Product Name: **MYL3 Mouse Monoclonal Antibody**
Catalog #: **AMM80736**
For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ELISA
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	22kDa

Antigen Information

Gene Name	MYL3
Alternative Names	CMH8; VLC1; MLC1V; MLC1SB
Gene ID	4634.0
SwissProt ID	P08590
Immunogen	Purified recombinant fragment of MYL3 expressed in E. Coli.

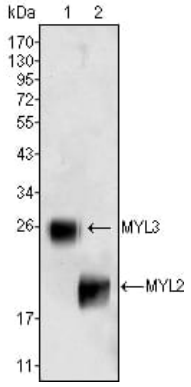
Background

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

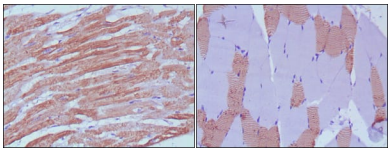
pathways which increase calcium and myosin phosphorylation resulting in contraction. Myosin light chain phosphatase acts to regulate muscle contraction by dephosphorylating activated myosin light chain. MYL3 encodes myosin light chain 3, an alkali light chain also referred to in the literature as both 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.

Research Area

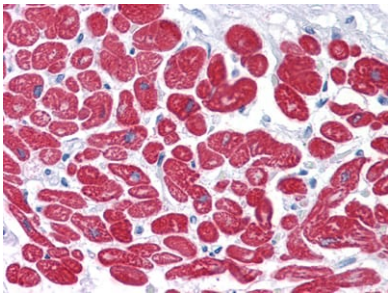
Image Data



Western blot analysis using MYL3 (1) and MYL2 (2) mouse mAb against rat fetal heart tissues lysate.



Immunohistochemical analysis of paraffin-embedded human skeletal muscle (left) and cardiac muscle (right) using MYL3 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human Heart tissues using MYL3 mouse mAb.