



Rabbit Anti-phospho-MRCL3 (Thr18 + Ser19) antibody

SL17750R

Product Name:	phospho-MRCL3 (Thr18 + Ser19)
Chinese Name:	磷酸化肌球蛋白调节轻链MRCL3抗体
Alias:	MRCL3 (phospho T18 + S19); ML12A_HUMAN; MLC 2B; MLC-2B; MLCB; MYL12A; Myosin regulatory light chain 12A; Myosin regulatory light chain 2; Myosin regulatory light chain 2, nonsarcomeric; Myosin regulatory light chain MRCL3; Myosin regulatory light chain MRCL3; Myosin RLC; Myosin, light polypeptide, regulatory, non sarcomeric (20kD); nonsarcomeric; RLC.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Zebrafish,Sheep,
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:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human MRCL3 around the phosphorylation site of Thr18 + Ser19:RA(p-T)(p-S)N
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

Myosin is a highly conserved, ubiquitously expressed protein that interacts with Actin to generate the force for cellular movements. Conventional myosins are hexameric proteins consisting of two heavy chain subunits, a pair of non-phosphorylatable light chain subunits and a pair of phosphorylatable light chain subunits. Three general classes of myosin have been cloned: smooth muscle myosins, striated muscle myosins and non-muscle myosins. Myosin regulatory light chains, including MRCL3 (also known as MRLC3 or MLCB), MRLC2 (also known as MLC-B) and MYL9 (also known as LC20, MLC2, MRLC1 or MYRL2), regulate contraction in smooth muscle and non-muscle cells via phosphorylation by myosin light chain kinase (MLCK). Phosphorylation of myosin regulatory light chains, catalyzed by MLCK in the presence of calcium and calmodulin, increases the Actin-activated myosin ATPase activity, thereby regulating the contractile activity. Myosin light chain is also located in striated skeletal muscle, where its function remains undefined.

Function:

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

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.

Similarity:

Contains 3 EF-hand domains.

SWISS:

P19105

Gene ID:

10627

Database links:

[Entrez Gene: 10627](#) Human

[Entrez Gene: 67268](#) Mouse

[SwissProt: P19105](#) Human

[Unigene: 190086](#) Human

[Unigene: 261329](#) Mouse

Product Detail:

Important Note:

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

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