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Myosin Light Chain 2 Antibody

Rabbit mAb
Catalog # AP90711

Product Information

Application	WB, IHC, IP
Primary Accession	P10916
Reactivity	Rat, Human, Mouse
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

Additional Information

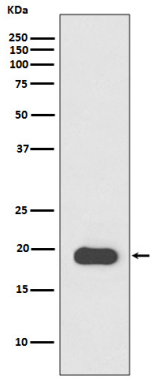
Dilution	WB 1:1000~1:5000 IHC 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Myosin Light Chain 2
Description	Myosin is composed of six polypeptide chains: two identical heavy chains and two pairs of light chains. Myosin light chain 2 (MLC2), 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 Ca2+/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.

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.

Images



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

Image not found : 202311/AP90711-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human heart, using Myosin Light Chain 2 Antibody.

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