

For Research Use Only

MYL12B Polyclonal antibody

Catalog Number: 10324-1-AP

6 Publications



Basic Information

Catalog Number:

10324-1-AP

Size:

150ul, Concentration: 650 ug/ml by Nanodrop and 327 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0398

GenBank Accession Number:

BC004994

GeneID (NCBI):

103910

UNIPROT ID:

O14950

Full Name:

myosin, light chain 12B, regulatory

Calculated MW:

20 kDa

Observed MW:

18-20 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:3000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

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 skeletal muscle tissue, mouse heart tissue, rat skeletal muscle tissues

IHC : human colon tissue, human colon cancer tissue

Background Information

MYL12B is a regulatory subunit of myosin and plays an important role in regulation of both smooth muscle and nonmuscle cell contractile activity via its phosphorylation. There are two groups of residues on the MYL12B that are phosphorylated by distinct kinases and have contrasting effects on myosin II biophysical properties. Phosphorylation at Thr18/Ser19 essentially "activates" the myosin molecule to produce force. The second group of phosphorylated residues is at the N-terminus of the MYL12B at Ser1, Ser2 and Thr9 and causes inhibitory effect on myosin activity. (PMID: 22136066)

Notable Publications

Author	Pubmed ID	Journal	Application
Asker Y Khapchaev	27699916	J Pept Sci	WB
Beach Jordan R JR	22136066	BMC Cell Biol	WB,IF
Shuai Tang	39578737	BMC Microbiol	

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

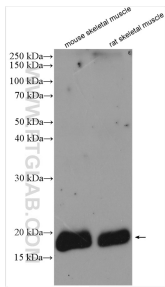
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

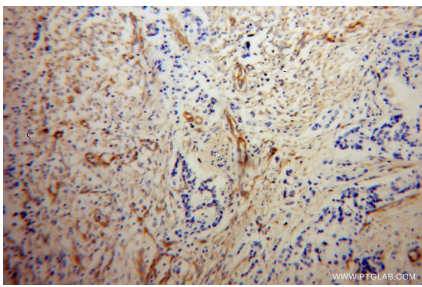
E: proteintech@ptglab.com
W: ptglab.com

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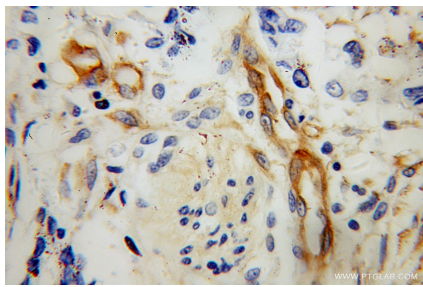
Selected Validation Data



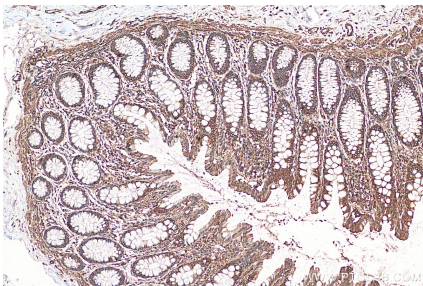
Various lysates were subjected to SDS PAGE followed by western blot with 10324-1-AP (MYL12B antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



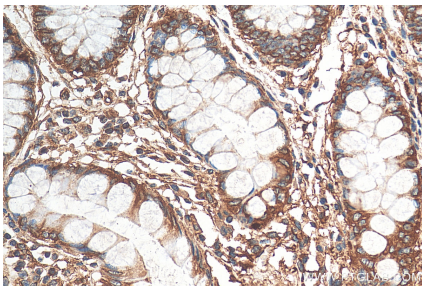
Immunohistochemical analysis of paraffin-embedded human colon cancer using 10324-1-AP (MYL12B antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human colon cancer using 10324-1-AP (MYL12B antibody) at dilution of 1:100 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 10324-1-AP (MYL12B antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 10324-1-AP (MYL12B antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).