

Mouse anti-Human Caldesmon Monoclonal Antibody | anti-CALD1 antibody

Anti-Caldesmon Antibody

CATALOG # AAA293399	HOST Mouse	REACTIVITY Human	APPLICATIONS Immunohistochemistry, Western Blot
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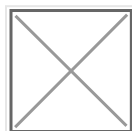
PRODUCT SYNONYMS

Caldesmon; Monoclonal Antibody; Anti-Caldesmon Antibody; CAD; CDM; anti-CALD1 antibody

PRODUCT SPECIFICATIONS

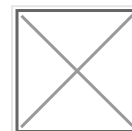
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2b
Specificity	Recognizes endogenous levels of Caldesmon protein.
Form/Format	Mouse IgG2b. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.09% (W/V) sodium azide.
Applicable Applications for anti-CALD1 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250 UniProtKB:P13505}. Cytoplasm, myofibril {ECO:0000250 UniProtKB:P13505}. Cytoplasm, cytoskeleton, stress fiber {ECO:0000250 UniProtKB:P13505}. Note=On thin filaments in smooth muscle and on stress fibers in fibroblasts (nonmuscle) {ECO:0000250 UniProtKB:P13505}
Tissue Location	High-molecular-weight caldesmon (isoform 1) is predominantly expressed in smooth muscles, whereas low-molecular-weight caldesmon (isoforms 2, 3, 4 and 5) are widely distributed in non-muscle tissues and cells. Not expressed in skeletal muscle or heart
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IP (Immunoprecipitation)

Dilution: WB (1/500 - 1/1000), IH (1/100 - 1/300)



IF (Immunofluorescence)

Dilution: IF WB (1/500 - 1/1000), IH (1/100 - 1/300)Immunohistochemical analysis of Caldesmon staining in human liomyoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



IHC (Immunohistochemistry)

Dilution: WB: (1/500 - 1/1000), IH (1/100 - 1/300) Immunohistochemical analysis of Caldesmon staining in human fibroid formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

ADDITIONAL INFORMATION

Related Product Information for anti-CALD1 antibody	Mouse monoclonal antibody to Caldesmon KLH-conjugated synthetic peptide encompassing a sequence within human Caldesmon. The exact sequence is proprietary. Actin- and myosin-binding protein implicated in the regulation of actomyosin interactions in smooth muscle and nonmuscle cells (could act as a bridge between myosin and actin filaments). Stimulates actin binding of tropomyosin which increases the stabilization of actin filament structure. In muscle tissues, inhibits the actomyosin ATPase by binding to F-actin. This inhibition is attenuated by calcium-calmodulin and is potentiated by tropomyosin. Interacts with actin, myosin, two molecules of tropomyosin and with calmodulin. Also plays an essential role during cellular mitosis and receptor capping. Involved in Schwann cell migration during peripheral nerve regeneration (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4826657
NCBI GeneID	800
NCBI Accession #	NP_004333.1
NCBI GenBank Nucleotide #	NM_004342.6
UniProt Accession #	Q05682; Q13978; Q13979; Q14741; Q14742; Q9UD91; A8K0X1
Molecular Weight	93,231 Da
NCBI Official Full Name	caldesmon isoform 2
NCBI Official Synonym Full Names	caldesmon 1
NCBI Official Symbol	CALD1
NCBI Official Synonym Symbols	CDM; HCAD; LCAD; H-CAD; L-CAD; NAG22
NCBI Protein Information	caldesmon
UniProt Protein Name	Caldesmon
UniProt Gene Name	CALD1
UniProt Synonym Gene Names	CAD; CDM; CDM
UniProt Entry Name	CALD1_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.