For Research Use Only

## MYL12B Polyclonal antibody

Catalog Number:10324-1-AP 4 Publications



**Basic Information** 

**Applications** 

Catalog Number: 10324-1-AP

GenBank Accession Number:

**Purification Method:** Antigen affinity purification

Size:

Source:

GeneID (NCBI):

Recommended Dilutions:

150ul , Concentration: 650 µg/ml by

103910

BC004994

WB 1:500-1:2000 IHC 1:20-1:200

Nanodrop and 327  $\mu g/ml$  by Bradford Full Name: method using BSA as the standard;

myosin, light chain 12B, regulatory

Calculated MW:

Rabbit 20 kDa Isotype

Observed MW:

20 kDa

Immunogen Catalog Number:

AG0398

**Tested Applications:** 

IHC. WR.FIISA

WB: mouse skeletal muscle tissue, mouse heart tissue

**Cited Applications:** 

IF. WB

IHC: human colon cancer tissue,

Species Specificity: human, mouse, rat **Cited Species:** 

human

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**

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  $properties. Phosphory lation\ at\ Thr 18/Ser 19\ essentially\ "activates"\ the\ myosin\ molecule\ to\ produce\ force.$  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
Breckenridge Mark T MT	18971378	Mol Biol Cell	WB

Storage

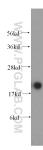
Storage:

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

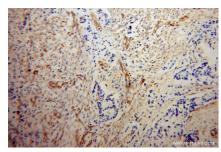
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

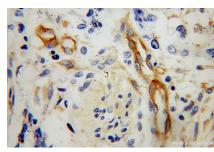
## Selected Validation Data



mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 10324-1-AP (MYL12B antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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



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