

For Research Use Only

# Calponin Recombinant monoclonal antibody

Catalog Number:86977-4-RR



## Basic Information

Catalog Number:	86977-4-RR	GenBank Accession Number:	BC022015	Purification Method:	Protein A purification
Size:	100ul , Concentration: 1000 µg/ml by Nanodrop;	GenID (NCBI):	1264	CloneNo.:	252040C7
Source:	Rabbit	UNIPROT ID:	P51911	Recommended Dilutions:	WB: 1:2000-1:10000 IHC: 1:1000-1:4000 IF-P: 1:200-1:800
Isotype:	IgG	Full Name:	calponin 1, basic, smooth muscle		
Immunogen Catalog Number:	AG21384	Calculated MW:	33 kDa		
		Observed MW:	34 kDa		

## Applications

Tested Applications:	WB, IHC, IF-P, ELISA	Positive Controls:	WB: mouse colon tissue, mouse bladder tissue, rat bladder tissue
Species Specificity:	human, mouse, rat	IHC :	human appendix tissue,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>			IF-P: 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-kDa protein specifically expressed in smooth muscle and a marker of smooth muscle cell differentiation.

## Storage

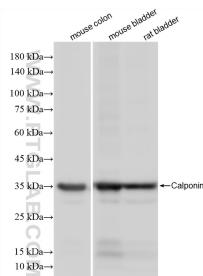
Storage:  
Store at -20°C. Stable for one year after shipment.  
Storage Buffer:  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

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

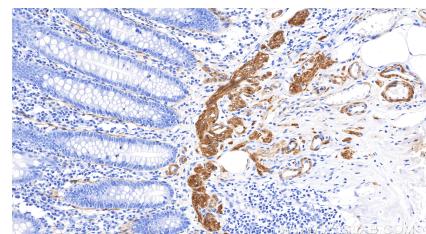
For technical support and original validation data for this product please contact:  
T: 1(888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com  
W: ptglab.com

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

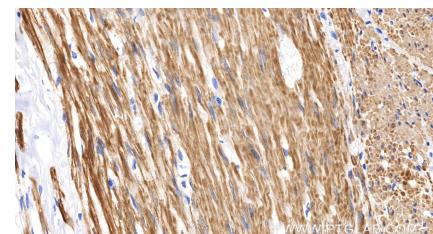
## Selected Validation Data



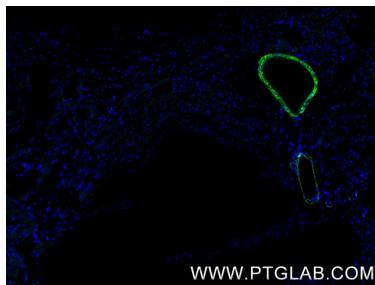
Various lysates were subjected to SDS PAGE followed by western blot with 86977-4-RR (Calponin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



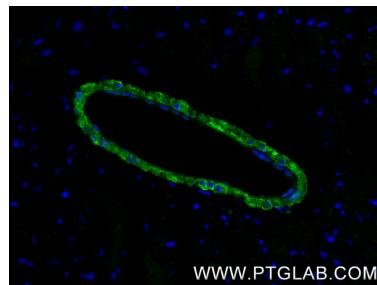
Immunohistochemical analysis of paraffin-embedded human appendix tissue slide using 86977-4-RR (Calponin antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



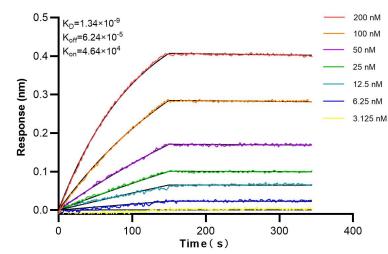
Immunohistochemical analysis of paraffin-embedded human appendix tissue slide using 86977-4-RR (Calponin antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using Calponin antibody (86977-4-RR, Clone: 252040C7) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using Calponin antibody (86977-4-RR, Clone: 252040C7) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 86977-4-RR against Human Calponin were performed. The affinity constant is  $1.34 \text{ nM}$ .