

Rabbit Anti-MYL12B antibody

SL19147R

Product Name:	MYL12B
Chinese Name:	肌球蛋白调节轻链12B 抗体
Alias:	ML12B_HUMAN; MLC-2; MLC-2a; MLC-B; MLC20; MRLC2; MYL12B; MYLC2B; Myosin light chain 12B regulatory; Myosin regulatory light chain 12B; myosin regulatory light chain 2; Myosin regulatory light chain 2-B; myosin regulatory light chain 2-B, smooth muscle isoform; Myosin regulatory light chain 20 kDa; Myosin regulatory light chain MRLC2; myosin, light chain 12B, regulatory; OTTHUMP00000162244; OTTHUMP00000165806; OTTHUMP00000165807; OTTHUMP00000165808; SHUJUN-1; smooth muscle isoform.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	20kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MYL12B:2-80/172
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The activity of nonmuscle myosin II (see MYH9; MIM 160775) is regulated by

phosphorylation of a regulatory light chain, such as MRLC2. This phosphorylation results in higher MgATPase activity and the assembly of myosin II filaments (Iwasaki et al., 2001 [PubMed 11942626]).[supplied by OMIM, Mar 2008]

Function:

Myosin regulatory subunit that plays an important role in regulation of both smooth muscle and nonmuscle cell contractile activity via its phosphorylation. Phosphorylation triggers actin polymerization in vascular smooth muscle. Implicated in cytokinesis, receptor capping, and cell locomotion.

Tissue Specificity:

Ubiquitously expressed in various hematopoietic cells.

Post-translational modifications:

Phosphorylation increases the actin-activated myosin ATPase activity and thereby regulates the contractile activity. It is required to generate the driving force in the migration of the cells but not necessary for localization of myosin-2 at the leading edge. Phosphorylation is reduced following epigallocatechin-3-O-gallate treatment.

Similarity:

Contains 3 EF-hand domains.

SWISS:

O14950

Gene ID:

103910

Database links:

Entrez Gene: 103910 Human

Entrez Gene: 67938 Mouse

Entrez Gene: 50685 Rat

Omim: 609211 Human

SwissProt: O14950 Human

SwissProt: Q3THE2 Mouse

SwissProt: P18666 Rat

<u>Unigene: 190086</u> Human

Unigene: 464472 Human

Unigene: 261329 Mouse

Unigene: 485011 Mouse

Unigene: 214633 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

