10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MYL9 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14674b

Product Information

Application	WB, IHC-P, E
Primary Accession	P24844
Other Accession	Q64122, P29269, Q9CQ19, P02612, NP_006088.2
Reactivity	Human
Predicted	Chicken, Mouse, Pig, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34487
Calculated MW	19827
Antigen Region	96-125

Additional Information

Gene ID	10398
Other Names	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 MRLC1, MYL9, MLC2, MRLC1, MYRL2
Target/Specificity	This MYL9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 96-125 amino acids from the C-terminal region of human MYL9.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MYL9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MYL9 {ECO:0000303|PubMed:29453416, ECO:0000312|HGNC:HGNC:15754}

Function	Myosin regulatory subunit that plays an important role in regulation of both smooth muscle and nonmuscle cell contractile activity via its phosphorylation (PubMed:11942626, PubMed:2526655). Implicated in cytokinesis, receptor capping, and cell locomotion (PubMed:11942626, PubMed:2526655). In myoblasts, may regulate PIEZO1- dependent cortical actomyosin assembly involved in myotube formation (By similarity).
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9CQ19}. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q9CQ19}. Note=Colocalizes with F-actin, MYH9 and PIEZO1 at the actomyosin cortex in myoblasts {ECO:0000250|UniProtKB:Q9CQ19}
Tissue Location	Smooth muscle tissues and in some, but not all, nonmuscle cells.

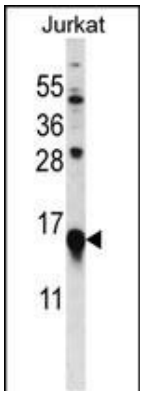
Background

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.

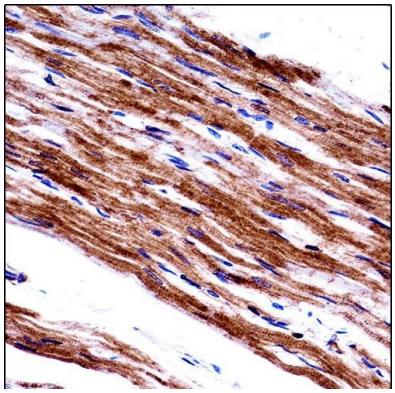
References

Gilles, L., et al. Blood 114(19):4221-4232(2009)
Higashihara, M., et al. J Smooth Muscle Res 44(1):29-40(2008)
Szczesna-Cordary, D., et al. J. Cell. Sci. 118 (PT 16), 3675-3683 (2005) :
Webb, R.C. Adv Physiol Educ 27 (1-4), 201-206 (2003) :
Deloukas, P., et al. Nature 414(6866):865-871(2001)

Images



MYL9 Antibody (C-term) (Cat. #AP14674b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the MYL9 antibody detected the MYL9 protein (arrow).



MYL9 Antibody (C-term) (AP14674b)immunohistochemistry analysis in formalin fixed and paraffin embedded human heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MYL9 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.