

# Caldesmon Rabbit mAb

Catalog # AP76417

#### **Product Information**

Application WB, IHC-P
Primary Accession Q05682
Reactivity Human, Rat
Host Rabbit

**Clonality** Monoclonal Antibody

Calculated MW 93231

#### **Additional Information**

Gene ID 800

Other Names CALD1

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

### **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,

 $myofibril~\{ECO:0000250~|~UniProtKB:P13505\}.~Cytoplasm,~cytoskeleton,~stress~fiber~\{ECO:0000250~|~UniProtKB:P13505\}.~Note=On~thin~filaments~in~smooth$ 

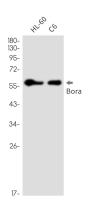
muscle and on stress fibers in fibroblasts (nonmuscle)

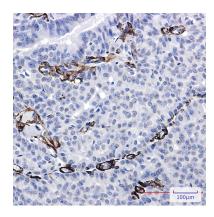
{ECO:0000250 | UniProtKB:P13505}

#### **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

## **Images**





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