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

Concentration:

1000 ug/ml

Source:

Rabbit

P10916

Isotype:

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.

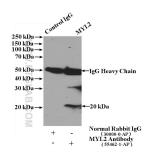
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol Aliquoting is unnecessary for -20° C storage

Selected Validation Data



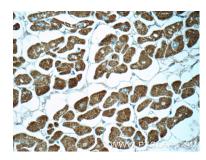
rat heart tissue were subjected to SDS PAGE followed by western blot with 55462-1-AP (MYL2 Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



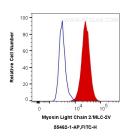
IP result of anti-Myosin Light Chain 2/MLC-2V (IP:55462-1-AP, 4ug; Detection:55462-1-AP 1:500) with mouse brain tissue lysate 4000ug.



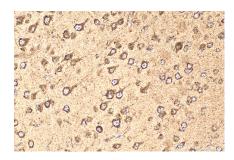
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 55462-1-AP (MYL2 Antibody) at dilution of 1:50 (under 10x lens)



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).



Immunohistochemical analysis of paraffinembedded 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).