

For Research Use Only

# MYL3 Monoclonal antibody, PBS Only (Capture)

Catalog Number: 66286-1-PBS



## Basic Information

<b>Catalog Number:</b> 66286-1-PBS	<b>GenBank Accession Number:</b> BC009790	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4634	<b>CloneNo.:</b> 2E4B2
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P08590	
<b>Isotype:</b> IgG1	<b>Full Name:</b> myosin, light chain 3, alkali; ventricular, skeletal, slow	
<b>Immunogen Catalog Number:</b> AG24535	<b>Calculated MW:</b> 22 kDa	
	<b>Observed MW:</b> 22-25 kDa	

## Applications

**Tested Applications:**  
WB, IHC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

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

## Product Information

66286-1-PBS targets MYL3 as part of a matched antibody pair.

MP50642-3: 66286-1-PBS capture and 66286-5-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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)

## Storage

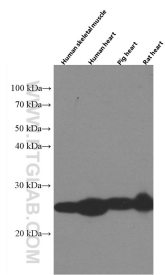
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

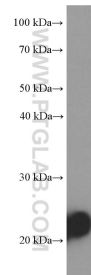
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

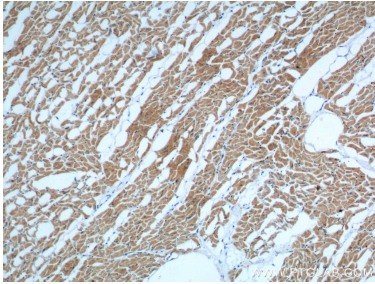
Selected Validation Data



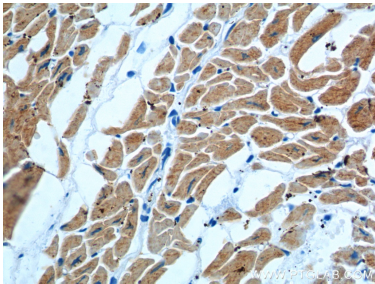
Various tissue lysates were subjected to SDS PAGE followed by western blot with 66286-1-Ig (MYL3 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66286-1-PBS in a different storage buffer formulation.



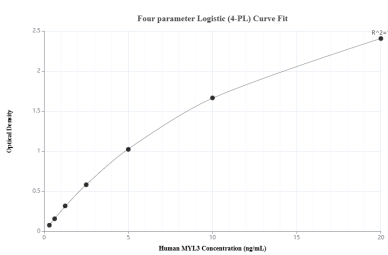
human skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 66286-1-Ig (MYL3 Antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66286-1-PBS in a different storage buffer formulation.



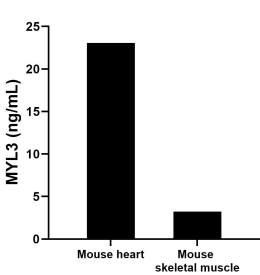
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66286-1-Ig (MYL3 Antibody) at dilution of 1:600 (under 10x lens). This data was developed using the same antibody clone with 66286-1-PBS in a different storage buffer formulation.



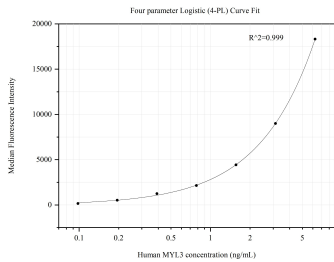
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66286-1-Ig (MYL3 Antibody) at dilution of 1:600 (under 40x lens). This data was developed using the same antibody clone with 66286-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP50642-3, Human MYL3 Monoclonal Matched Antibody Pair - PBS only. 66286-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag24535. 66286-5-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



The mean MYL3 concentration was determined to be 23.06 ng/mL in mouse heart tissue extract based on a 6.9 mg/mL extract load and 3.2 ng/mL in mouse skeletal muscle tissue extract based on a 1.7 mg/mL extract load.



Cytometric bead array standard curve of MP50642-3, MYL3 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66286-1-PBS. Detection antibody: 66286-5-PBS. Standard:Ag24535. Range: 0.098-6.25 ng/mL