

For Research Use Only

Calponin Polyclonal antibody

Catalog Number: 13938-1-AP

Featured Product

52 Publications



Basic Information

Catalog Number:

13938-1-AP

Concentration:

500 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4989

GenBank Accession Number:

BC022015

GeneID (NCBI):

1264

UNIPROT ID:

P51911

Full Name:

calponin 1, basic, smooth muscle

Calculated MW:

33 kDa

Observed MW:

35 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:2000-1:8000

IF-P 1:50-1:500

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, bovine

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 colon tissue, mouse heart tissue, mouse lung tissue, mouse uterus 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-P : mouse heart tissue,

IF/ICC : C2C12 cells,

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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

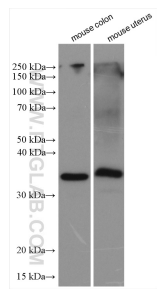
T: 4006900926

E: Proteintech-CN@ptglab.com

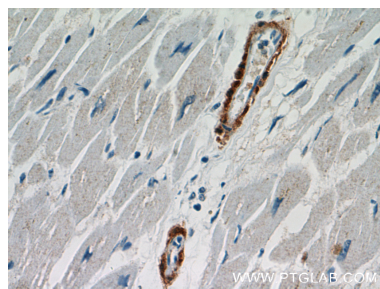
W: ptgen.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

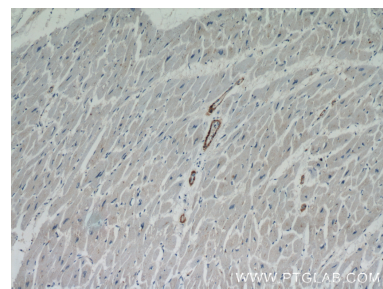
Selected Validation Data



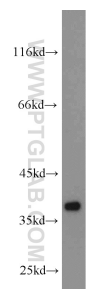
Various lysates were subjected to SDS PAGE followed by western blot with 13938-1-AP (Calponin antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



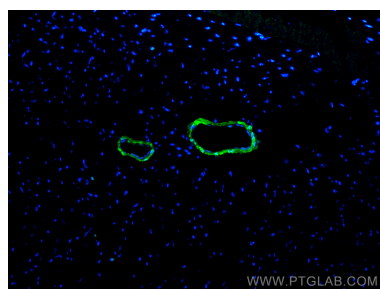
Immunohistochemical analysis of paraffin-embedded human heart using 13938-1-AP (CNN1 antibody) at dilution of 1:50 (under 40x lens).



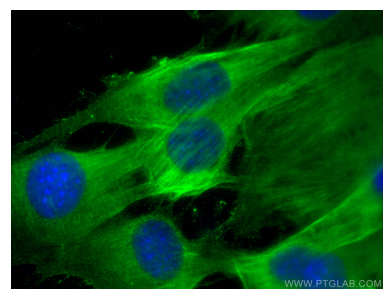
Immunohistochemical analysis of paraffin-embedded human heart using 13938-1-AP (CNN1 antibody) at dilution of 1:50 (under 10x lens).



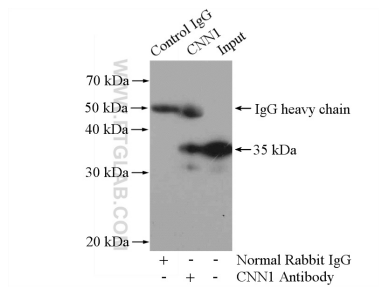
mouse heart tissue were subjected to SDS PAGE followed by western blot with 13938-1-AP (CNN1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



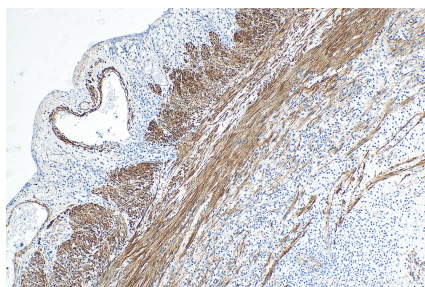
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using Calponin antibody (13938-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



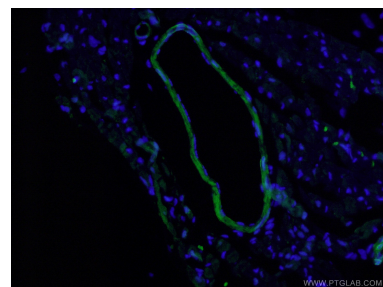
Immunofluorescent analysis of (-20°C Methanol) fixed C2C12 cells using Calponin antibody (13938-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



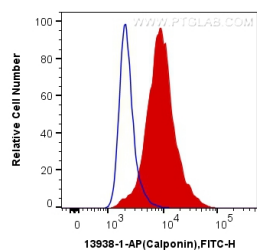
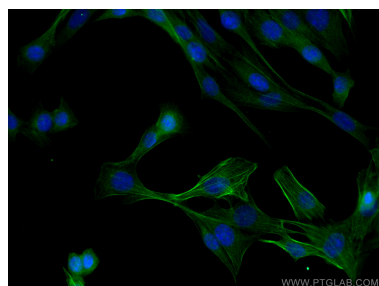
IP result of anti-Calponin (IP:13938-1-AP, 4ug; Detection:13938-1-AP 1:1000) with mouse lung tissue lysate 2800ug.



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 (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).



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).

1X10⁶ 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).