

Anti-MYL9 (Phospho-S20) Antibody

Catalog # AP51632

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P24844
Reactivity	Human, Mouse, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	19827

Additional Information

Gene ID	10398
Other Names	MLC2; MRCL1; 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 MRCL1
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S20 of human MYL9 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	MYL9
Synonyms	MLC2, MRCL1, MYRL2
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 (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.

References

Kumar C.C.,et al.Biochemistry 28:4027-4035(1989).

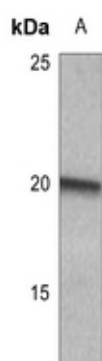
Pan J.Y.,et al.Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases.

Iwasaki T.,et al.Cell Struct. Funct. 26:677-683(2001).

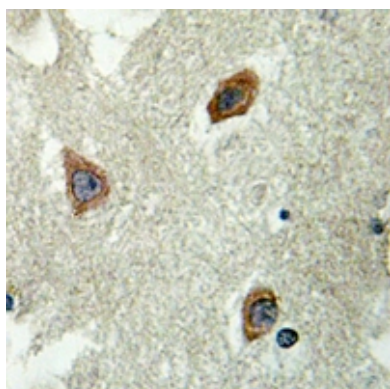
Deloukas P.,et al.Nature 414:865-871(2001).

Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

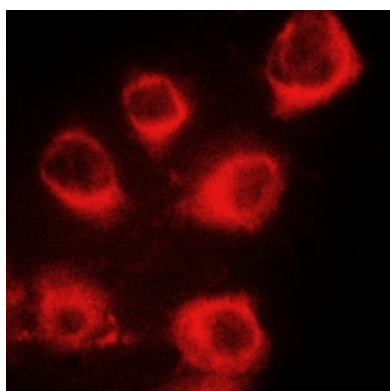
Images



Western blot analysis of MYL9 (Phospho-S20) expression in human ventricle (A) whole cell lysates. (Predicted band size: 19 kD; Observed band size: 20 kD)



Immunohistochemical analysis of MYL9 (Phospho-S20) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MYL9 (Phospho-S20) staining in HUVEC cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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