

For Research Use Only

# SMMHC Polyclonal antibody

Catalog Number: 21404-1-AP

55 Publications



## Basic Information

### Catalog Number:

21404-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG16114

### GenBank Accession Number:

BC104906

### GeneID (NCBI):

4629

### UNIPROT ID:

P35749

### Full Name:

myosin, heavy chain 11, smooth muscle

### Calculated MW:

1979 aa, 228 kDa

### Observed MW:

220 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:1000-1:4000

IF-P: 1:50-1:500

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF-P, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

WB: mouse uterus tissue,

IHC: human colon tissue, rat eye tissue, mouse eye tissue, rat bladder tissue, human skeletal muscle tissue

IF-P: mouse heart tissue,

FC (Intra): C2C12 cells,

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

## Background Information

SMMHC (smooth muscle myosin heavy chain; MYH11) is a contractile protein of smooth muscle cells. It is specifically expressed in cells derived from smooth muscle lineages. SMMHC is used as vascular smooth muscle cell (vSMC) contractile marker. It is also an excellent marker for myoepithelial cells, with no or few cross-reaction with myofibroblasts, thus very useful in the evaluation of stromal invasion.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yu-Yuan Zhang	36259516	J Biol Chem	WB
Jinghan Lin	36155059	Biochem Biophys Res Commun	WB
Ziqing Li	32886850	Acta Physiol (Oxf)	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

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

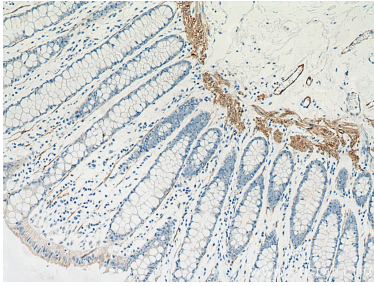
For technical support and original validation data for this product please contact:

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

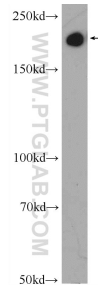
E: proteintech@ptglab.com  
W: ptglab.com

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

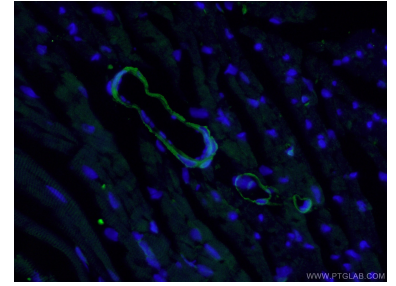
## Selected Validation Data



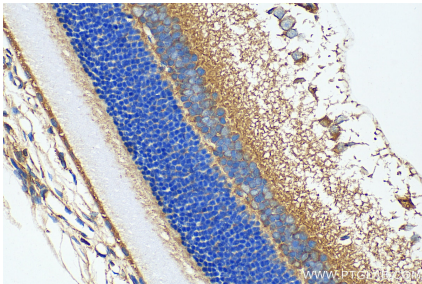
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 21404-1-AP (SMMHC antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



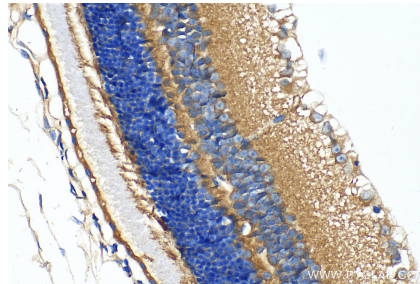
mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21404-1-AP (SMMHC antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



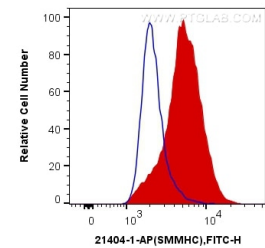
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 21404-1-AP (SMMHC antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded rat eye tissue slide using 21404-1-AP (SMMHC antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse eye tissue slide using 21404-1-AP (SMMHC antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> C2C12 cells were intracellularly stained with 0.4 ug Anti-Human SMMHC (21404-1-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).