

Product datasheet for **AM06334SU-N**

Myosin light chain 3 (MYL3) Mouse Monoclonal Antibody [Clone ID: 7C1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	7C1
Applications:	ELISA, IHC, WB
Recommended Dilution:	ELISA: 1/10000. Western Blot: 1/500 - 1/2000. Immunohistochemistry on Paraffin Sections: 1/200 - 1/1000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of MYL3 expressed in E. Coli.
Specificity:	Recognizes MYL3
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	22 kDa
Gene Name:	myosin light chain 3
Database Link:	Entrez Gene 4634 Human P08590



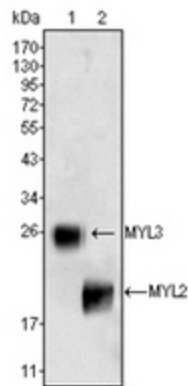
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Background:

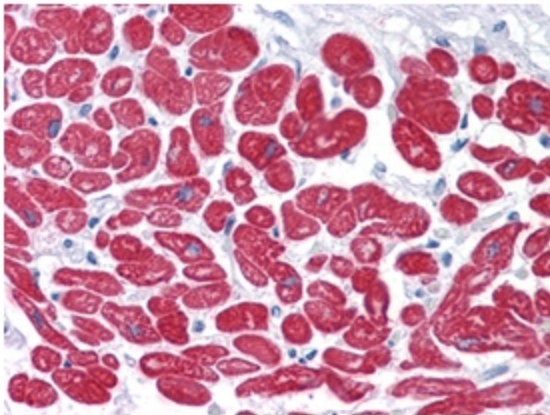
Myosins are a large superfamily of motor proteins that move along actin filaments, while hydrolyzing ATP. Myosin is the major component of thick muscle filaments, and is a long asymmetric molecule containing a globular head and a long tail. The molecule consists of two heavy chains and four light chains. Activation of smooth and cardiac muscle primarily involves pathways which increase calcium and myosin phosphorylation resulting in contraction. Myosin light chain phosphatase acts to regulate muscle contraction by dephosphorylating activated myosin light chain. MYL3 encodes myosin light chain 3, an alkali light chain also referred to in the literature as both the ventricular isoform and the slow skeletal muscle isoform. Human myosin light chain has clinical application as a cardiac marker. Mutations in MYL3 have been identified as a cause of mid-left ventricular chamber type hypertrophic cardiomyopathy.

Synonyms:

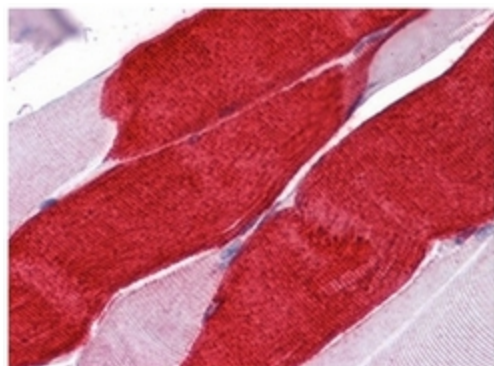
Myosin light chain 3, Myosin light chain 1, slow-twitch muscle B/ventricular isoform, MLC1SB, Cardiac myosin light chain 1, CMLC1

Product images:

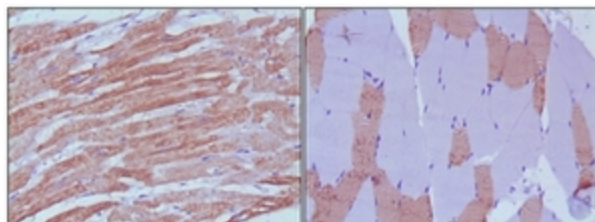
Western blot analysis using MYL3 (Lane 1) and MYL2 (Lane 2) Monoclonal antibody against rat fetal heart tissues lysate.



Immunohistochemical analysis of paraffin-embedded human Heart tissues using MYL3 antibody Cat.-No AM06334SU-N



Immunohistochemical analysis of paraffin-embedded human Skeletal Muscle tissues using MYL3 antibody Cat.-No AM06334SU-N



Immunohistochemical analysis of paraffin-embedded human skeletal muscle (left) and cardiac muscle (right) using MYL3 antibody Cat.-No AM06334SU-N with DAB staining.