

## MYL2 Antibody (clone 7C9)

Mouse Monoclonal Antibody Catalog # ALS15307

### **Specification**

# MYL2 Antibody (clone 7C9) - Product Information

Application IHC
Primary Accession P10916
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 19kDa KDa

### MYL2 Antibody (clone 7C9) - Additional Information

**Gene ID 4633** 

#### **Other Names**

Myosin regulatory light chain 2, ventricular/cardiac muscle isoform, MLC-2, MLC-2v, MYL2

# **Target/Specificity**

Human MYL2

#### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

# **Precautions**

MYL2 Antibody (clone 7C9) is for research use only and not for use in diagnostic or therapeutic procedures.

# MYL2 Antibody (clone 7C9) - Protein Information

### Name MYL2 (HGNC:7583)

#### **Function**

Contractile protein that plays a role in heart development and function (PubMed:<a href="http://www.uniprot.org/citations/23365102" target="\_blank">23365102</a>, PubMed:<a href="http://www.uniprot.org/citations/32453731" target="\_blank">32453731</a>). 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**

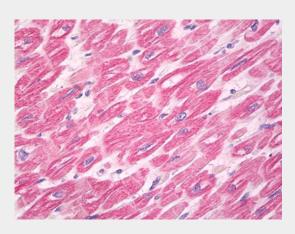
Highly expressed in type I muscle fibers.

# MYL2 Antibody (clone 7C9) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# MYL2 Antibody (clone 7C9) - Images



Anti-MYL2 antibody IHC of human heart.

# MYL2 Antibody (clone 7C9) - References

Libera L.D.,et al.Nucleic Acids Res. 17:2360-2360(1989). Wu Q.L.,et al.Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases. Margossian S.S.,et al.Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases. Wadgaonkar R.,et al.Cell. Mol. Biol. Res. 39:13-26(1993). Kovalyov L.I.,et al.Electrophoresis 16:1160-1169(1995).