For Research Use Only

MYL3 Polyclonal antibody

Catalog Number:10913-1-AP 3 Publications

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Basic Information

Catalog Number:
10913-1-AP

Size:
550 μg/ml

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 1:50-1:500

Applications

Tested Applications:
FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:
IF, IHC, WB

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 : 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 : C2C12 cells,

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
He Cao	37794006	Nat Commun	WB,IHC,IF
Yuan Lin	37159428	J Proteome Res	WB
Addona Terri A TA	21685905	Nat Biotechnol	WB

Storage

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

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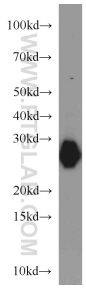
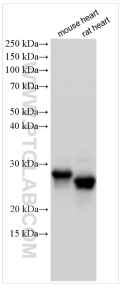
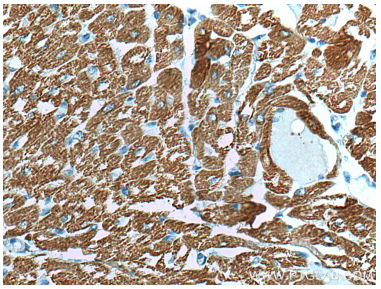
Selected Validation Data



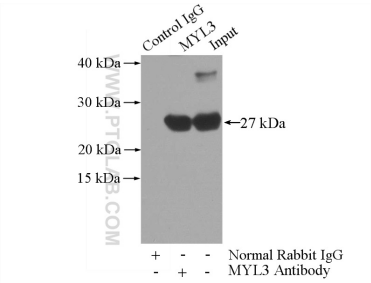
mouse heart tissue were subjected to SDS PAGE followed by western blot with 10913-1-AP (MYL3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



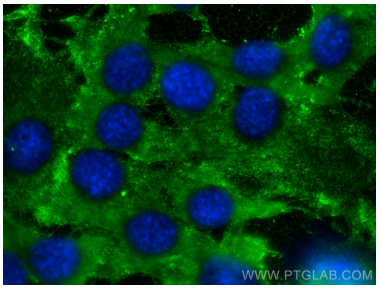
Various lysates were subjected to SDS PAGE followed by western blot with 10913-1-AP (MYL3 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



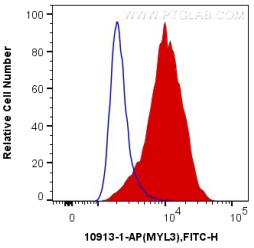
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 10913-1-AP (MYL3 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug Anti-Human MYL3 (10913-1-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).