

**Anti-Calponin-1 Antibody**  
**Recombinant Rabbit Monoclonal Antibody**  
**Catalog # AH13133**

**Specification**

**Anti-Calponin-1 Antibody - Product Information**

Application	,14,3,4,
Primary Accession	<a href="#">P51911</a>
Other Accession	<a href="#">465929</a>
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

**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**

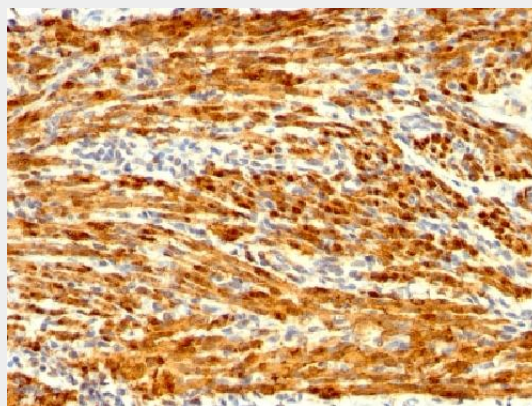
Anti-Calponin-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-Calponin-1 Antibody - Protein Information**

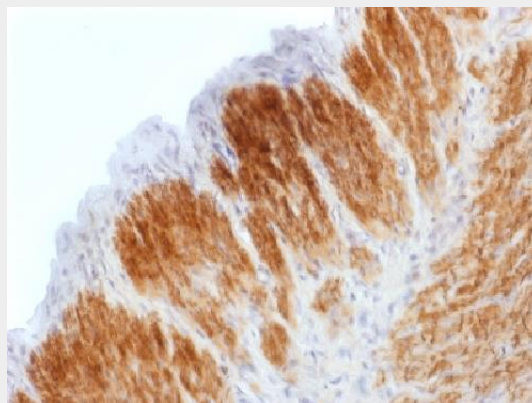
**Name** CNN1

**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



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

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 Cytometry](#)
- [Cell Culture](#)

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.