

For Research Use Only

Alpha smooth muscle actin specific Polyclonal antibody

Catalog Number: 55135-1-AP

275 Publications



Basic Information

Catalog Number:

55135-1-AP

Size:

150ul, Concentration: 1000 ug/ml by 59 Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_001613

GeneID (NCBI):

59

UNIPROT ID:

P62736

Full Name:

actin, alpha 2, smooth muscle, aorta

Calculated MW:

42 kDa

Observed MW:

42 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:4000

IHC 1:500-1:3000

IF-P 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, 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

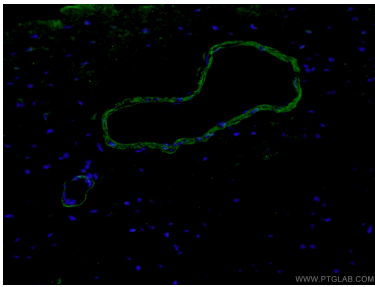
For technical support and original validation data for this product please contact:

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

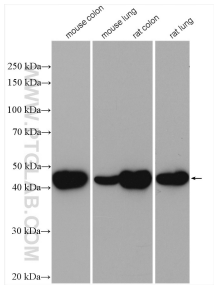
E: proteintech@ptglab.com
W: ptglab.com

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

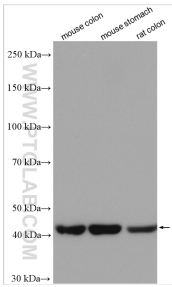
Selected Validation Data



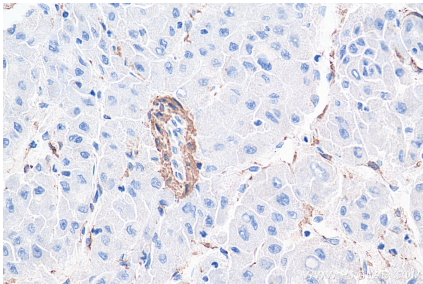
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 55135-1-AP (Alpha SMA-specific antibody) at dilution of 1:200 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



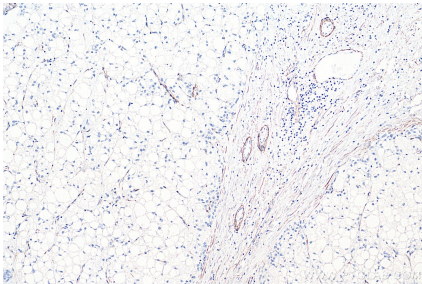
Various lysates were subjected to SDS PAGE followed by western blot with 55135-1-AP (smooth muscle actin-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



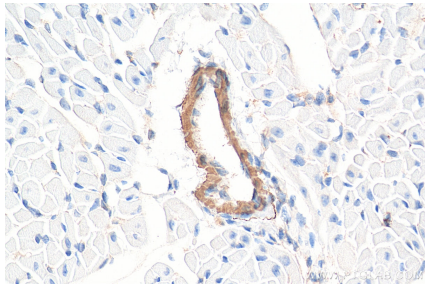
Various lysates were subjected to SDS PAGE followed by western blot with 55135-1-AP (smooth muscle actin specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded 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).



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).