

KD-Validated Anti-Caldesmon 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1852

Product Information

Application	WB, FC
Primary Accession	Q05682
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB4735
Calculated MW	93231
Gene Name	CALD1
Aliases	CALD1; Caldesmon 1; CDM; H-CAD; LCAD; H-CD; Caldesmon; Testis Secretory SpermBinding Protein Li 227n; NAG22; HCAD; LCAD; CAD
Immunogen	A synthesized peptide derived from human Caldesmon

Additional Information

Gene ID	800
Other Names	Caldesmon, CDM, CALD1, CAD, CDM

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

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