

## MYLK Polyclonal antibody

Catalog Number: 21642-1-AP 30 Publications

## Basic Information

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

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, ELISA	<b>Positive Controls:</b> WB : mouse uterus tissue, mouse large intestine tissue
<b>Cited Applications:</b> WB, IHC, IF, ColP	IHC : human colon tissue,
<b>Species Specificity:</b> human, mouse, rat	IF-P : mouse ovary tissue, human rectal cancer tissue
<b>Cited Species:</b> human, mouse, rat, pig, monkey	IF/ICC : HepG2 cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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<sup>+</sup>-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

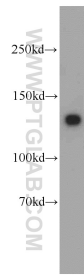
For technical support and original validation data for this product please contact:

T: 4006900926

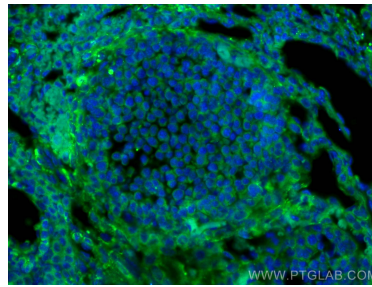
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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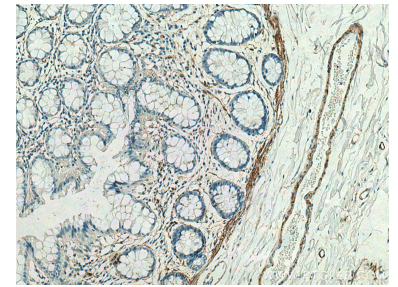
## Selected Validation Data



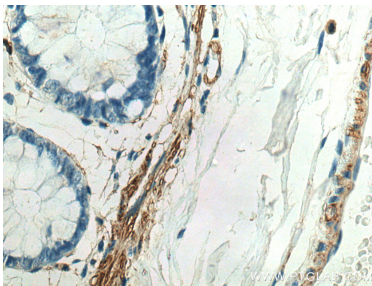
mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21642-1-AP (MYLK antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



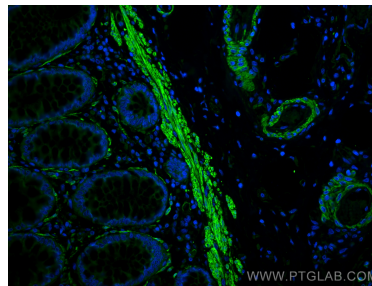
Immunofluorescent analysis of (4% PFA) fixed mouse ovary tissue using MYLK antibody (21642-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



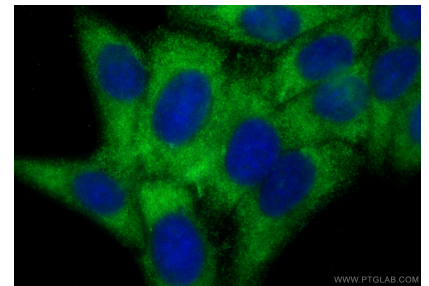
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 21642-1-AP (MYLK antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).