

For Research Use Only

MYL3 Polyclonal antibody

Catalog Number: 10913-1-AP

4 Publications



Basic Information

Catalog Number:

10913-1-AP

Size:

150ul, Concentration: 550 ug/ml by Nanodrop and 300 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1364

GenBank Accession Number:

BC009790

GeneID (NCBI):

4634

UNIPROT ID:

P08590

Full Name:

myosin, light chain 3, alkali; ventricular, skeletal, slow

Calculated MW:

22 kDa

Observed MW:

22-27 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:5000-1:50000

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

IHC: 1:500-1:2000

IF/ICC: 1:50-1:500

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

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

Positive Controls:

WB: mouse heart tissue, mouse skeletal muscle tissue, human heart tissue, rat heart tissue

IP: mouse heart tissue,

IHC: human heart tissue, human lung cancer tissue

IF/ICC: C2C12 cells,

FC (Intra): C2C12 cells,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

MYL3, also named as MLC1v, is an essential light chain of myosin that is associated with muscle contraction. It is expressed in ventricular and slow skeletal muscle. MYL3 may serve as a target for caspase-3 in dying cardiomyocytes. Mutations of MYL3 gene cause hypertrophic cardiomyopathy. MYL3 has been identified as potential serum biomarker for drug induced myotoxicity. Great increase in MYL3 serum concentration has been observed in rats with cardiac and skeletal muscle injury. (PMID:21685905)

Notable Publications

Author	Pubmed ID	Journal	Application
Yesheng Fu	38582895	Nat Commun	WB
He Cao	37794006	Nat Commun	WB, IHC, IF
Yuan Lin	37159428	J Proteome Res	WB

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

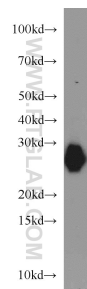
For technical support and original validation data for this product please contact:

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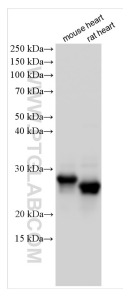
E: proteintech@ptglab.com
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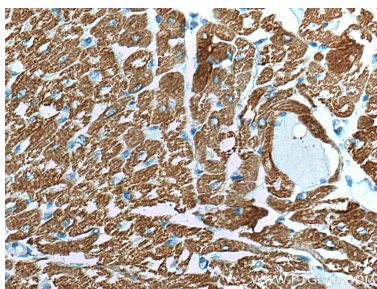
Selected Validation Data



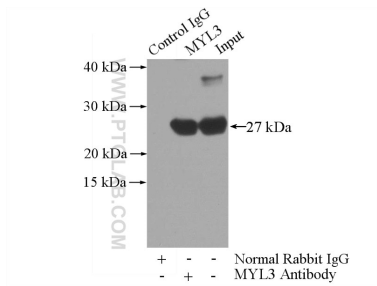
mouse heart tissue were subjected to SDS PAGE followed by western blot with 10913-1-AP (MYL3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



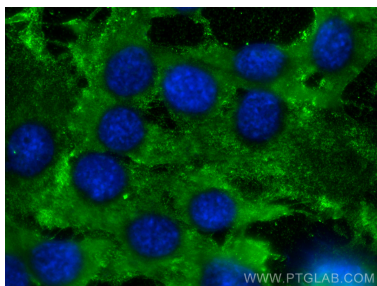
Various lysates were subjected to SDS PAGE followed by western blot with 10913-1-AP (MYL3 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



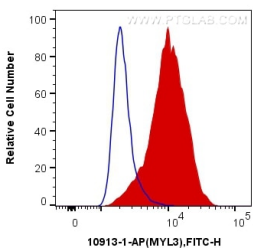
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 10913-1-AP (MYL3 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-MYL3 (IP:10913-1-AP, 3ug; Detection:10913-1-AP 1:7000) with mouse heart tissue lysate 4000ug.



Immunofluorescent analysis of (-20°C Methanol) fixed C2C12 cells using MYL3 antibody (10913-1-AP) at dilution of 1:200 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



1X10⁶ C2C12 cells were intracellularly stained with 0.4 ug Anti-Human MYL3 (10913-1-AP) and Coralite®488-Conjugated 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).