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Anti-Calponin-1 Antibody

Recombinant Mouse Monoclonal Antibody
Catalog # AH13131

Product Information

Application	IHC-P, IF, FC
Primary Accession	P51911
Other Accession	465929
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	rCNN1/832
Calculated MW	33170

Additional Information

Gene ID	1264
Other Names	Calponin 1 basic smooth muscle; Calponin H1 smooth muscle; Calponin-1; CNN1; Cnn1; Sm Calp; SMCC
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 1mM EDTA, pH 7.5-8.5, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of recombinant MAb purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Calponin-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

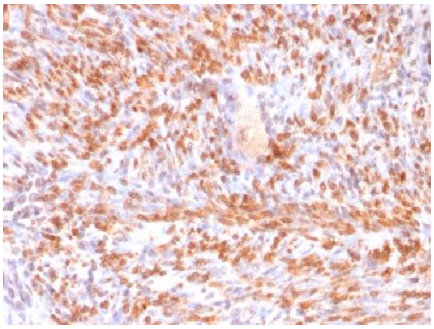
Name	CNN1
Function	Thin filament-associated protein that is implicated in the regulation and modulation of smooth muscle contraction. It is capable of binding to actin, calmodulin and tropomyosin. The interaction of calponin with actin inhibits the actomyosin Mg-ATPase activity (By similarity).

Tissue Location	Smooth muscle, and tissues containing significant amounts of smooth muscle

Background

Multiple isoelectric variants of calponin have been identified, however only two molecular weight isoforms exist; a 34kDa form and a 29kDa form. Expression of the 29kDa form, I-calponin, is primarily restricted to muscle of the urogenital tract, whereas the higher molecular weight variant has been demonstrated in vascular and visceral smooth muscle. In Western blotting, this MAb reacts with only the 34kDa form of calponin in extracts of human aortic medial smooth muscle and is unreactive with fibroblast extracts of cultivated human foreskin. Calponin is a calmodulin, F-actin and tropomyosin binding protein, which is thought to be involved in the regulation of smooth muscle contraction. Calponin expression is restricted to smooth muscle cells and has been shown to be a marker of the differentiated (contractile) phenotype of developing smooth muscle.

Images



Formalin-fixed, paraffin-embedded human Uterus stained with Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832).