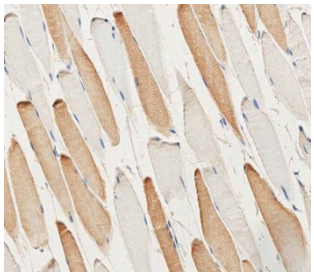
# Myosin Light Chain 2 Antibody / MLC2 / MYL2 (F54326)

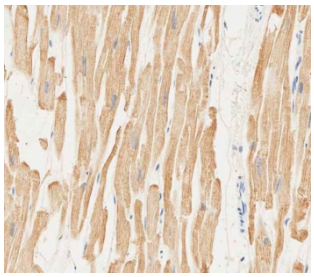
| Catalog No. | Formulation | Size |
|---|---|---|
| F54326-0.2ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.2 ml |
| F54326-0.05ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.05 ml |

**Bulk quote request**

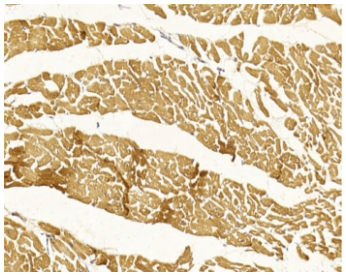
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | Antigen affinity purified |
| **UniProt** | P10916 |
| **Localization** | Cytoplasmic |
| **Applications** | Western Blot : 1:500-1:2000<br>Flow Cytometry : 1:25 (1x10e6 cells)<br>Immunohistochemistry (FFPE) : 1:25 |
| **Limitations** | This Myosin Light Chain 2 antibody is available for research use only. |



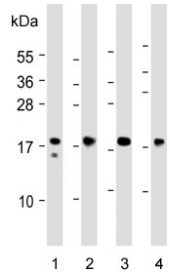
IHC testing of FFPE human skeletal muscle tissue with Myosin Light Chain 2 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



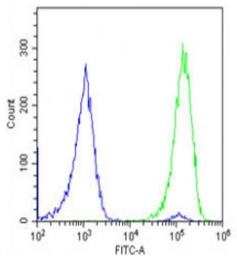
IHC testing of FFPE human heart tissue with Myosin Light Chain 2 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE human myocardium tissue with Myosin Light Chain 2 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.




Western blot testing of 1) human heart, 2) human skeletal muscle, 3) mouse heart and 4) rat heart lysate with Myosin Light Chain 2 antibody. Predicted molecular weight ~19 kDa.




Flow cytometry testing of fixed and permeabilized human U-2 OS cells with Myosin Light Chain 2 antibody; Blue=isotype control, Green= Myosin Light Chain 2 antibody.

## Description

Contractile protein that plays a role in heart development and function (By similarity). 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). [UniProt]

## Application Notes

The stated application concentrations are suggested starting points. Titration of the Myosin Light Chain 2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 42-75 from the human protein was used as the immunogen for the Myosin Light Chain 2 antibody.

## Storage

Aliquot the Myosin Light Chain 2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.