For Research Use Only

smooth muscle actin specific Polyclonal antibody



Catalog Number: 55135-1-AP

229 Publications

Basic Information

Catalog Number: GenBank Accession Number: 55135-1-AP NM 001613

GeneID (NCBI):

150ul, Concentration: 600 µg/ml by 59

Nanodrop;

Source: actin, alpha 2, smooth muscle, aorta

Rabbit Calculated MW: Isotype: 42 kDa IgG Observed MW: 42 kDa

Applications

Tested Applications: IF, IHC, WB, ELISA

Cited Applications: IF, IHC, WB

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

human, rat, mouse, 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

Purification Method:

WB 1:500-1:4000 IHC 1:20-1:200

IF 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

stomach, rat colon, mouse lung, rat lung

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

IF: 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 Storage Buffer

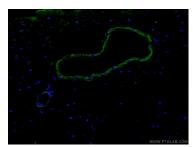
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

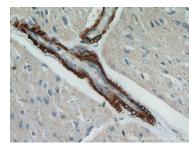
*** 20ul sizes contain 0.1% BSA

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

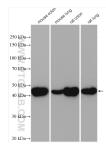
Selected Validation Data



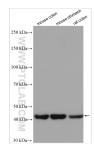
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 55135-1-AP (Alpha SMA-specific antibody) at dilution of 1:200 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



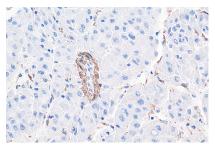
Immunohistochemical analysis of paraffinembedded human heart using 55135-1-AP (ACTA2-Specific antibody) at dilution of 1:100 (under 40x lens)



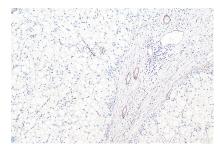
Various lysates were subjected to SDS PAGE followed by western blot with 55135-1-AP (smooth muscle actin-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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 paraffinembedded 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 paraffinembedded 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).