

For Research Use Only

MYLK Polyclonal antibody

Catalog Number: 21642-1-AP

28 Publications



Basic Information

Catalog Number: 21642-1-AP	GenBank Accession Number: BC113456	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 600 ug/ml by Nanodrop;	GeneID (NCBI): 4638	Recommended Dilutions: WB 1:500-1:2400
Source: Rabbit	UNIPROT ID: Q15746	IHC 1:200-1:800
Isotype: IgG	Full Name: myosin light chain kinase	IF-P 1:50-1:500
Immunogen Catalog Number: AG16306	Calculated MW: 1914 aa, 211 kDa	IF/ICC 1:200-1:800
	Observed MW: 135 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, IF-P, ELISA	Positive Controls: WB : mouse uterus tissue, mouse large intestine tissue
Cited Applications: WB, IHC, IF, ColP	IHC : human colon tissue,
Species Specificity: human, mouse, rat	IF-P : mouse ovary tissue, human rectal cancer tissue
Cited Species: human, mouse, rat, pig, monkey	IF/ICC : HepG2 cells,
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
Jian Zhao	36170767	Placenta	WB
Wenxuan Xu	27896916	FEBS J	IF
Jie Wu	33206094	Metallomics	WB

Storage

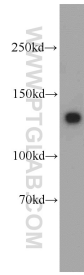
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

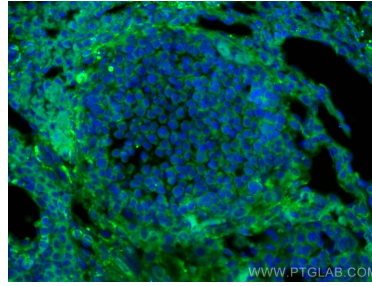
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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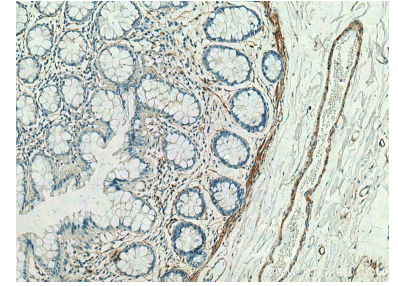
Selected Validation Data



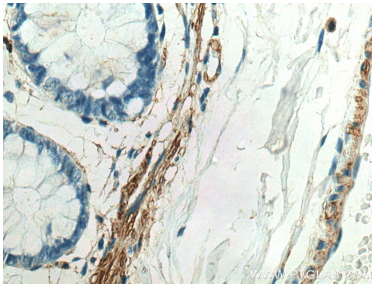
mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21642-1-AP (MYLK antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



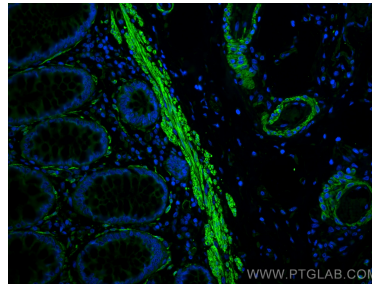
Immunofluorescent analysis of (4% PFA) fixed mouse ovary tissue using MYLK antibody (21642-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



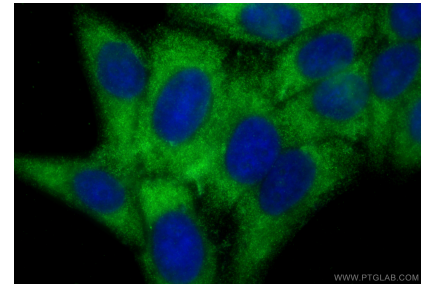
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 21642-1-AP (MYLK antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).