

For Research Use Only

Myosin Light Chain 2/MLC-2V Polyclonal antibody

Catalog Number: 10906-1-AP

232 Publications



Basic Information

Catalog Number:

10906-1-AP

Concentration:

300 ug/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 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

FC (Intra): 0.40 ug per 10⁶ cells in a
100 µl suspension

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,

FC (Intra): C2C12 cells,

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

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

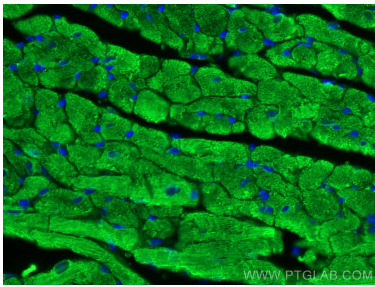
T: 4006900926

E: Proteintech-CN@ptglab.com

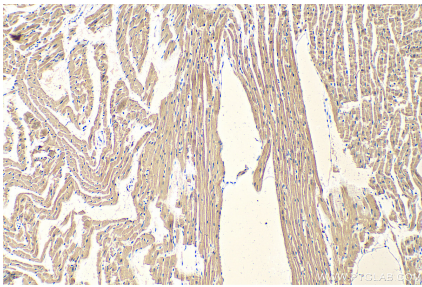
W: ptgcn.com

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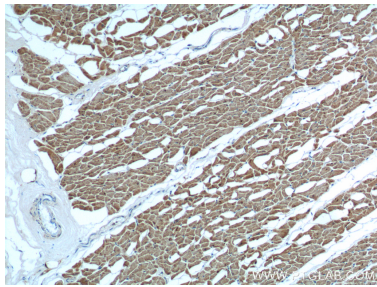
Selected Validation Data



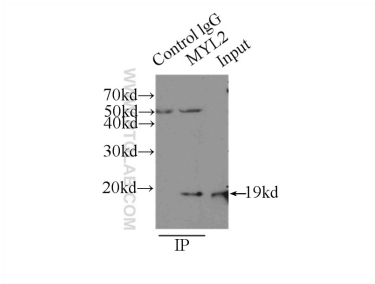
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Myosin Light Chain 2/MLC-2V antibody (10906-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



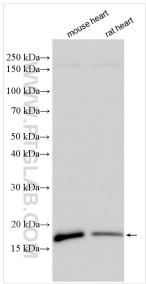
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



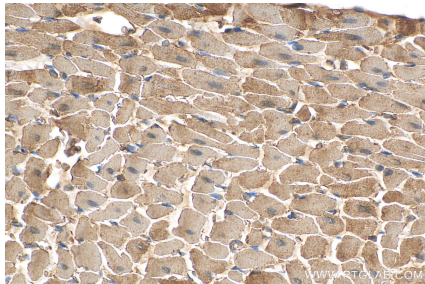
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 10906-1-AP (Myosin Light Chain 2 antibody at dilution of 1:200 (under 10x lens).



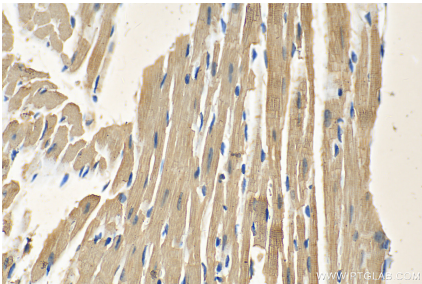
IP result of anti-Myosin Light Chain 2/MLC-2V (IP:10906-1-AP, 3ug; Detection:10906-1-AP 1:500) with mouse heart tissue lysate 6000ug.



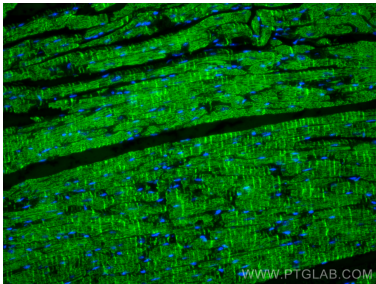
Various lysates were subjected to SDS PAGE followed by western blot with 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



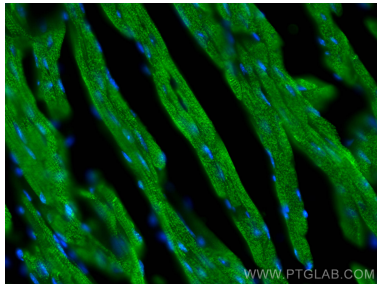
Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



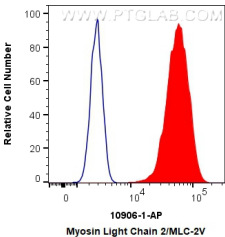
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 10906-1-AP (Myosin Light Chain 2/MLC-2V antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1X10⁶ 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).