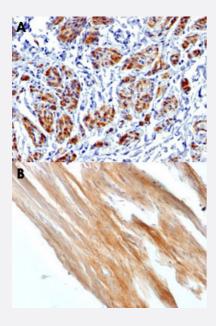


#### RecomAb™

# Caldesmon, HMW recombinant monoclonal antibody, clone CALD1/1424R

Catalog # RAB00359 Size 100 ug

## **Applications**



## Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human uterus (A) and rat uterus (B) with Caldesmon, HMW recombinant monoclonal antibody, clone CALD1/1424R (Cat # RAB00359).

Specification	
Product Description	Rabbit recombinant monoclonal antibody raised against human Caldesmon, HMW.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against recombinant protein corresponding to full length human Caldesmo n, HMW.
Theoretical MW (kDa)	150
Reactivity	Human, Rat
Form	Liquid



## **Product Information**

Protein A/G purification
lgG, kappa
Flow Cytometry (0.5-1 ug/10 <sup>6</sup> cells)
Immunofluorescence (1-2 ug/mL)
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1-2 ug/mL)
The optimal working dilution should be determined by the end user.
In 10 mM PBS (0.05% BSA, 0.05% sodium azide)
Store at 4°C.
This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

## Applications

• Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human uterus (A) and rat uterus (B) with Caldesmon, HMW recombinant monoclonal antibody, clone CALD1/1424R (Cat # RAB00359).

- Immunofluorescence
- Flow Cytometry

## Gene Info — CALD1

Entrez GenelD	800
Protein Accession#	<u>Q05682</u>
Gene Name	CALD1
Gene Alias	CDM, H-CAD, L-CAD, MGC21352, NAG22
Gene Description	caldesmon 1
Omim ID	<u>114213</u>
Gene Ontology	Hyperlink



## **Product Information**

**Gene Summary** 

This gene encodes a calmodulin- and actin-binding protein that plays an essential role in the regul ation of smooth muscle and nonmuscle contraction. The conserved domain of this protein posses ses the binding activities to Ca(2+)-calmodulin, actin, tropomyosin, myosin, and phospholipids. Th is protein is a potent inhibitor of the actin-tropomyosin activated myosin MgATPase, and serves a s a mediating factor for Ca(2+)-dependent inhibition of smooth muscle contraction. Alternative spl icing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by Re fSeq

**Other Designations** 

## **Publication Reference**

 <u>h-Caldesmon as a specific marker for smooth muscle tumors. Comparison with other smooth muscle markers</u> in bone tumors.

Watanabe K, Tajino T, Sekiguchi M, Suzuki T.

American Journal of Clinical Pathology 2000 May; 113(5):663.

 <u>Phenotypic changes of human smooth muscle cells during development: late expression of heavy caldesmon</u> and calponin.

Frid MG, Shekhonin BV, Koteliansky VE, Glukhova MA.

Developmental Biology 1992 Oct; 153(2):185.

## Pathway

<u>Vascular smooth muscle contraction</u>

### Disease

- Diabetes Mellitus
- Diabetic Nephropathies
- Genetic Predisposition to Disease
- Tobacco Use Disorder