

For Research Use Only

# Calponin Polyclonal antibody

Catalog Number: 13938-1-AP

Featured Product

40 Publications



## Basic Information

<b>Catalog Number:</b> 13938-1-AP	<b>GenBank Accession Number:</b> BC022015	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 500 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1264	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate IHC 1:2000-1:8000 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> calponin 1, basic, smooth muscle	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 33 kDa	
<b>Immunogen Catalog Number:</b> AG4989	<b>Observed MW:</b> 35 kDa	

## Applications

**Tested Applications:**  
FC, IF, IHC, IP, WB, ELISA

**Cited Applications:**  
IF, IHC, WB

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, rat, mouse, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** mouse heart tissue, mouse lung tissue

**IP:** mouse lung tissue,

**IHC:** human appendicitis tissue, human ovary tumor tissue, human hysteromyoma tissue, human breast cancer tissue, human bladder tissue, human skin tissue, human heart tissue

**IF:** C2C12 cells, mouse heart tissue

## Background Information

Calponin is a family of actin filament-associated proteins which regulate smooth muscle cell contraction. Three isoforms of calponin exist: calponin h1 (CNN1), calponin h2 (CNN2) and calponin 3 (CNN3). CNN1 is a basic 34-kD protein specifically expressed in smooth muscle and a marker of smooth muscle cell differentiation. This antibody raised against the full-length of human CNN1 may cross-react with CNN2 and CNN3.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yang Yang	31523025	Acta Biomater	IF
Yan Yan	36068532	Reprod Biol Endocrinol	IHC
Meng Wang	30651790	Exp Ther Med	IF

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

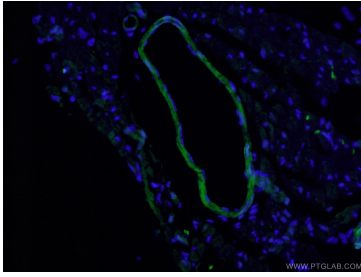
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

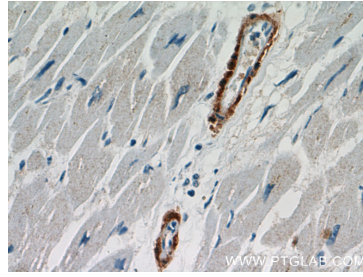
E: proteintech@ptglab.com  
W: ptglab.com

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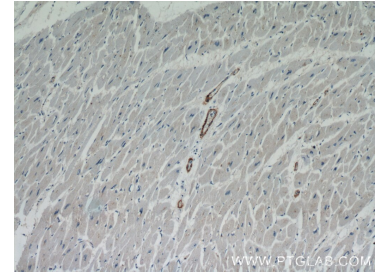
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 13938-1-AP (Calponin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



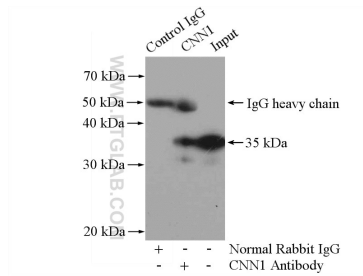
Immunohistochemical analysis of paraffin-embedded human heart using 13938-1-AP (CNN1 antibody) at dilution of 1:50 (under 40x lens).



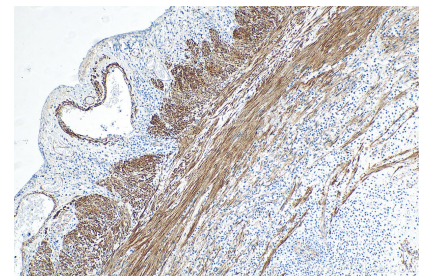
Immunohistochemical analysis of paraffin-embedded human heart using 13938-1-AP (CNN1 antibody) at dilution of 1:50 (under 10x lens).



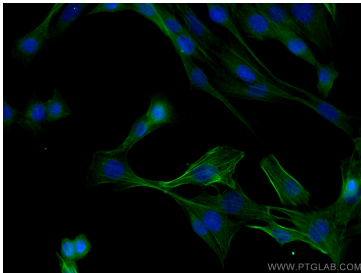
mouse heart tissue were subjected to SDS PAGE followed by western blot with 13938-1-AP (CNN1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



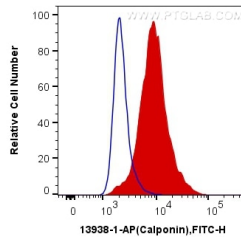
IP Result of anti-Calponin (IP:13938-1-AP, 4ug; Detection:13938-1-AP 1:1000) with mouse lung tissue lysate 2800ug.



Immunohistochemical analysis of paraffin-embedded human appendicitis tissue slide using 13938-1-AP (Calponin antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed C2C12 cells using Calponin antibody (13938-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



$1 \times 10^6$  C2C12 cells were intracellularly stained with 0.4 ug Anti-Human Calponin (13938-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).