Product Datasheet

alpha smooth muscle Actin Rabbit mAb

Catalog No: #48785

Package Size: #48785-1 50ul #48785-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

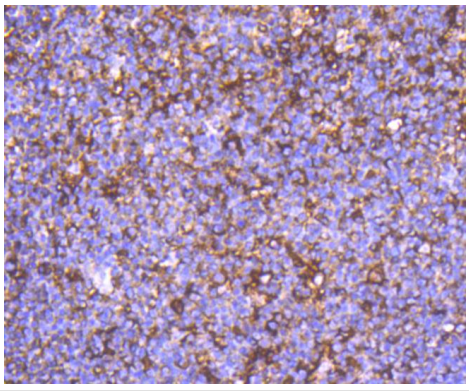
Description

Product Name	alpha smooth muscle Actin Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SY25-03
Purification	ProA affinity purified
Applications	WB, IHC, FC,IP,ICC/IF
Species Reactivity	Human;Mouse;Rat;Zebrafish
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	a actin antibody AAT6 antibody ACTA_HUMAN antibody ACTA2 antibody Actin alpha 2 smooth muscle aorta antibody Actin aortic smooth muscle antibody Actin, aortic smooth muscle antibody ACTSA antibody ACTVS antibody Alpha 2 actin antibody Alpha actin 2 antibody Alpha cardiac actin antibody Alpha-actin-2 antibody Cell growth inhibiting gene 46 protein antibody Cell growth-inhibiting gene 46 protein antibody GIG46 antibody Growth inhibiting gene 46 antibody MYMY5 antibody
Accession No.	Swiss-Prot#:P62736
Calculated MW	42 kDa
SDS-PAGE MW	42 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

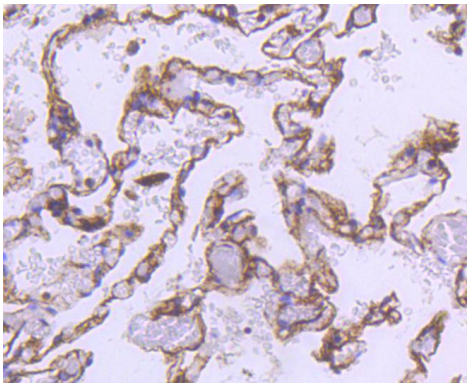
Application Details

WB: 1:1,000-5,000IHC:1:50-1:200 FC: 1:50-1:100

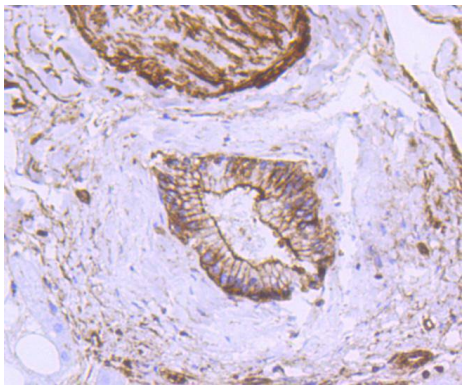
Images



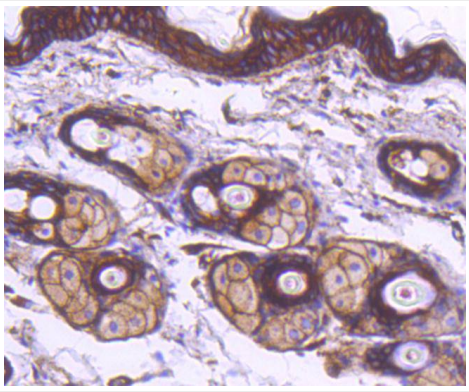
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-alpha smooth muscle Actin antibody. Counter stained with hematoxylin.



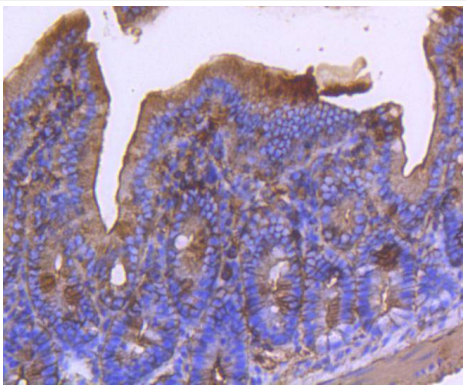
Immunohistochemical analysis of paraffin-embedded human lung tissue using anti-alpha smooth muscle Actin antibody. Counter stained with hematoxylin.



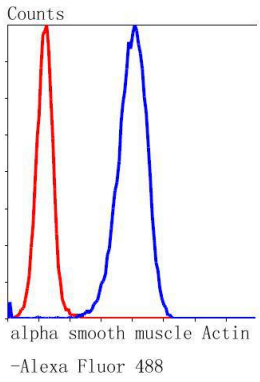
Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-alpha smooth muscle Actin antibody. Counter stained with hematoxylin.



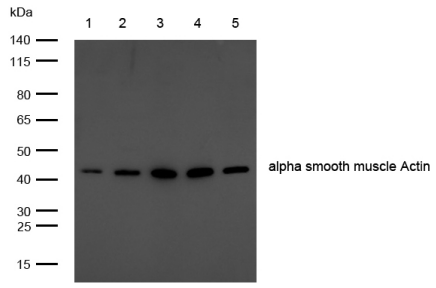
Immunohistochemical analysis of paraffin-embedded mouse skin tissue using anti-alpha smooth muscle Actin antibody. Counter stained with hematoxylin.



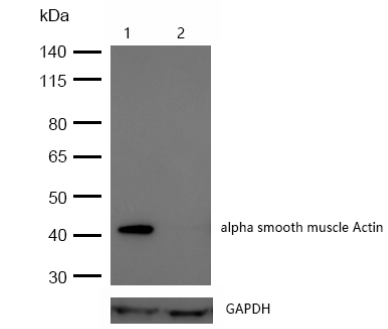
Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue using anti-alpha smooth muscle Actin antibody. Counter stained with hematoxylin.



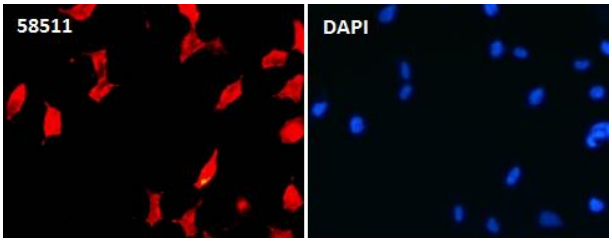
Flow cytometric analysis of Hela cells with alpha smooth muscle Actin antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.



All lanes: alpha smooth muscle Actin Rabbit mAb at 1/1k dilutionLane 1 : 293 whole cell lysates Lane 2 : A549 whole cell lysates Lane 3 : C2C12 whole cell lysates Lane 4 : PC12 whole cell lysates Lane 5 : C6 whole cell lysates Lysates/proteins at 20 µg per lane.SecondaryAll lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilutionPredicted band size: 42 kDa Observed band size: 42 kDaExposure time: 6 seconds



All lanes:alpha smooth muscle Actin Rabbit mAb at 1/1k dilutionLane 1 : Wild-type Hela cell lysateLane 2 : alpha smooth muscle Actin knockdown Hela cell lysateLysates/proteins at 20 µg per lane.



Immunocytochemistry/ Immunofluorescence alpha smooth muscle Actin antibody (48785) ICC/IF staining of alpha smooth muscle Actin in 293T cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100.

Samples were incubated with 48785 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 647 goat anti rabbit, used at a dilution of 1/500.

Nuclei were counterstained with DAPI.

Background

All eukaryotic cells express Actin, which often constitutes as much as 50% of total cellular protein. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. While lower eukaryotes, such as yeast, have only one Actin gene, higher eukaryotes have several isoforms encoded by a family of genes. At least six types of Actin are present in mammalian tissues and fall into three classes. α-Actin expression is limited to various types of muscle, whereas oΩ½Cβ and γ-Actin are the principle constituents of filaments in other tissues. Members of the small GTPase family regulate the organization of the Actin cytoskeleton. Rho controls the assembly of Actin stress fibers and focal adhesion. Rac regulates Actin filament accumulation at the plasma membrane. Cdc42 stimulates formation of filopodia.

References

1. Manetti M et al. Telocytes are reduced during fibrotic remodelling of the colonic wall in ulcerative colitis. J Cell Mol Med 19:62-73 (2015). 2. Ikenaga N et al. A new Mdr2(-/-) mouse model of sclerosing cholangitis with rapid fibrosis progression, early-onset portal hypertension, and liver cancer. Am J Pathol 185:325-34 (2015).

Published Papers

Feng Wang;Ping Li;Xinxin Yan;Anna Yue;Jingyi Xu;Yaqing Shao;Kaiyu Zhang;Qian Zhang;Yuan Li;Kangyun Sun el at., Novel therapeutic insights into pathological cardiac hypertrophy: tRF-16-R29P4PE regulates PACE4 and metabolic pathways., , (2025)

PMID:39947523

Note: This product is for in vitro research use only and is not intended for use in humans or animals.