

For Research Use Only

MYLK Polyclonal antibody

Catalog Number: 21642-1-AP

32 Publications



Basic Information

Catalog Number:

21642-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG16306

GenBank Accession Number:

BC113456

GeneID (NCBI):

4638

UNIPROT ID:

Q15746

Full Name:

myosin light chain kinase

Calculated MW:

1914 aa, 211 kDa

Observed MW:

135 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:2400

IHC: 1:200-1:800

IF-P: 1:50-1:500

IF/ICC: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IHC, IF, ColP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, monkey

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-P: mouse ovary tissue, human rectal cancer tissue

IF/ICC: HepG2 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 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
Jian Zhao	36170767	Placenta	WB
Wenxuan Xu	27896916	FEBS J	IF
Jie Wu	33206094	Metallomics	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

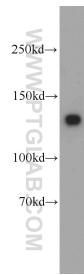
For technical support and original validation data for this product please contact:

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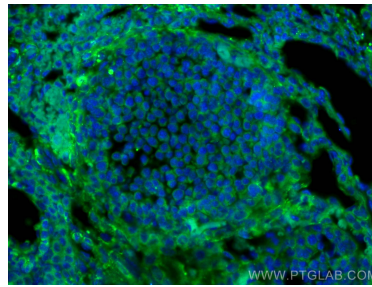
E: proteintech@ptglab.com
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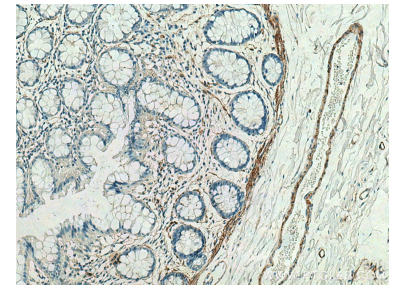
Selected Validation Data



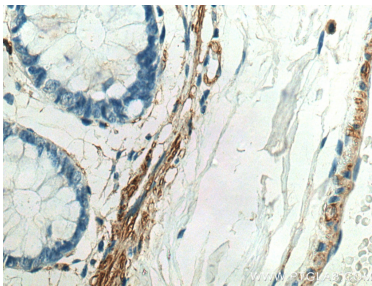
mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21642-1-AP (MYLK antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



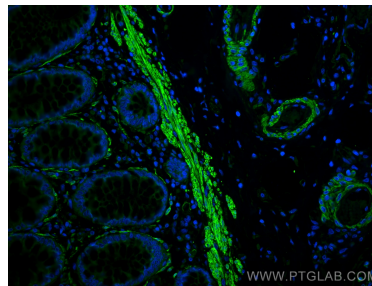
Immunofluorescent analysis of (4% PFA) fixed mouse ovary tissue using MYLK antibody (21642-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



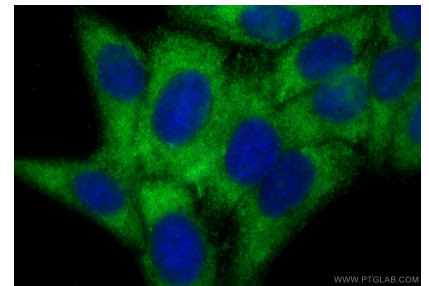
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 21642-1-AP (MYLK antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human rectal cancer tissue using MYLK antibody (21642-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MYLK antibody (21642-1-AP) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).