



# MRLC2 (phospho Ser20) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-17177
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	MYL9
<b>Protein Name</b>	Myosin regulatory light polypeptide 9
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Myosin regulatory light chain 2 around the phosphorylation site of Ser18. AA range:3-52
<b>Specificity</b>	Phospho-MRLC2 (S20) Polyclonal Antibody detects endogenous levels of MRLC2 protein only when phosphorylated at S20.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	MYL9; MLC2; MRLC1; MYRL2; Myosin regulatory light polypeptide 9; 20 kDa myosin light chain; LC20; MLC-2C; Myosin RLC; Myosin regulatory light chain 2; smooth muscle isoform; Myosin regulatory light chain 9; Myosin regulatory light chain MRL
<b>Observed Band</b>	18kD
<b>Cell Pathway</b>	Cytoplasm, cytoskeleton . Cytoplasm, cell cortex . Colocalizes with F-actin, MYH9 and PIEZO1 at the actomyosin cortex in myoblasts. .
<b>Tissue Specificity</b>	Smooth muscle tissues and in some, but not all, nonmuscle cells.
<b>Function</b>	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.,miscellaneous:This chain binds calcium.,PTM: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.,subunit:Myosin is an hexamer of 2



heavy chains and 4 light chains.,tissue specificity:Smooth muscle tissues and in some, but not all, nonmuscle cells.,

**Background**

Myosin, a structural component of muscle, consists of two heavy chains and four light chains. The protein encoded by this gene is a myosin light chain that may regulate muscle contraction by modulating the ATPase activity of myosin heads. The encoded protein binds calcium and is activated by myosin light chain kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

**matters needing attention**

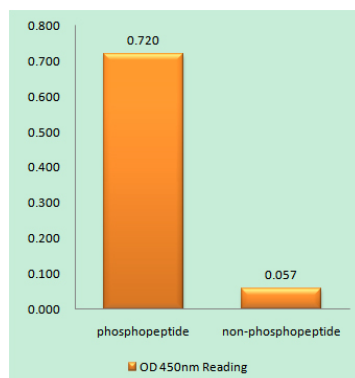
Avoid repeated freezing and thawing!

**Usage suggestions**

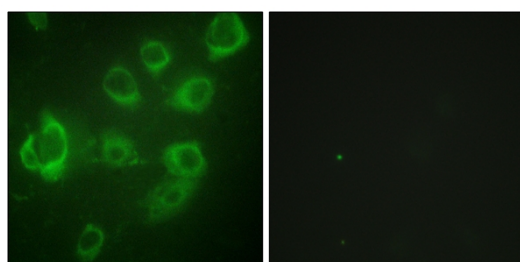
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



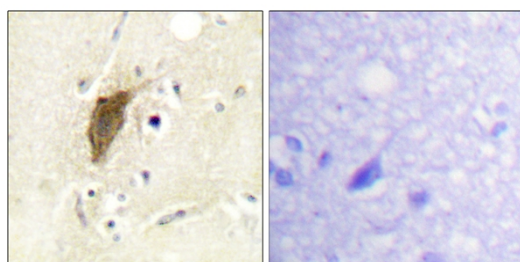
## Products Images



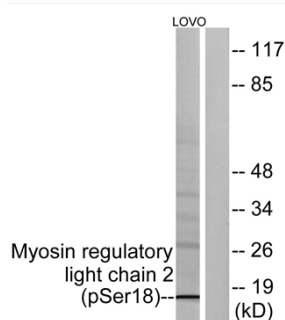
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Myosin regulatory light chain 2 (Phospho-Ser18) Antibody



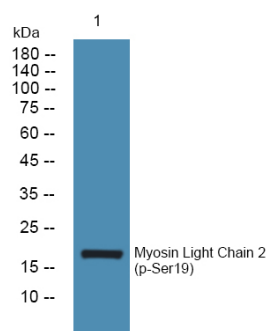
Immunofluorescence analysis of HUVEC cells, using Myosin regulatory light chain 2 (Phospho-Ser18) Antibody. The picture on the right is blocked with the phosphopeptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using Myosin regulatory light chain 2 (Phospho-Ser18) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from LOVO cells treated with H<sub>2</sub>O<sub>2</sub> 100uM 30', using Myosin regulatory light chain 2 (Phospho-Ser18) Antibody. The lane on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from PC12 cells, primary antibody was diluted at 1:1000, 4° over night