# Myosin Light Chain 2/MLC-2V Mouse mAb[U8B0]

Cat NO. :A43882

# Information:

| Applications  | Reactivity: | UniProt ID: | MW(kDa) | Host  | Isotype | Size        |
|---------------|-------------|-------------|---------|-------|---------|-------------|
| WB,IHC,ICC/IF | H,M,R       | P10916      | 18kDa   | Mouse | lgG     | 100ul,200ul |

## **Applications detail:**

| Application  | Dilution    |  |  |
|--|-------------|--|--|
| WB   | 1:1000-2000 |  |  |
| ІНС  | 1:100       |  |  |
| ICC/IF   | 1:100       |  |  |
| The optimal dilutions should be determined by the end user |             |  |  |

## Conjugate:

UnConjugate

Form:

Liquid

#### sensitivity:

Endogenous

# **Purification**:

Protein A purification

#### Specificity:

Antibody is produced by immunizing animals with a synthetic peptide of human Myosin Light Chain 2/MLC-2V.

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

#### **Tissue specificity:**

Highly expressed in type I muscle fibers..

# Subcellular location:

Cytoplasm, myofibril, sarcomere, A band.

#### **Function**:

Contractile protein that plays a role in heart development and function (PubMed:23365102, PubMed:32453731). 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

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/

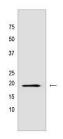
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

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(By similarity). During cardiogenesis plays an early role in cardiac contractility by promoting cardiac myofibril assembly (By similarity)..

# Validation Data:

Myosin Light Chain 2/MLC-2V Mouse mAb[U8B0] Images



Western blot (SDS PAGE) analysis of extracts from human heart tissue.Using Myosin Light Chain 2/MLC-2V Mouse mAb IgG [U8B0] at dilution of 1:1000 incubated at

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IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.