

Anti-Calponin-1 Antibody

Recombinant Rabbit Monoclonal Antibody Catalog # AH13133

Specification

Anti-Calponin-1 Antibody - Product Information

Application IHC-P, IF, FC
Primary Accession P51911
Other Accession 465929
Reactivity Human, Rat
Host Rabbit
Clonality Monoclonal

Isotype Rabbit / IgG, 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 Ab 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



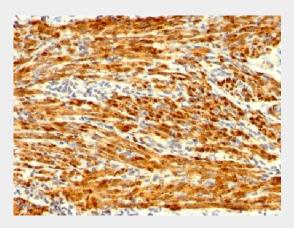
Smooth muscle, and tissues containing significant amounts of smooth muscle

Anti-Calponin-1 Antibody - Protocols

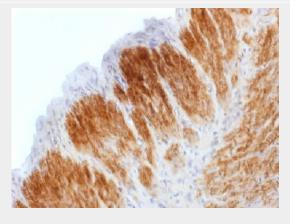
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-Calponin-1 Antibody - Images



Formalin-fixed, paraffin-embedded Human Uterus stained with Calponin Recombinant Rabbit Monoclonal Antibody (CNN1/1408R).



Formalin-fixed, paraffin-embedded Rat Uterus stained with Calponin Recombinant Rabbit Monoclonal Antibody (CNN1/1408R).

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.