

For Research Use Only

MYLK Polyclonal antibody

Catalog Number: 21642-1-AP **6 Publications**



Basic Information

Catalog Number: 21642-1-AP	GenBank Accession Number: BC113456	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 240 µg/ml by Nanodrop and 233 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 4638	Recommended Dilutions: WB 1:500-1:2400 IHC 1:200-1:800 IF 1:10-1:100
Source: Rabbit	Full Name: myosin light chain kinase	
Isotype: IgG	Calculated MW: 1914 aa, 211 kDa	
Immunogen Catalog Number: AG16306	Observed MW: 135 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : mouse uterus tissue, mouse large intestine tissue IHC : human colon tissue, IF : HepG2 cells, Hela cells
Cited Applications: IF, IHC, WB	
Species Specificity: human, mouse, rat	
Cited Species: human, mouse, rat	
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

MYLK (Myosin light chain kinase) is also named as MLCK, MLCK1, MYLK1 and belongs to the protein kinase superfamily. It is a key enzyme in muscle contraction. Its activation is sufficient to enhance paracellular permeability and is required for tight junction barrier regulation in response to Na⁺-nutrient cotransport, inflammatory cytokines, or pathogenic bacteria (PMID:20404178). The expression of smooth muscle MYLK is tissue-specific. Smooth muscle MYLK generates three different proteins, long MYLK, short MYLK, and telokin. The 130-kDa smooth muscle, or short, MYLK (130 kDa) is expressed in smooth muscles. It has 8 isoforms produced by alternative splicing and alternative initiation and our anti-MYLK antibody can recognize these isoforms.

Notable Publications

Author	Pubmed ID	Journal	Application
Wenxuan Xu	27896916	FEBS J	IF
Jie Wu	33206094	Metallomics	WB
Nao Iguchi	31066574	Am J Physiol Renal Physiol	WB

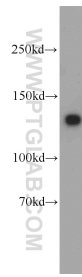
Storage

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

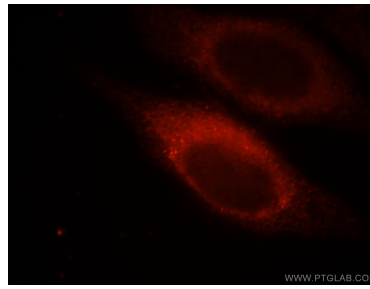
For technical support and original validation data for this product please contact:
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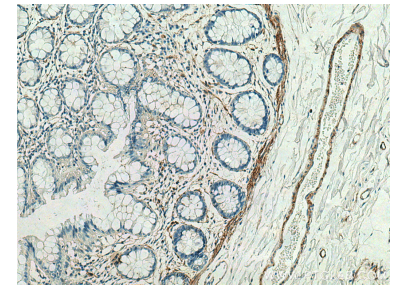
Selected Validation Data



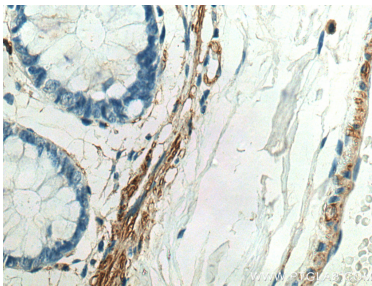
mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21642-1-AP (MYLK antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of HepG2 cells, using MYLK antibody 21642-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 21642-1-AP (MYLK antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 21642-1-AP (MYLK antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).