10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Calponin-1 Antibody
Recombinant Mouse Monoclonal Antibody
Catalog # AH13131

Specification

Anti-Calponin-1 Antibody - Product Information

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

Anti-Calponin-1 Antibody - 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
IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

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.

Anti-Calponin-1 Antibody - 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

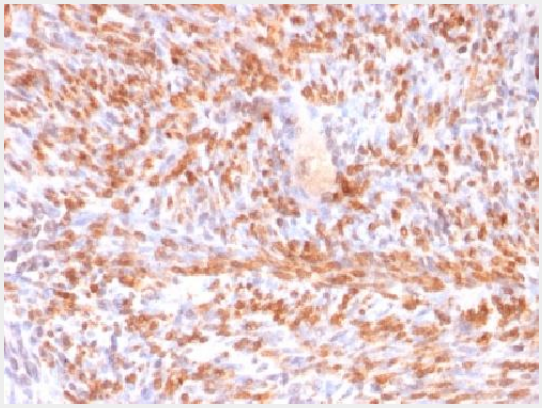
Smooth muscle, and tissues containing significant amounts of smooth muscle

Anti-Calponin-1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Calponin-1 Antibody - Images



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

Anti-Calponin-1 Antibody - 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.