For Research Use Only

MYLK Polyclonal antibody

Catalog Number: 21642-1-AP

18 Publications



Basic Information

Applications

Catalog Number: 21642-1-AP

GenBank Accession Number:

Purification Method: Antigen affinity purification

Size:

BC113456 GeneID (NCBI):

Recommended Dilutions:

150ul, Concentration: 240 µg/ml by Nanodrop and 233 µg/ml by Bradford Full Name:

4638

WB 1:500-1:2400 IHC 1:200-1:800

method using BSA as the standard;

myosin light chain kinase

IF 1:10-1:100

Calculated MW:

Rabbit Isotype:

1914 aa, 211 kDa

Observed MW: 135 kDa

IgG

Immunogen Catalog Number:

AG16306

Tested Applications:

IF, IHC, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, monkey, pig

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 uterus tissue, mouse large intestine tissue

IHC: human colon tissue. IF: HepG2 cells, Hela cells

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 tissuespecific. 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 isforms.

Notable Publications

Author	Pubmed ID	Journal	Application
Jian Zhao	36170767	Placenta	WB
Wenxuan Xu	27896916	FEBS J	IF
Jie Wu	33206094	Metallomics	WB

Storage

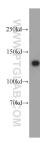
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

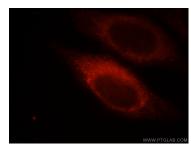
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

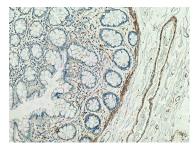
Selected Validation Data



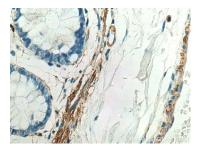
mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21642-1-AP (MYLK antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



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



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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).