Product Name: Myosin Light Chain 2 (8D15) Rabbit Monoclonal Antibody
Catalog #: AMRe14344

Summary

Production Name	Myosin Light Chain 2 (8D15) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Purification	Affinity purification

Immunogen

Gene Name	MYL2
Alternative Names	MYL2; MLC2; Myosin light chain 2; MLC-2; RLC of myosin; CMH10; MLC-2v;
Gene ID	4633.0
SwissProt ID	P10916.A synthetic peptide of human Myosin Light Chain 2

Application

Dilution Ratio	WB: 1:1000-1:5000
Molecular Weight	19kDa

Background

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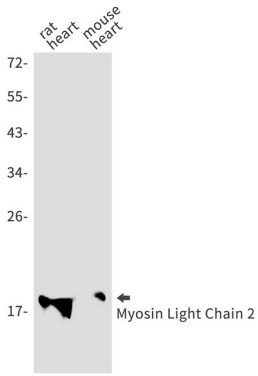
Myosin is composed of six polypeptide chains: two identical heavy chains and two pairs of light chains. Myosin light chain 2 (MLC2), also known as myosin regulatory light chain (MRLC), RLC, or LC20, has many isoforms depending on its distribution. In smooth muscle, MLC2 is phosphorylated at Thr18 and Ser19 by myosin light chain kinase (MLCK) in a Ca2+/calmodulin-dependent manner. Contractile protein that plays a role in heart development and function (By similarity). 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).

Research Area

Image Data



Western blot detection of Myosin Light Chain 2 in rat heart,mouse heart using Myosin Light Chain 2 antibody.

Note

For research use only.