

MYL9 polyclonal antibody

Catalog # PAB11255 Size 100 ug

Applications

Western Blot (Tissue lysate)

Western blot using MYL9 polyclonal antibody (Cat # PAB11255) to detect vascular myosin (rat aorta, lane 1), but not cardiac myosin (mouse heart, lane2).

Each lane was loaded with 35 ug of lysate.

Arrowheads indicate the detection of both mono-phosphorylated (upper) and unphosphorylated (lower) forms of the protein.

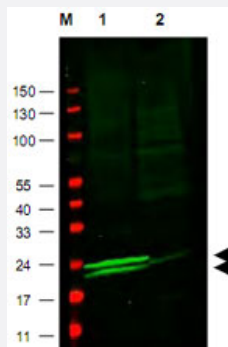
After blocking with 5% NGS and 0.5% BLOTTO in PBS, the membrane was probed with the primary antibody diluted in blocking buffer to 1 : 600 for 2 h at room temperature.

The membrane was washed and reacted with a 1 : 10,000 dilution of IRDye 800™ conjugated Gt-a-Rabbit IgG [H&L] MX for 45 min at room temperature (800nm channel, green).

Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red).

IRDye™ 800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

IRDye is a trademark of LI-COR, Inc.



Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of MYL9.
Immunogen	A synthetic peptide corresponding to amino acids 12-27 of human MYL9.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This affinity purified antibody is directed against the regulatory light chain of smooth and non- muscle myosin. This antibody detects both unphosphorylated and monophosphorylated forms of the protein.

Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:5000-1:20000) Western Blot (1:500-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

Gene Info — MYL9

Entrez GeneID	10398
Protein Accession#	P24844(Human);Q9CQ19(Mouse)
Gene Name	MYL9
Gene Alias	LC20, MGC3505, MLC2, MRLC1, MYRL2

Gene Description	myosin, light chain 9, regulatory
Omim ID	609905
Gene Ontology	Hyperlink
Gene Summary	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]
Other Designations	OTTHUMP00000030857 myosin RLC myosin regulatory light chain 2, smooth muscle isoform myosin regulatory light chain 9 myosin, light polypeptide 9, regulatory

Publication Reference

- [Diphosphorylated MRLC is required for organization of stress fibers in interphase cells and the contractile ring in dividing cells.](#)

Iwasaki T, Murata-Hori M, Ishitobi S, Hosoya H.

Cell Structure and Function 2001 Dec; 26(6):677.

Application: IF, Rat, REF cells

- [Characterization and differential expression of human vascular smooth muscle myosin light chain 2 isoform in nonmuscle cells.](#)

Kumar CC, Mohan SR, Zavodny PJ, Narula SK, Leibowitz PJ.

Biochemistry 1989 May; 28(9):4027.

Application: IP, Rabbit, Reticulocytes

Pathway

- [Focal adhesion](#)
- [Leukocyte transendothelial migration](#)
- [Regulation of actin cytoskeleton](#)
- [Tight junction](#)
- [Vascular smooth muscle contraction](#)