

### Calponin-1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6795A

### **Specification**

### Calponin-1 Antibody (N-term) - Product Information

Application WB, FC, IHC-P,E

Primary Accession P51911

Other Accession <u>Q08290</u>, <u>Q08091</u>, <u>Q2HJ38</u>, <u>Q7YRL2</u>

Reactivity Human

Predicted Bovine, Mouse, Rat, Sheep

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 10-39

### Calponin-1 Antibody (N-term) - Additional Information

#### **Gene ID 1264**

#### **Other Names**

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

#### Target/Specificity

This Calponin-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 10-39 amino acids from the N-terminal region of human Calponin-1.

#### **Dilution**

WB~~1:1000 FC~~1:10~50 IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Calponin-1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### Calponin-1 Antibody (N-term) - Protein Information

### Name CNN1





Tel: 858.875.1900 Fax: 858.875.1999

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**

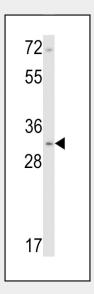
Smooth muscle, and tissues containing significant amounts of smooth muscle

## Calponin-1 Antibody (N-term) - Protocols

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

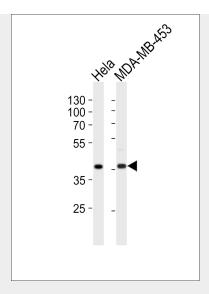
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Calponin-1 Antibody (N-term) - Images

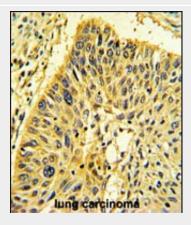


Western blot analysis of Calponin-1 Antibody (N-term) (Cat. #AP6795a) in NCI-H460 cell line lysates (35ug/lane). CNN1 (arrow) was detected using the purified Pab.

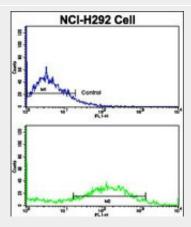




Western blot analysis of lysates from Hela, MDA-MB-453 cell line (from left to right), using Calponin-1 Antibody (N-term)(Cat. #AP6795a). AP6795a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Formalin-fixed and paraffin-embedded human lung carcinoma with Calponin-1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of NCI-H292 cells using Calponin-1 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Tel: 858.875.1900 Fax: 858.875.1999

# Calponin-1 Antibody (N-term) - Background

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

## Calponin-1 Antibody (N-term) - References

Marsh, W.L., et.al., Appl. Immunohistochem. Mol. Morphol. 17 (3), 216-219 (2009) Calponin-1 Antibody (N-term) - Citations

• Actin cytoskeleton mediates BMP2-Smad signaling via calponin 1 in preosteoblast under simulated microgravity.