CALM1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CALM1, Polyclonal Antibody
Full Product Name	CALM1 Antibody, HRP conjugated
Product Gene Name	anti-CALM1 antibody
Product Synonym Names	Calmodulin; CaM; CALM1; CALM; CAM; CAM1; AND; CALM2; CAM2; CAMB; AND; CALM3; CALML2; CAM3; CAMC; CAMIII
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Purity/Purification	>95%, Protein G Purified
Preparation and Storage	Shipped at 4 degree C. Upon delivery aliquot and store at -20 degree C or -80 degree C. Avoid repeated freeze.
Matching Pairs	Unconjugated Antibody: CALM1 (MBS1492745) HRP Conjugated Antibody: CALM1 (MBS968793)
Molecular Weight	16,838 Da
OMIM	114180
3D Structure	ModBase 3D Structure for P62158
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Conjugate	HRP
Immunogen	Recombinant human Calmodulin protein
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-1989 / sc-34082 / sc-5537
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CALM1 antibody	ELISA (EIA)
Related Product Information for anti-CALM1 antibody	Calmodulin mediates the control of a large number of enzymes, ion channels, aquaporins and other proteins by Ca(2+). Among the enzymes to be stimulated by the calmodulin-Ca(2+) complex are a number of protein kinases and phosphatases. Together with CCP110 and centrin, is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis.
Other Notes	Small volumes of anti-CALM1 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 CALM1 purchase	MBS968793 is an antibody targeting CALM1. Also known as CALM1 Antibody, HRP conjugated. Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CALM1. It may not necessarily be applicable to this product.

NCBI GI #	779176942
NCBI GeneID	805
NCBI Accession #	NP_001292553.1
UniProt Primary Accession #	P62158
UniProt Secondary Accession #	P02593; P70667; P99014; Q13942; Q53S29; Q61379; Q61380; Q96HK3
UniProt Related Accession #	P62158
GenBank Nucleotide #	NM_001305624.1
NCBI Official Full Name	calmodulin isoform 1
NCBI Official Synonym Full Names	calmodulin 2 (phosphorylase kinase, delta)
NCBI Official Symbol	CALM2
NCBI Official Synonym Symbols	caM; PHKD; CAMII; LQT15; PHKD2
UniProt Protein Name	Calmodulin
Protein Family	Calmodulin
UniProt Gene Name	CALM1
UniProt Synonym Gene Names	CALM; CAM; CAM1; CaM
UniProt Entry Name	CALM_HUMAN
NCBI Protein Information	calmodulin
NCBI Summary for CALM1	This gene is a member of the calmodulin gene family. There are three distinct calmodulin genes dispersed throughout the genome that encode the identical protein, but differ at the nucleotide level. Calmodulin is a calcium binding protein that plays a role in signaling pathways, cell cycle progression and proliferation. Several infants with severe forms of long-QT syndrome (LQTS) who displayed life-threatening ventricular arrhythmias together with delayed neurodevelopment and epilepsy were found to have mutations in either this gene or another member of the calmodulin gene family (PMID:23388215). Mutations in this gene have also been identified in patients with less severe forms of LQTS (PMID:24917665), while mutations in another calmodulin gene family member have been associated with catecholaminergic polymorphic ventricular tachycardia (CPVT)(PMID:23040497), a rare disorder thought to be the cause of a significant fraction of sudden cardiac deaths in young individuals. Pseudogenes of this gene are found on chromosomes 10, 13, and 17. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2015]

UniProt Comments for CALM1	Calmodulin: a calcium-binding small regulatory protein that mediates the control of a large number of enzymes by Ca(2+). Among the enzymes to be stimulated by the calmodulin-Ca(2+) complex are a number of protein kinases and phosphatases. Has four functional calcium-binding domains. Phosphorylation and ubiquitination result in a decreased activity. Protein type: Calcium-binding Chromosomal Location of Human Ortholog: 14q32.11 Cellular Component: centrosome; cytoplasm; cytosol; extracellular region; growth cone; nucleoplasm; nucleus; plasma membrane; sarcomere; spindle microtubule; spindle pole; vesicle Molecular Function: adenylate cyclase binding; calcium ion binding; calcium-dependent protein binding; N-terminal myristoylation domain binding; nitric-oxide synthase binding; nitric-oxide synthase regulator activity; phosphoinositide 3-kinase binding; phospholipase binding; protein binding; protein domain specific binding; protein kinase binding; protein serine/threonine kinase activator activity; thioesterase binding; titin binding; type 3 metabotropic glutamate receptor binding Biological Process: activation of MAPKK activity; adenylate cyclase activation; axon guidance; blood coagulation; carbohydrate metabolic process; detection of calcium ion; epidermal growth factor receptor signaling pathway; fibroblast growth factor receptor signaling pathway; G-protein coupled receptor protein signaling pathway; glucose metabolic process; glycogen catabolic process; innate immune response; inositol phosphate metabolic process; insulin receptor signaling pathway; MAPKKK cascade; muscle contraction; nerve growth factor receptor signaling pathway; nitric oxide metabolic process; phospholipase C activation; phototransduction, visible light; platelet activation; platelet degranulation; positive regulation of cyclic nucleotide metabolic process; positive regulation of cyclic-nucleotide phosphodiesterase activity; positive regulation of nitric-oxide synthase activity; positive regulation of phosphoprotein phosphatase activity; positive regulation of protein amino acid autophosphorylation; positive regulation of protein amino acid dephosphorylation; Ras protein signal transduction; regulation of cytokinesis; regulation of heart rate; regulation of nitric-oxide synthase activity; regulation of rhodopsin mediated signaling; response to amphetamine; response to calcium ion; response to corticosterone stimulus; rhodopsin mediated signaling; signal transduction; small GTPase mediated signal transduction; stimulatory C-type lectin receptor signaling pathway; substantia nigra development; synaptic transmission; vascular endothelial growth factor receptor signaling pathway Disease: Long Qt Syndrome 14; Ventricular Tachycardia, Catecholaminergic Polymorphic, 4
Research Articles on CALM1	**1.** 5 novel de novo CALM2 mutations in association with long-QT syndrome and exertioninduced arrhythmias.(p.N98S, p.N98I, p.D134H, p.D132E, p.Q136P)
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