

For Research Use Only

# Myosin Light Chain 2/MLC-2V Polyclonal antibody

Catalog Number: 10906-1-AP

220 Publications



## Basic Information

### Catalog Number:

10906-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### 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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:400-1:1600

IF-P 1:50-1:500

IF-Fro 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-P, IF-Fro, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, FC (Intra)

### Species Specificity:

human, mouse, rat, zebrafish

### Cited Species:

human, mouse, rat, pig, monkey, zebrafish

**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-P: mouse heart tissue,

IF-Fro: 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, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

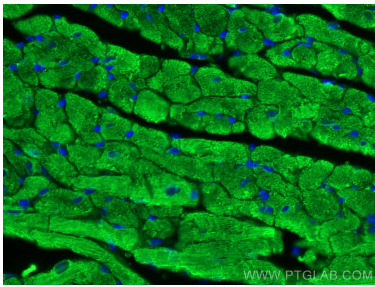
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

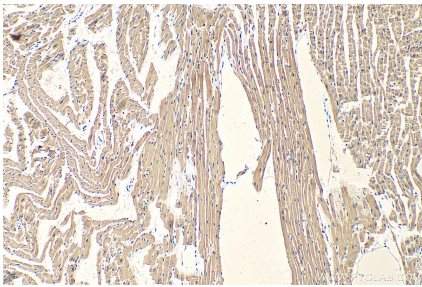
E: proteintech@ptglab.com  
W: ptglab.com

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

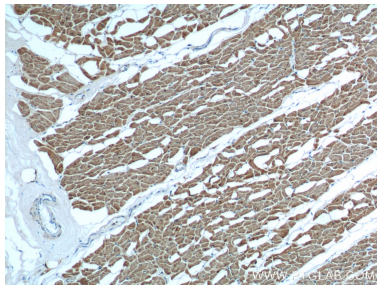
Selected Validation Data



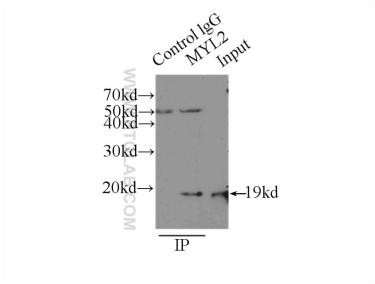
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Myosin Light Chain 2/MLC-2V antibody (10906-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



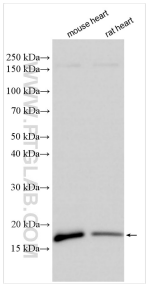
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



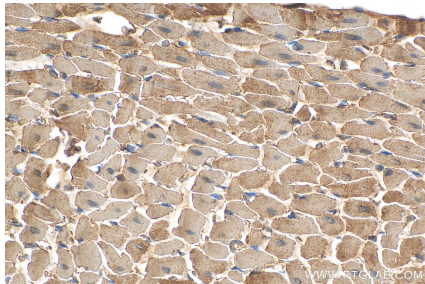
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 10906-1-AP (Myosin Light Chain 2 antibody at dilution of 1:200 (under 10x lens).



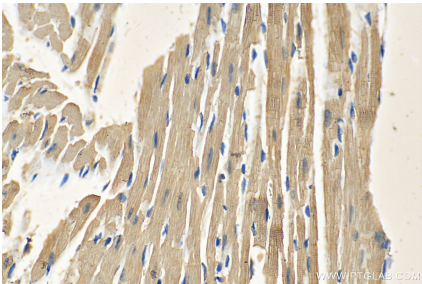
IP result of anti-Myosin Light Chain 2/MLC-2V (IP:10906-1-AP, 3ug; Detection:10906-1-AP 1:500) with mouse heart tissue lysate 6000ug.



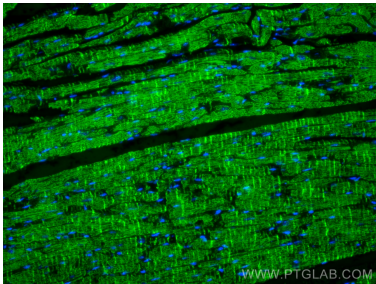
Various lysates were subjected to SDS PAGE followed by western blot with 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



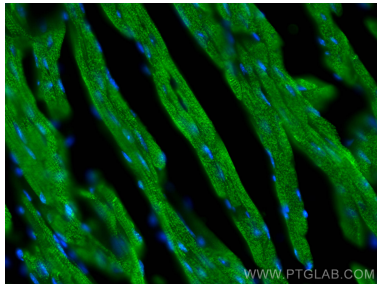
Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



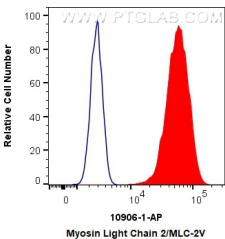
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using Myosin Light Chain 2/MLC-2V antibody (10906-1-AP) at dilution of 1:200 and Multi-rAb CoraLite @ Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse heart tissue using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:200 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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).