

For Research Use Only

MYH7-specific Polyclonal antibody

Catalog Number: 22280-1-AP

Featured Product

86 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, mouse heart 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

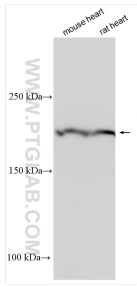
For technical support and original validation data for this product please contact:

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

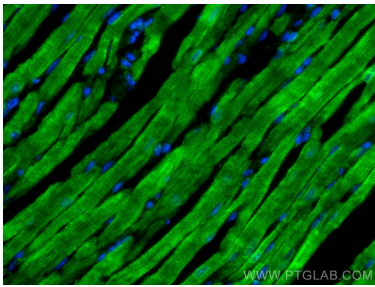
E: proteintech@ptglab.com
W: ptglab.com

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

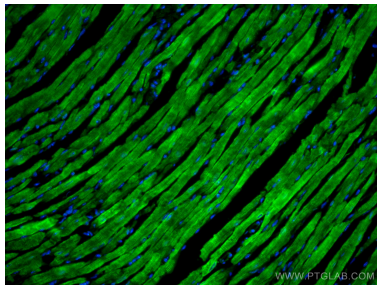
Selected Validation Data



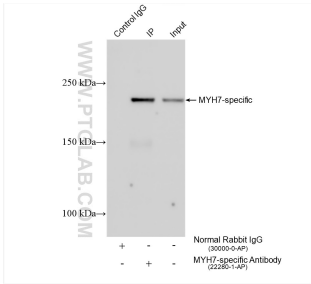
Various lysates were subjected to SDS PAGE followed by western blot with 22280-1-AP (MYH7-specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



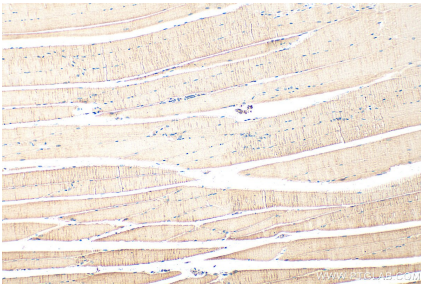
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using MYH7-specific antibody (22280-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



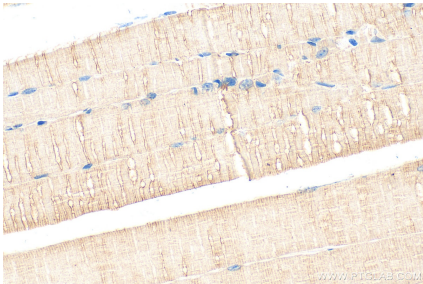
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using MYH7-specific antibody (22280-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



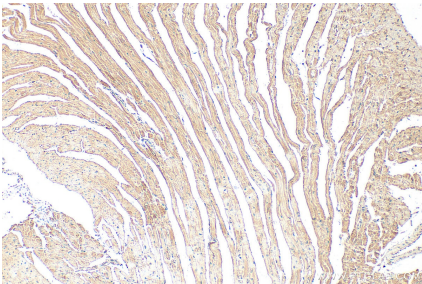
IP result of anti-MYH7-specific (IP:22280-1-AP, 4ug; Detection:22280-1-AP 1:3000) with mouse heart tissue lysate 1840 ug.



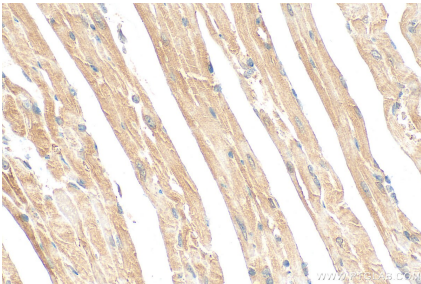
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 22280-1-AP (MYH7-specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



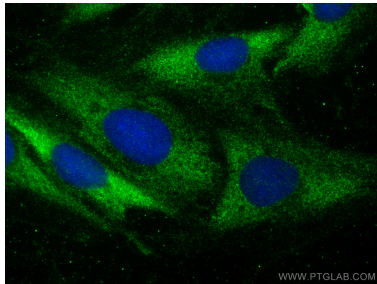
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 22280-1-AP (MYH7-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart 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 heart 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).