

For Research Use Only

smooth muscle actin Polyclonal antibody



Catalog Number: 23081-1-AP

31 Publications

Basic Information

Catalog Number:

23081-1-AP

Size:

150ul, Concentration: 300 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG19481

GenBank Accession Number:

BC017554

GeneID (NCBI):

59

UNIPROT ID:

P62736

Full Name:

actin, alpha 2, smooth muscle, aorta

Calculated MW:

377 aa, 42 kDa

Observed MW:

42 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:1000

Applications

Tested Applications:

WB, IP, IHC, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

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 heart tissue, mouse brown adipose tissue, mouse kidney tissue, mouse liver tissue, mouse skeletal muscle tissue, rat heart tissue

IP : mouse heart tissue,

IHC : human heart tissue, mouse skeletal muscle tissue, human colon tissue, human liver cancer tissue, stromal tumor tissue, human hystero myoma tissue, human liver tissue, human small intestine tissue, human skeletal muscle tissue

Background Information

ACTA2 (also known as α -smooth muscle actin or α -SMA) 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. ACTA2 is primarily expressed in vascular smooth muscle and anti-ACTA2 is commonly used to marker smooth muscle cells. This antibody is specific to the ACTA2. It selectively stains the vascular smooth muscle but not cardiac or skeletal muscle.

Notable Publications

Author	Pubmed ID	Journal	Application
Jan Krivanek	32968047	Nat Commun	IF
Yong He	25201080	Biochim Biophys Acta	WB
Jing Guo	28902355	Int J Oncol	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

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

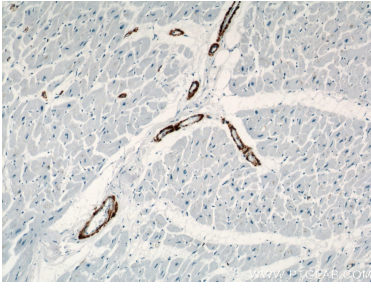
For technical support and original validation data for this product please contact:

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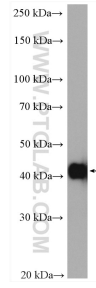
E: proteintech@ptglab.com
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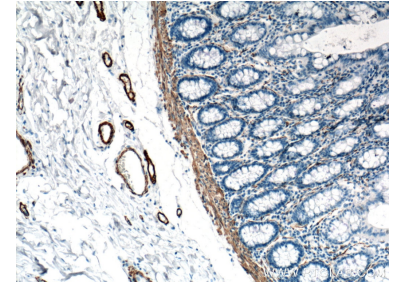
Selected Validation Data



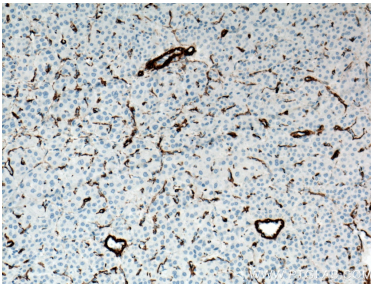
Immunohistochemical analysis of paraffin-embedded human heart using 23081-1-AP (ACTA2/smooth muscle actin antibody) at dilution of 1:500 (under 10x lens).



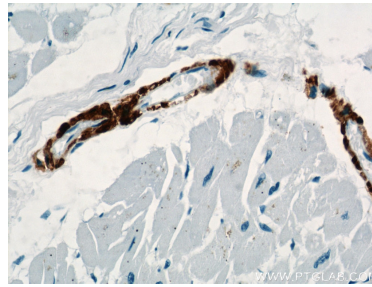
mouse heart tissue were subjected to SDS PAGE followed by western blot with 23081-1-AP (ACTA2/smooth muscle actin antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



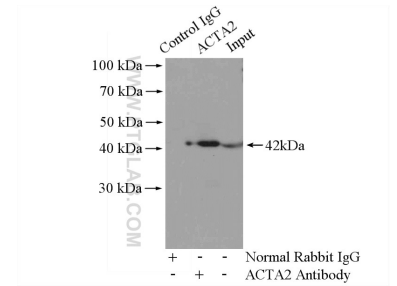
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 23081-1-AP (ACTA2/smooth muscle actin antibody) at dilution of 1:6400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 23081-1-AP (ACTA2/smooth muscle actin antibody) at dilution of 1:3200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human heart using 23081-1-AP (ACTA2/smooth muscle actin antibody) at dilution of 1:500 (under 40x lens).



IP result of anti-smooth muscle actin (IP:23081-1-AP, 4ug; Detection:23081-1-AP 1:1000) with mouse heart tissue lysate 3200ug.