

**Caldesmon (ABT146R) rabbit mAb**

<b>Catalog No :</b>	YM7026
<b>Reactivity :</b>	Human;
<b>Applications :</b>	WB; IHC; ELISA
<b>Target :</b>	Caldesmon
<b>Fields :</b>	>>Vascular smooth muscle contraction
<b>Gene Name :</b>	CALD1
<b>Protein Name :</b>	Caldesmon pan
<b>Human Gene Id :</b>	800
<b>Human Swiss Prot No :</b>	Q05682
<b>Immunogen :</b>	Synthesized peptide derived from human Caldesmon pan AA range:100-200
<b>Specificity :</b>	This antibody detects endogenous levels of Caldesmon
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Monoclonal, Rabbit IgG1, Kappa
<b>Dilution :</b>	IHC 1:100-500, WB 1:500-1000, ELISA 1:5000-20000
<b>Purification :</b>	Recombinant Expression and Affinity purified
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	93kD
<b>Background :</b>	This gene encodes a calmodulin- and actin-binding protein that plays an essential role in the regulation of smooth muscle and nonmuscle contraction. The conserved domain of this protein possesses the binding activities to Ca(2+)-calmodulin, actin, tropomyosin, myosin, and phospholipids. This protein is

a potent inhibitor of the actin-tropomyosin activated myosin MgATPase, and serves as a mediating factor for Ca(2+)-dependent inhibition of smooth muscle contraction. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008],

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**Function :**

domain:The N-terminal part seems to be a myosin/calmodulin-binding domain, and the C-terminal a tropomyosin/actin/calmodulin-binding domain. These two domains are separated by a central helical region in the smooth-muscle form.,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 play an essential role during cellular mitosis and receptor capping.,PTM:In non-muscle cells, phosphorylation by CDC2 during mit

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**Subcellular Location :**

Cytoplasmic

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**Expression :**

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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**Tag :**

hot,recombinant

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**Sort :**

25057

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**No4 :**

1

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**Host :**

Rabbit

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**Modifications :**

Unmodified

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