Myosin Light Chain 2 Rabbit mAb

Catalog No: #49023

Package Size: #49023-1 50ul #49023-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

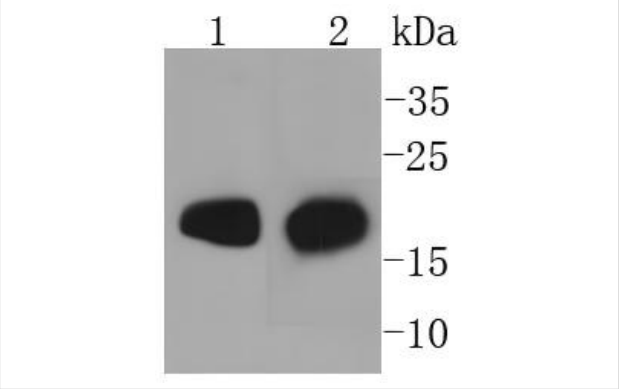
Product Name	Myosin Light Chain 2 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	SN67-09
Purification	ProA affinity purified
Applications	WB, IHC, IP
Species Reactivity	Human;Mouse;Rat;Zebrafish
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	Cardiac myosin light chain-2 antibody Cardiac ventricular myosin light chain 2 antibody CMH10 antibody MLC 2v antibody MLC-2 antibody MLC-2v antibody MLC2 antibody MLRV_HUMAN antibody MYL 2 antibody MYL2 antibody Myosin light chain 2 regulatory cardiac slow antibody Myosin light polypeptide 2 regulatory cardiac slow antibody Myosin regulatory light chain 2 antibody Myosin regulatory light chain 2 ventricular/cardiac muscle isoform antibody Regulatory light chain of myosin antibody RLC of myosin antibody Slow cardiac myosin regulatory light chain 2 antibody ventricular/cardiac muscle isoform antibody
Accession No.	Swiss-Prot#:P10916
Calculated MW	19 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

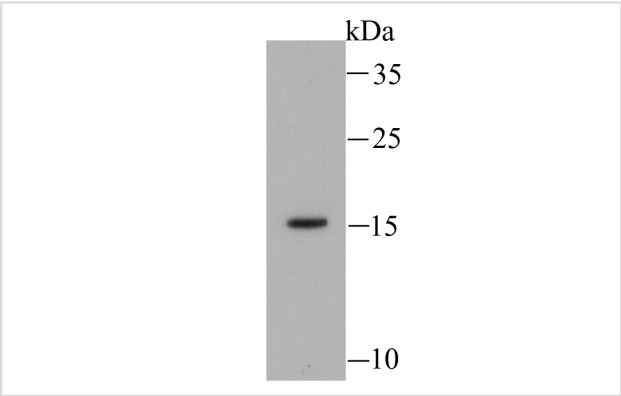
WB: 1:1,000-5,000

IHC: 1:50-1:200

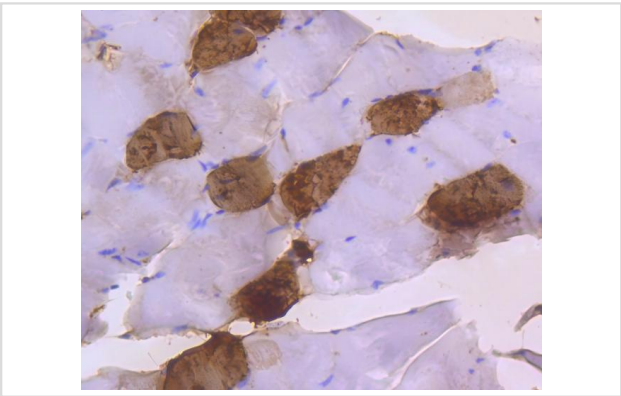
Images



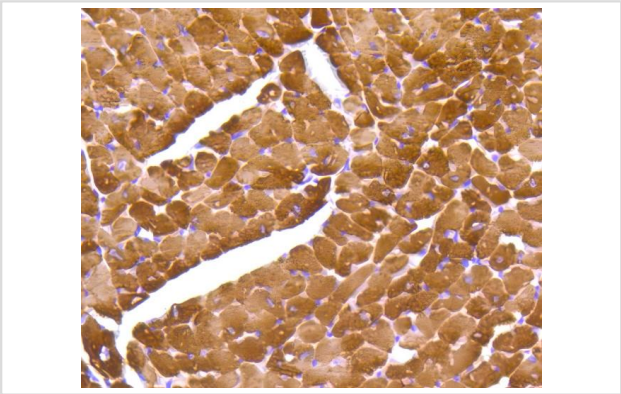
Western blot analysis of Myosin Light Chain 2 on different lysates using anti-Myosin Light Chain 2 antibody at 1/1,000 dilution. Positive control: Lane 1: mouse heart tissue lysate Lane 2: rat heart tissue lysate



Western blot analysis of Myosin Light Chain 2 on hybrid fish (crucian-carp) skin tissue lysate using anti-Myosin Light Chain 2 antibody at 1/500 dilution.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue using anti-Myosin Light Chain 2 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-Myosin Light Chain 2 antibody. Counter stained with hematoxylin.

Background

Encoded by the MYL2 gene, myosin regulatory light chain 2, ventricular/cardiac muscle isoform, also designated MLC-2 or MLC2v, is part of a hexameric complex of two heavy chains and four light chains predominantly expressed in adult cardiac ventricle muscle. Myosin regulatory light chain 2 binds calcium and has been shown to be a useful molecular marker for cardiac chamber specification. The co-expression of myosin regulatory light chain 7 (MYL7) and myosin regulatory light chain 2 in the outflow tract and atrioventricular canal, together with the single expression in the atrial (MYL7) and ventricular (MYL2) myocardium, permits the delineation of their boundaries. At the amino acid level there is 96% homology between the human and mouse myosin regulatory light chain sequences. Mutations in MYL2 are correlated with mid-left ventricular chamber type hypertrophic cardiomyopathy (MVC2) as well as familial hypertrophic cardiomyopathy type 10 (CMH10).

References

1. Suliman, HB. et al. 2016. Heme Oxygenase-1/Carbon Monoxide System and Embryonic Stem Cell Differentiation and Maturation into Cardiomyocytes. Antioxidants & redox signaling. 24: 345-60.
2. Harmelink, C. et al. 2013. Myocardial Mycn is essential for mouse ventricular wall morphogenesis. Dev. Biol. 373: 53-63.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.