

# Myosin Light Chain 2/MLC-2V

## Polyclonal antibody

 Catalog Number: 10906-1-AP **194 Publications**

### Basic Information

**Catalog Number:**

10906-1-AP

**Size:**

300 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG1356

**GenBank Accession Number:**

BC015821

**GeneID (NCBI):**

4633

**UNIPROT ID:**

P10916

**Full Name:**

myosin, light chain 2, regulatory, cardiac, slow

**Calculated MW:**

19 kDa

**Observed MW:**

19 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:2000-1:16000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:400-1:1600

IF 1:50-1:500

### Applications

**Tested Applications:**

FC, IF-P, IHC, IP, WB, ELISA

**Cited Applications:**

FC, IF, IHC, WB

**Species Specificity:**

human, mouse, rat, zebrafish

**Cited Species:**

human, rat, mouse, monkey, zebrafish, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

WB : mouse heart tissue, rat heart tissue

IP : mouse heart tissue,

IHC : mouse heart tissue, human heart tissue, rat heart tissue

IF : mouse heart tissue,

### Background Information

MYL2, also named as MLC-2v and MLC-2, is ventricular/cardiac muscle isoform. Defects in MYL2 are the cause of cardiomyopathy familial hypertrophic type 10 (CMH10). Defects in MYL2 are the cause of cardiomyopathy familial hypertrophic with mid-left ventricular chamber type 2 (MVC2). MYL2 has been widely used as a marker of mature ventricular cardiomyocytes. There are four genes of myosin light chain 2 (MLC2): MYL2 (MLC2v), MYL5, MYL7 (MLC2a) and MYL9 (MLC2c). While usually myosin light chain 2 is referred to MYL2.

### Notable Publications

| Author             | Pubmed ID | Journal            | Application |
|--------------------|-----------|--------------------|-------------|
| Arvin H Soepriatna | 34777603  | Cell Mol Bioeng    | IF          |
| Bin Li             | 28962583  | Stem Cell Res Ther | IF          |
| A Gaignerie        | 30254308  | Sci Rep            | IF          |

### Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

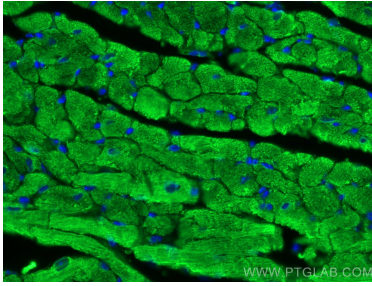
For technical support and original validation data for this product please contact:

T: 4006900926

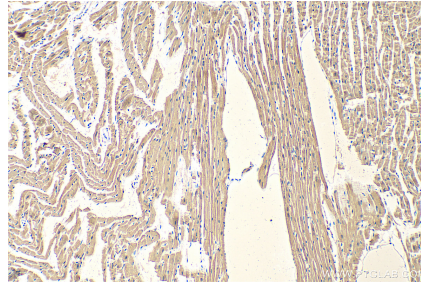
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

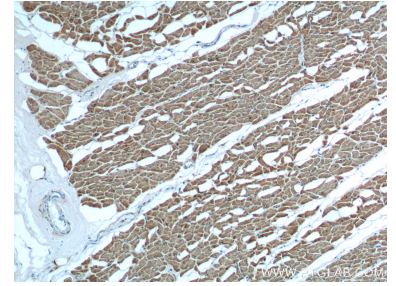
## Selected Validation Data



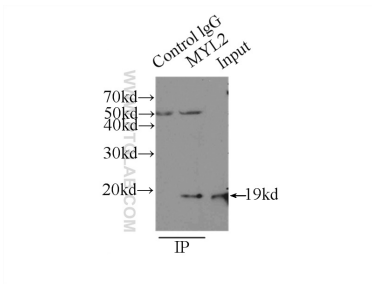
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Myosin Light Chain 2/MLC-2V antibody (10906-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



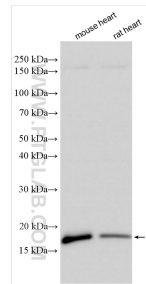
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



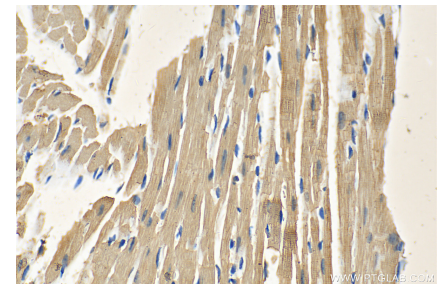
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 10906-1-AP (Myosin Light Chain 2 antibody at dilution of 1:200 (under 10x lens).



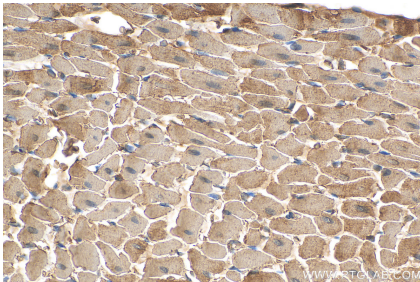
IP result of anti-Myosin Light Chain 2/MLC-2V (IP:10906-1-AP, 3ug; Detection:10906-1-AP 1:500) with mouse heart tissue lysate 6000ug.



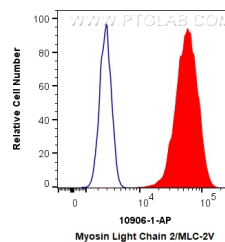
Various lysates were subjected to SDS PAGE followed by western blot with 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> C2C12 cells were intracellularly stained with 0.4 ug Anti-Human Myosin Light Chain 2/MLC-2V (10906-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).