Myosin light chain kinase Rabbit mAb

Catalog No: #48846

Package Size: #48846-1 50ul #48846-2 100ul

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

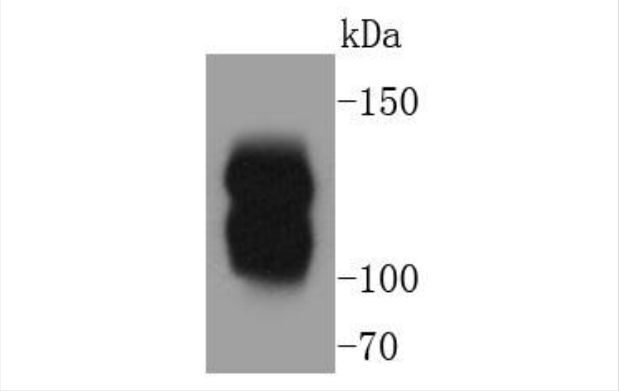
Description

Product Name	Myosin light chain kinase Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SU40-06
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	deglutamylated form antibody DKFZp686I10125 antibody EC 2.7.11.18 antibody FLJ12216 antibody Kinase related protein antibody Kinase-related protein antibody KRP antibody MLCK antibody MLCK1 antibody MLCK108 antibody MLCK210 antibody MSTP083 antibody MYLK antibody MYLK_HUMAN antibody MYLK1 antibody Myosin light chain kinase antibody Myosin light polypeptide kinase antibody OTTHUMP00000180642 antibody OTTHUMP00000180643 antibody smMLCK antibody smooth muscle antibody Smooth muscle myosin light chain kinase antibody Telokin antibody
Accession No.	Swiss-Prot#:Q15746
Uniprot	Q15746
GeneID	4638;
Calculated MW	110 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

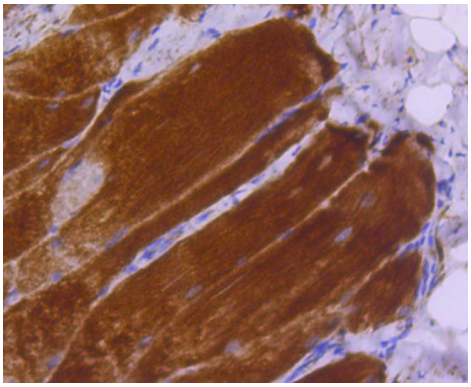
Application Details

WB: 1:2,000-1:10,000 IHC: 1:100-1:500 ICC: 1:100-1:500FC: 1:50-1:100

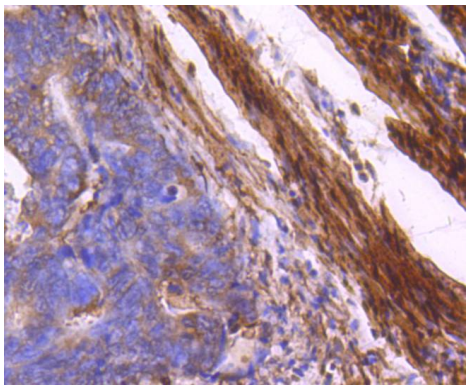
Images



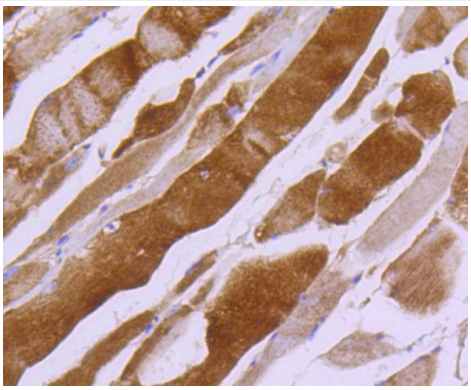
Western blot analysis of MYLK on human lung lysates using anti-MYLK antibody at 1/5,000 dilution.



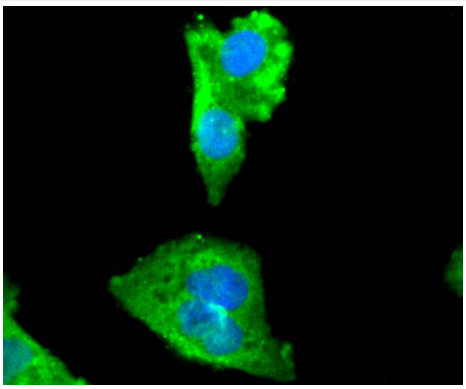
Immunohistochemical analysis of paraffin-embedded rat smooth muscle tissue using anti-MYLK antibody. Counter stained with hematoxylin.



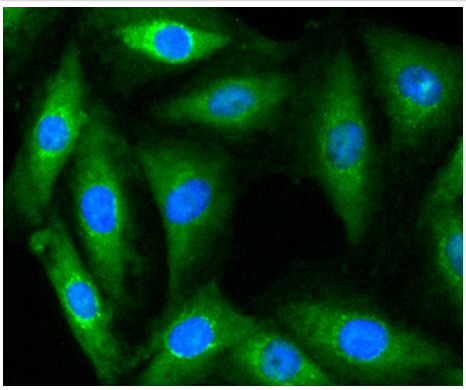
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-MYLK antibody. Counter stained with hematoxylin.



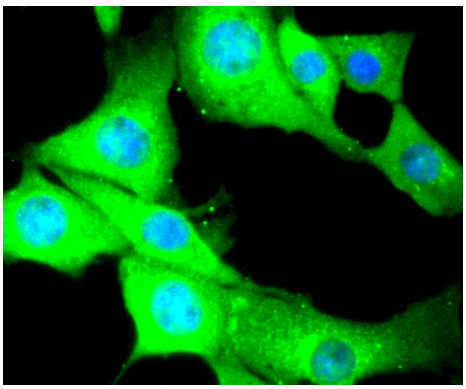
Immunohistochemical analysis of paraffin-embedded mouse smooth muscle tissue using anti-MYLK antibody. Counter stained with hematoxylin.



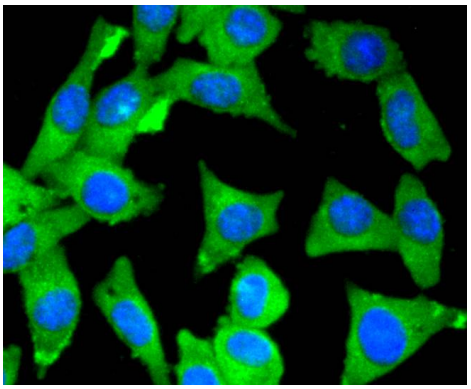
ICC staining MYLK in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



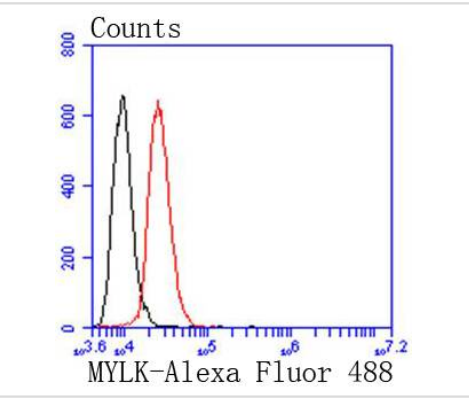
ICC staining MYLK in L6 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining MYLK in NIH/3T3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining MYLK in SH-SY-5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of SH-SY-5Y cells with MYLK antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

MLCK, a member of the Ser/Thr protein kinase family, is a calcium/calmodulin-dependent enzyme responsible for smooth muscle contraction via phosphorylation of a specific serine in the N-terminus of myosin light chains (MLC), an event that facilitates myosin interaction with actin filaments. It is a central determinant in the development of vascular permeability and tissue edema formation. In the nervous system it has been shown to control the growth initiation of astrocytic processes in culture and to participate in transmitter release at synapses formed between cultured sympathetic ganglion cells. MLCK acts as a critical participant in signaling sequences that result in fibroblast apoptosis. Smooth muscle and non-muscle isozymes are expressed in a wide variety of adult and fetal tissues and in cultured endothelium with qualitative expression appearing to be neither tissue- nor development-specific. Non-muscle isoform 2 is the dominant splice variant expressed in various tissues. The Telokin isoform, which binds calmodulin, has been found in a wide variety of adult and fetal tissues. MLCK is probably down-regulated by phosphorylation. The protein contains 1 fibronectin type III domain and 9 immunoglobulin-like C2-type domains.

References

Note: This product is for in vitro research use only