

For Research Use Only

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

Catalog Number: 55462-1-AP

3 Publications



## Basic Information

### Catalog Number:

55462-1-AP

### Size:

150ul, Concentration: 1000 ug/ml by Nanodrop and 793 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_000432

### GeneID (NCBI):

4633

### UNIPROT ID:

P10916

### Full Name:

myosin, light chain 2, regulatory, cardiac, slow

### Calculated MW:

19 kDa

### Observed MW:

18-20 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:20000

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

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

**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 : rat heart tissue,

IP : mouse brain tissue,

IHC : mouse brain tissue, human heart tissue, human skeletal muscle 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Chao Ci	30431060	Int J Mol Med	WB
Kiwon Ban	26651608	Stem Cell Reports	IF
Anteneh Getachew	34113824	iScience	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

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

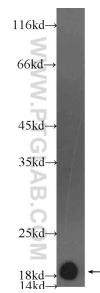
For technical support and original validation data for this product please contact:

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

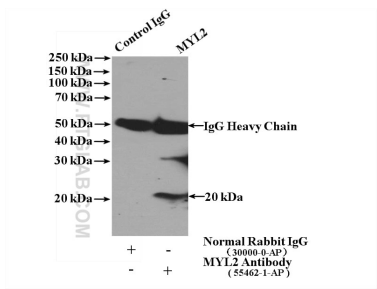
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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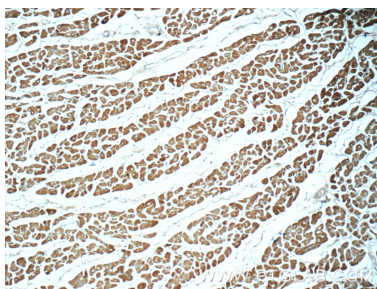
Selected Validation Data



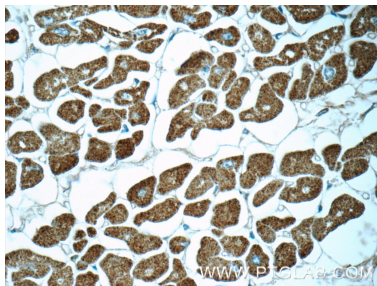
rat heart tissue were subjected to SDS PAGE followed by western blot with 55462-1-AP (MYL2 Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



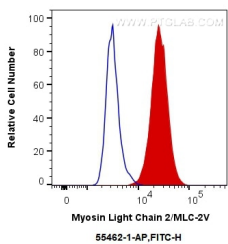
IP result of anti-Myosin Light Chain 2/MLC-2V (IP:55462-1-AP, 4ug; Detection:55462-1-AP 1:500) with mouse brain tissue lysate 4000ug.



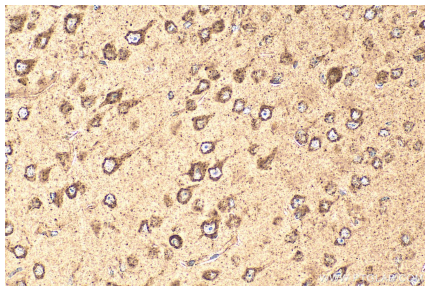
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 55462-1-AP (MYL2 Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 55462-1-AP (MYL2 Antibody) at dilution of 1:50 (under 40x lens).



1X10<sup>6</sup> C2C12 cells were intracellularly stained with 0.4 ug Anti-Human Myosin Light Chain 2/MLC-2V (55462-1-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).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 55462-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).