## 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: 1000 µg/ml

Isotype:

NM\_000432 GeneID (NCBI): **UNIPROT ID:** Source: Rabbit P10916 Full Name:

myosin, light chain 2, regulatory, cardiac, slow

GenBank Accession Number:

Calculated MW: 19 kDa Observed MW: 18-20 kDa

**Purification Method:** Antigen affinity purification Recommended Dilutions: WB 1:2000-1:20000

IHC 1:20-1:200

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

### **Applications**

**Tested Applications:** FC, IHC, IP, WB, ELISA Cited Applications:

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: 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

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

Storage Buffer:

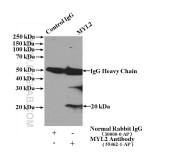
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

### **Selected Validation Data**



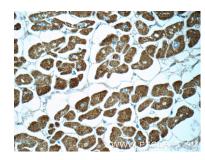
rat heart tissue were subjected to SDS PAGE followed by western blot with 55462-1-AP (MYL2 Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



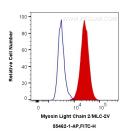
IP result of anti-Myosin Light Chain 2/MLC-2V (IP:55462-1-AP, 4ug; Detection:55462-1-AP 1:500) with mouse brain tissue lysate 4000ug.



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



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



1X10^6 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).