

**CALD1 / Caldesmon Antibody (aa744-793)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS14722****Specification**

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**CALD1 / Caldesmon Antibody (aa744-793) - Product Information**

Application	IF, WB
Primary Accession	<a href="#">Q05682</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	93kDa KDa

**CALD1 / Caldesmon Antibody (aa744-793) - Additional Information****Gene ID** 800**Other Names**

Caldesmon, CDM, CALD1, CAD, CDM

**Target/Specificity**

Caldesmon antibody detects endogenous levels of total Caldesmon protein.

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**

CALD1 / Caldesmon Antibody (aa744-793) is for research use only and not for use in diagnostic or therapeutic procedures.

**CALD1 / Caldesmon Antibody (aa744-793) - 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

#### **Volume**

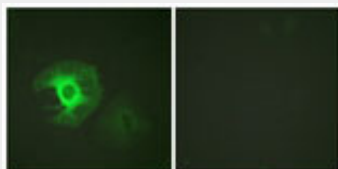
50 µl

### **CALD1 / Caldesmon Antibody (aa744-793) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **CALD1 / Caldesmon Antibody (aa744-793) - Images**



Immunofluorescence of HeLa cells, using Caldesmon antibody.



Western blot of extracts from HeLa cells, treated with EGF 200 ng/ml 30', using Caldesmon antibody.

### **CALD1 / Caldesmon Antibody (aa744-793) - Background**

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 play an essential role during cellular mitosis

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#### **CALD1 / Caldesmon Antibody (aa744-793) - References**

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Hillier L.W.,et al.Nature 424:157-164(2003).