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Anti-Caldesmon Antibody

Mouse monoclonal antibody to Caldesmon
Catalog # AP61604

Product Information

Application	WB, IHC
Primary Accession	Q05682
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	93231

Additional Information

Gene ID	800
Other Names	CAD; CDM; Caldesmon; CDM
Target/Specificity	Recognizes endogenous levels of Caldesmon protein.
Dilution	WB~~1:1000 IHC~~1:100~500
Format	Mouse IgG2b. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	CALD1
Synonyms	CAD, CDM
Function	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).
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

Background

KLH-conjugated synthetic peptide encompassing a sequence within human Caldesmon. The exact sequence is proprietary.