

For Research Use Only

# MYL4 Monoclonal antibody

Catalog Number: 67533-1-Ig **6 Publications**



## Basic Information

<b>Catalog Number:</b> 67533-1-Ig	<b>GenBank Accession Number:</b> BC030228	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1200 µg/ml by Nanodrop and 500 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 4635	<b>CloneNo.:</b> 2F5C1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P12829	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:150-1:600 IF 1:200-1:800
<b>Isotype:</b> IgG2b	<b>Full Name:</b> myosin, light chain 4, alkali; atrial, embryonic	
<b>Immunogen Catalog Number:</b> AG19244	<b>Calculated MW:</b> 197 aa, 22 kDa	
	<b>Observed MW:</b> 22-25 kDa	

## Applications

**Tested Applications:**  
WB, IF, FC, IHC, ELISA

**Cited Applications:**  
WB, IF

**Species Specificity:**  
Human, mouse, rat, pig

**Cited Species:**  
human, rat, mouse, pig

**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 :** pig heart tissue, rat heart tissues, mouse heart tissues

**IHC :** human heart tissue,

**IF :** mouse heart tissue,

## Background Information

Myosin light-chain 4 (MYL4) encodes an essential myosin light chain that is expressed in embryonic whole heart and skeletal muscle. It is specifically expressed in human atria after birth. MYL4 is essential for atrial electrical, functional, and structural integrity, and MYL4 dysfunction can produce severe inherited atrial cardiomyopathy.

## Notable Publications

Author	Pubmed ID	Journal	Application
Shixiong Dong	36202278	Gene	WB
Lei Bai	36042463	Cell Biosci	WB
Emmi Helle	34422835	Front Cell Dev Biol	IF

## 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

**\*\*\* 20ul sizes contain 0.1% BSA**

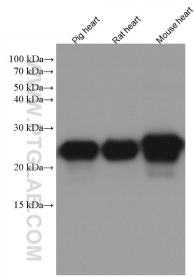
For technical support and original validation data for this product please contact:

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E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

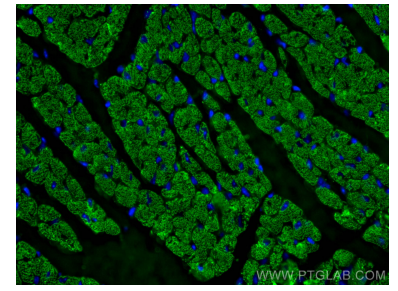
## Selected Validation Data



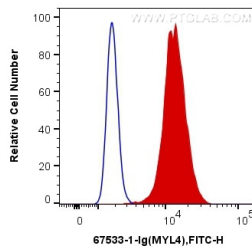
Various lysates were subjected to SDS PAGE followed by western blot with 67533-1-Ig (MYL4 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 67533-1-Ig (MYL4 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using MYL4 antibody (67533-1-Ig, Clone: 2F5C1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1X10<sup>6</sup> C2C12 cells were intracellularly stained with 0.4 ug Anti-Human MYL4 (67533-1-Ig, Clone:2F5C1) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse 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).