate immune response; positive regulation of transcription from RNA polymerase II promoter; response to calcium ion; regulation of excitatory postsynaptic membrane potential; multicellular organismal response to stress; G1/S transition of mitotic cell cycle
Research Articles on PP2B-Aalpha	**1.** These findings therefore provide initial support for the novel mechanistic hypothesis that oxidation-induced global and/or local conformational changes within calcineurin
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