

For Research Use Only

# MYH7-specific Polyclonal antibody

Catalog Number: 22280-1-AP

Featured Product

76 Publications



## Basic Information

### Catalog Number:

22280-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_000257

### GeneID (NCBI):

4625

### UNIPROT ID:

P12883

### Full Name:

myosin, heavy chain 7, cardiac muscle, beta

### Calculated MW:

223 kDa

### Observed MW:

200-220 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

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

IHC 1:50-1:500

IF-P 1:50-1:500

IF/ICC 1:300-1:1200

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, zebrafish, goat

**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 skeletal muscle tissue, human skeletal muscle tissue

IF-P: mouse heart tissue,

IF/ICC: H9C2 cells,

## Background Information

Myosin is the major contractile protein of all eukaryotic cells, existing as a hexameric molecule composed of two myosin heavy chains (MHCs) that contain the catalytic sites for ATP hydrolysis, and four lower molecular weight myosin light chains. MYH7 encodes the slow/beta-cardiac myosin heavy chain (MHC), which is the major MHC isoform of cardiac ventricles. It is also expressed in slow, oxidative, type 1 muscle fibers of skeletal muscle. Numerous mutations of MYH7 have been linked to familial hypertrophic cardiomyopathy. This antibody can specifically recognize endogenous MYH7, not cross-reacting with other MHCs (PMID: 2523412, 14520662). Due to the production of Heavy Meromyosin (HMM) during proteolysis of myosin, a band around 150 kDa may be detected, which may correspond to the HMM part of MYH7 (PMID: 14613868).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shiyuan Huang	32936696	Am J Physiol Cell Physiol	WB
Teng Wu	33015041	Front Cell Dev Biol	WB, IHC
Yanan Pang	34540911	Front Cardiovasc Med	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

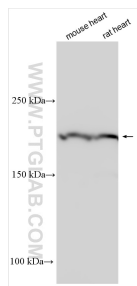
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

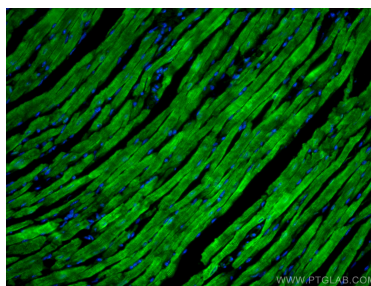
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

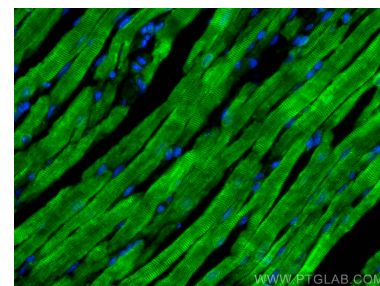
## Selected Validation Data



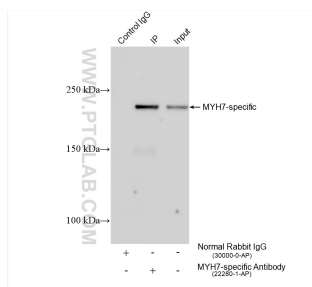
Various lysates were subjected to SDS PAGE followed by western blot with 22280-1-AP (MYH7-specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



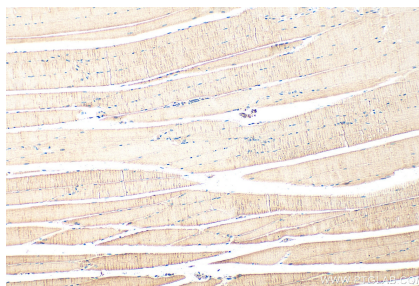
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using MYH7-specific antibody (22280-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



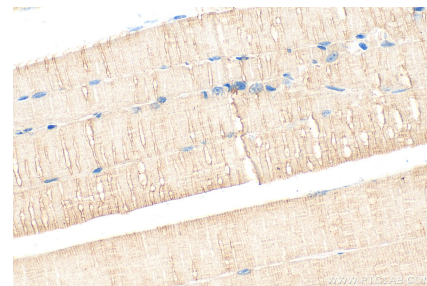
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using MYH7-specific antibody (22280-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



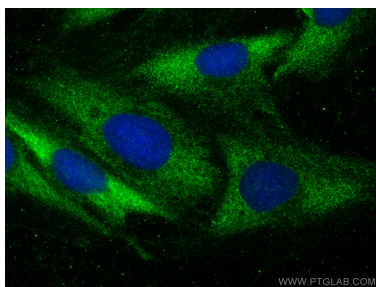
IP result of anti-MYH7-specific (IP:22280-1-AP, 4ug; Detection:22280-1-AP 1:3000) with mouse heart tissue lysate 1840 ug.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 22280-1-AP (MYH7-specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 22280-1-AP (MYH7-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed H9C2 cells using MYH7-specific antibody (22280-1-AP) at dilution of 1:600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).