

For Research Use Only

# Alpha smooth muscle actin specific Polyclonal antibody

Catalog Number: 55135-1-AP **284 Publications**



## Basic Information

<b>Catalog Number:</b> 55135-1-AP	<b>GenBank Accession Number:</b> NM_001613	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by 59 Nanodrop;	<b>GeneID (NCBI):</b> UNIPROT ID: P62736	<b>Recommended Dilutions:</b> WB: 1:500-1:4000 IHC: 1:500-1:3000 IF-P: 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> actin, alpha 2, smooth muscle, aorta	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 42 kDa	
	<b>Observed MW:</b> 42 kDa	

## Applications

### Tested Applications:

WB, IHC, IF-P, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, rabbit

**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 kidney tissue, mouse stomach, rat colon, mouse lung, rat lung

**IHC** : mouse heart tissue, human colon tissue, human colon cancer tissue, human heart tissue, human hepatocirrhosis tissue, human liver cancer tissue, mouse colon tissue, mouse liver tissue, rat colon tissue

**IF-P** : mouse heart tissue,

## Background Information

ACTA2, also named as a-SMA,AAT6;ACTSA belongs to the actin family. Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. Defects in ACTA2 are the cause of aortic aneurysm familial thoracic type 6 (AAT6). The immunogen of this antibody is a specific domain of ACTA2. This antibody stains the aorta only.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yuan Gao	33173749	Adv Sci (Weinh)	IF
Wei Wang	32976932	Cell Signal	IF
H-J Wang	32959695	Hum Exp Toxicol	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**

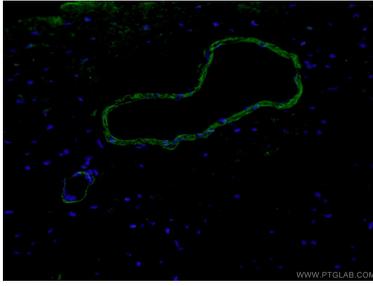
For technical support and original validation data for this product please contact:

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

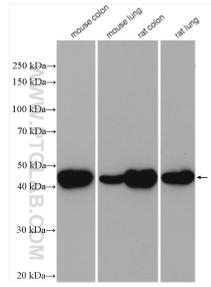
E: proteintech@ptglab.com  
W: ptglab.com

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

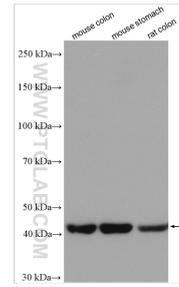
## Selected Validation Data



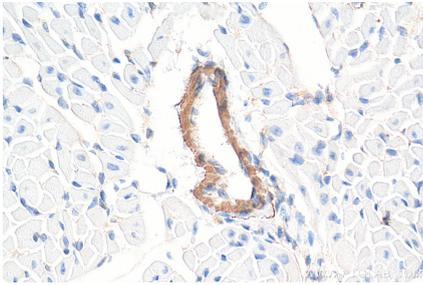
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 55135-1-AP (Alpha SMA-specific antibody) at dilution of 1:200 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



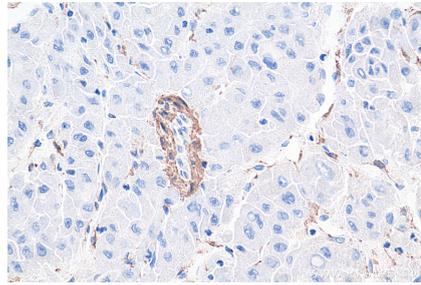
Various lysates were subjected to SDS PAGE followed by western blot with 55135-1-AP (smooth muscle actin-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



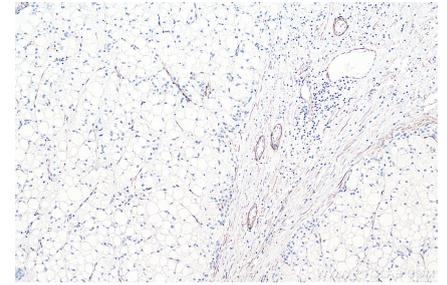
Various lysates were subjected to SDS PAGE followed by western blot with 55135-1-AP (smooth muscle actin specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 55135-1-AP (smooth muscle actin specific antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 55135-1-AP (smooth muscle actin specific antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 55135-1-AP (smooth muscle actin specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).