

**Anti-Myosin Light Chain 2 Rabbit Monoclonal Antibody**  
**Catalog # ABO14275****Specification**

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**Anti-Myosin Light Chain 2 Rabbit Monoclonal Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC, IP            |
| Primary Accession | <a href="#">P10916</a> |
| Host              | Rabbit                 |
| Isotype           | Rabbit IgG             |
| Reactivity        | Rat, Human, Mouse      |
| Clonality         | Monoclonal             |
| Format            | Liquid                 |

**Description**

Anti-Myosin Light Chain 2 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Myosin Light Chain 2 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 4633

**Other Names**

Myosin regulatory light chain 2, ventricular/cardiac muscle isoform, MLC-2, Ventricular myosin light chain 2, MYL2 ([HGNC:7583](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=7583))

**Calculated MW**

18789 MW KDa

**Application Details**

WB 1:1000-1:5000<br>IHC 1:50-1:200<br>IP 1:50

**Subcellular Localization**

Cytoplasm, myofibril, sarcomere, A band.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Myosin Light Chain 2

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## Anti-Myosin Light Chain 2 Rabbit Monoclonal Antibody - 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

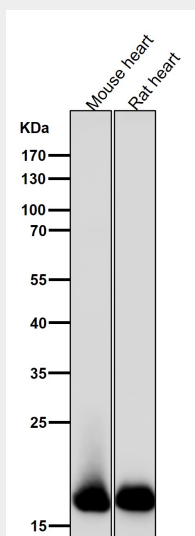
Highly expressed in type I muscle fibers.

## Anti-Myosin Light Chain 2 Rabbit Monoclonal Antibody - Protocols

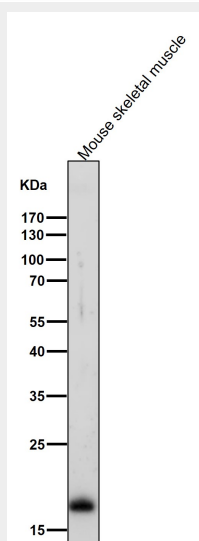
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

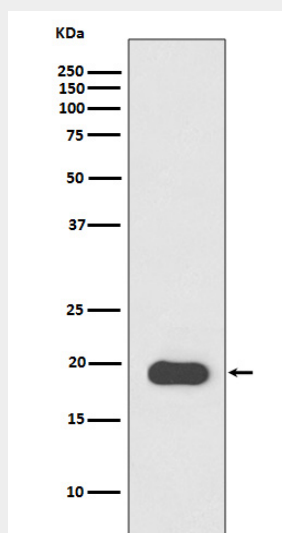
## Anti-Myosin Light Chain 2 Rabbit Monoclonal Antibody - Images



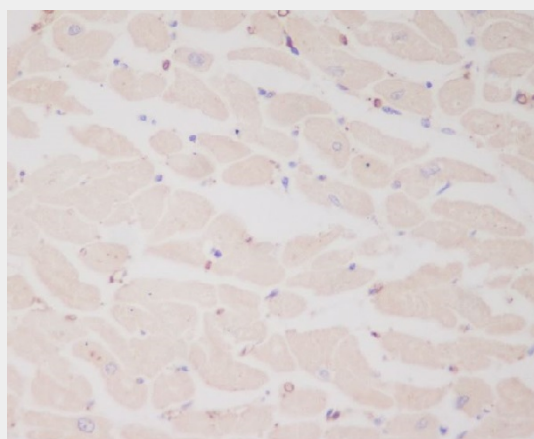
All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



Western blot analysis of Myosin Light Chain 2 expression in Mouse heart lysate.



Immunohistochemical analysis of paraffin-embedded human heart, using Myosin Light Chain 2 Antibody.