

smooth muscle actin specific Polyclonal antibody

 Catalog Number: **55135-1-AP** **231 Publications**

Basic Information

Catalog Number: 55135-1-AP	GenBank Accession Number: NM_001613	Purification Method: Antigen affinity purification
Size: 600 µg/ml	GeneID (NCBI): 59	Recommended Dilutions: WB 1:500-1:4000
Source: Rabbit	UNIPROT ID: P62736	IHC 1:20-1:200
Isotype: IgG	Full Name: actin, alpha 2, smooth muscle, aorta	IF 1:50-1:500
	Calculated MW: 42 kDa	
	Observed MW: 42 kDa	

Applications

Tested Applications: IF/ICC, IHC, WB, ELISA	Positive Controls:
Cited Applications: IF, IHC, WB	WB : mouse colon tissue, mouse kidney tissue, mouse stomach, rat colon, mouse lung, rat lung
Species Specificity: human, mouse, rat	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
Cited Species: human, rat, mouse, rabbit	IF : mouse heart tissue,
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

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.

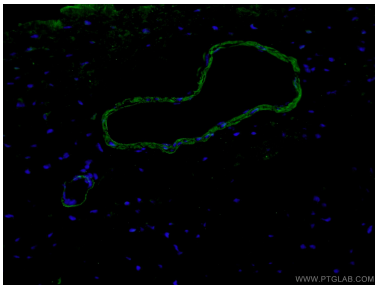
Notable Publications

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

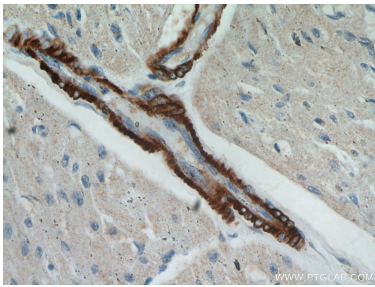
Storage

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

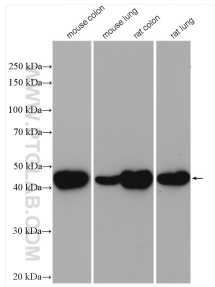
Selected Validation Data



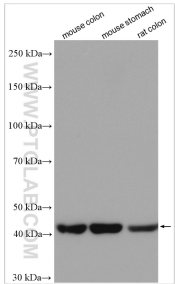
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 55135-1-AP (Alpha SMA-specific antibody) at dilution of 1:200 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



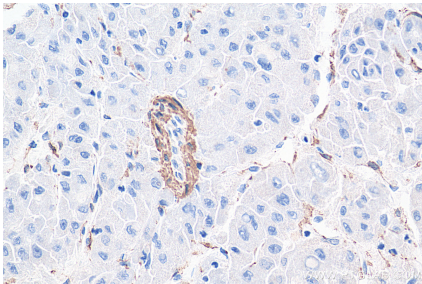
Immunohistochemical analysis of paraffin-embedded human heart using 55135-1-AP (ACTA2-Specific antibody) at dilution of 1:100 (under 40x lens).



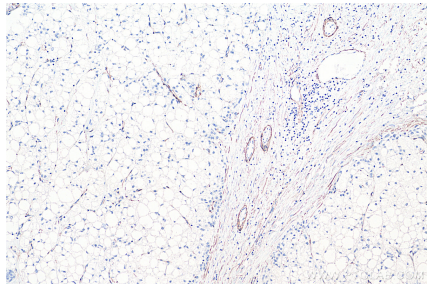
Various lysates were subjected to SDS PAGE followed by western blot with 55135-1-AP (smooth muscle actin-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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 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).