

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone CNN1/832 + CALP]
Catalog # AH11114

Specification

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide - Product Information

Application	IHC, IF, FC
Primary Accession	P51911
Other Accession	1264 , 465929
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG's
Calculated MW	34kDa KDa

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 1264

Other Names

Calponin-1, Basic calponin, Calponin H1, smooth muscle, CNN1

Application Note

IHC~~1:100~500
IF~~1:50~200
FC~~1:10~50

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide - 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

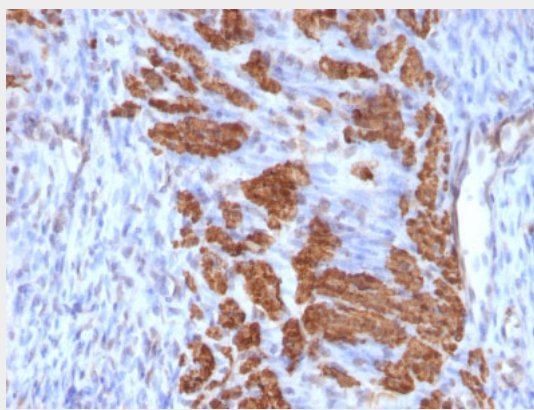
Smooth muscle, and tissues containing significant amounts of smooth muscle

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide - Protocols

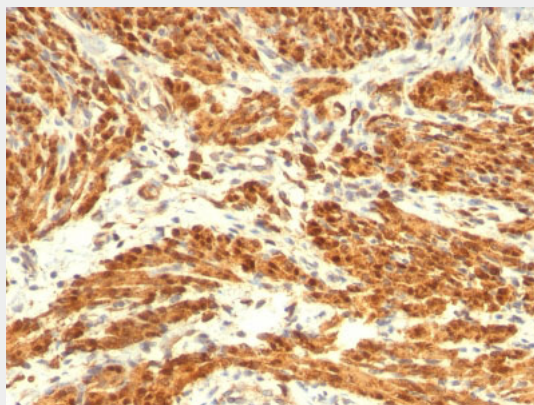
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

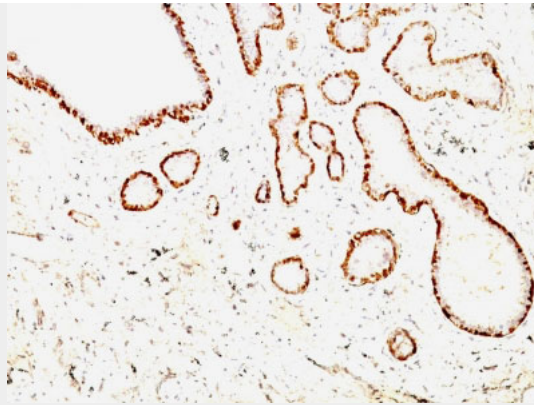
Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Uterus stained with Calponin-1 Monoclonal Antibody (CNN1/832 + CALP).



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with Calponin-1 Monoclonal Antibody (CNN1/832 + CALP).



Formalin-fixed, paraffin-embedded Rat Uterus stained with Calponin-1 Monoclonal Antibody (CNN1/832 + CALP).

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide - 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.

Calponin-1 (Smooth Muscle Marker) Antibody - With BSA and Azide - References

Tang, D.C., et al. 1996. Structure-function relations of smooth muscle Calponin. The critical role of Serine 175. J. Biol. Chem. 271: 8605-8611. | Frid MG, et al. Phenotypic changes of human smooth muscle cells during development: Late expression of heavy caldesmon and calponin. Dev Biol 1992; 153:185 |