For Research Use Only

Calponin Polyclonal antibody

Catalog Number:24855-1-AP 13 Publications



Basic Information

Catalog Number:

24855-1-AP

Concentration:

550 ug/ml

Source:

Rabbit

BC022015

GeneID (NCBI):

1264

UNIPROT ID:

Rabbit

P51911

Isotype:

Full Name:

calponin 1, basic, smooth muscle

Immunogen Catalog Number: Calculated MW: 33 kDa
Observed MW:

34 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB

Species Specificity: human, mouse Cited Species: human, mouse, rat

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 stomach tissue,

IHC: human colon tissue, human breast hyperplasia tissue, human heart tissue, human skeletal muscle

Purification Method:

WB 1:1000-1:6000 IHC 1:300-1:1200

IF/ICC 1:200-1:800

IF-P 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

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-kDa protein specifically expressed in smooth muscle and a marker of smooth muscle cell differentiation. This antibody raised against the specific region of human CNN1, thus it does not cross-react with CNN2 or CNN3.

Notable Publications

Author	Pubmed ID	Journal	Application
Rui Wang	35600979	Bioact Mater	WB
Dongli Liang	28252009	Sci Rep	WB
Huafeng Song	35300115	Front Mol Biosci	WB

Storage

Storage

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

Storage Buffer:

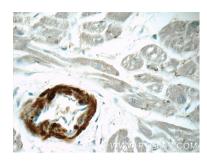
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

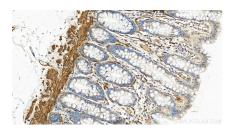
Selected Validation Data



mouse stomach tissue were subjected to SDS PAGE followed by western blot with 24855-1-AP (Calponin Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



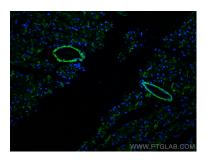
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 24855-1-AP (Calponin Antibody) at dilution of 1:50 (under 40x (ens).



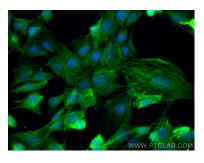
Immunohistochemical analysis of paraffinembedded human normal colon slide using 24855-1-AP (Calponin antibody) at dilution of 1:600 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human heart tissue slide using 24855-1-AP (Calponin Antibody) at dilution of 1:50 (under 10x lens).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Calponin antibody (24855-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (-20°C Methanol) fixed C2C12 cells using Calponin antibody (24855-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).