

Myosin Light Chain 2 Antibody
Rabbit mAb
Catalog # AP90711**Specification****Myosin Light Chain 2 Antibody - Product Information**

Application	WB, IHC, IP
Primary Accession	P10916
Reactivity	Rat
Clonality	Monoclonal
Other Names	
MYL2; MLC2; Myosin light chain 2; MLC-2; RLC of myosin; CMH10; MLC-2v;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	18789 Da

Myosin Light Chain 2 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Myosin Light Chain 2
Description	Myosin is composed of six polypeptide chains: two identical heavy chains and two pairs of light chains. Myosin light chain 2 (MLC2), also known as myosin regulatory light chain (MRLC), RLC, or LC20, has many isoforms depending on its distribution. In smooth muscle, MLC2 is phosphorylated at Thr18 and Ser19 by myosin light chain kinase (MLCK) in a Ca ²⁺ /calmodulin-dependent manner.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Myosin Light Chain 2 Antibody - Protein Information**Name** MYL2 ([HGNC:7583](#))**Function**

Contractile protein that plays a role in heart development and function (PubMed:23365102, PubMed:32453731). Following

phosphorylation, plays a role in cross-bridge cycling kinetics and cardiac muscle contraction by increasing myosin lever arm stiffness and promoting myosin head diffusion; as a consequence of the increase in maximum contraction force and calcium sensitivity of contraction force. These events altogether slow down myosin kinetics and prolong duty cycle resulting in accumulated myosins being cooperatively recruited to actin binding sites to sustain thin filament activation as a means to fine-tune myofilament calcium sensitivity to force (By similarity). During cardiogenesis plays an early role in cardiac contractility by promoting cardiac myofibril assembly (By similarity).

Cellular Location

Cytoplasm, myofibril, sarcomere, A band {ECO:0000250|UniProtKB:P08733}

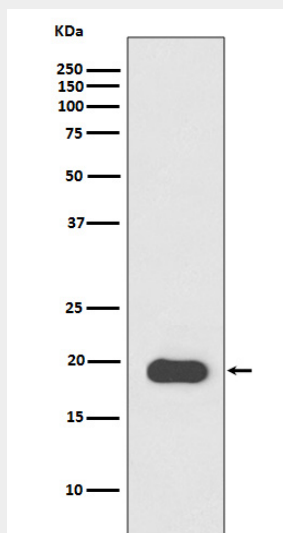
Tissue Location

Highly expressed in type I muscle fibers.

Myosin Light Chain 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Myosin Light Chain 2 Antibody - Images

Western blot analysis of Myosin Light Chain 2 expression in Mouse heart lysate.