

For Research Use Only

# MYL12B Polyclonal antibody

Catalog Number: 10324-1-AP

5 Publications



## Basic Information

<b>Catalog Number:</b> 10324-1-AP	<b>GenBank Accession Number:</b> BC004994	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 650 µg/ml by Nanodrop and 327 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 103910	<b>Recommended Dilutions:</b> WB 1:500-1:3000 IHC 1:20-1:200
<b>Source:</b> Rabbit	<b>Full Name:</b> myosin, light chain 12B, regulatory	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 20 kDa	
<b>Immunogen Catalog Number:</b> AG0398	<b>Observed MW:</b> 18-20 kDa	

## Applications

<b>Tested Applications:</b> IHC, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> IF, WB	<b>WB :</b> mouse skeletal muscle tissue, mouse heart tissue, rat skeletal muscle tissues
<b>Species Specificity:</b> human, mouse, rat	<b>IHC :</b> human colon cancer tissue,
<b>Cited Species:</b> human	
<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

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
Asker Y Khapchaev	37758312	Biochemistry (Mosc)	WB

## Storage

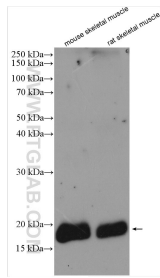
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

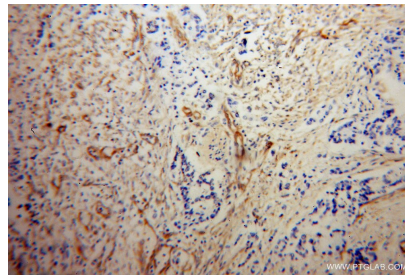
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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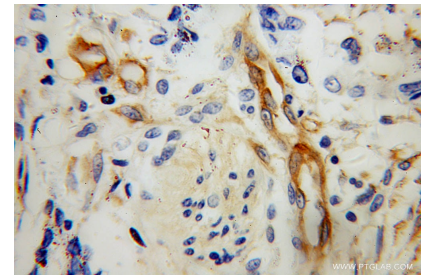
## Selected Validation Data



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).