

For Research Use Only

Cardiac Troponin I Monoclonal antibody

Catalog Number: 66376-1-Ig

22 Publications



Basic Information

Catalog Number:

66376-1-Ig

Concentration:

1000 ug/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG16758

GenBank Accession Number:

BC096165

GeneID (NCBI):

7137

UNIPROT ID:

P19429

Full Name:

troponin I type 3 (cardiac)

Calculated MW:

210 aa, 24 kDa

Observed MW:

26-28 kDa

Purification Method:

Protein G purification

CloneNo.:

1D5D6

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:50-1:500

IF-P: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

WB, IF, ISFET

Species Specificity:

human, mouse, rat, pig, rabbit

Cited Species:

human, mouse, rat, 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: human heart tissue, rat heart tissue, mouse heart tissue, pig heart tissue, rabbit heart tissue

IHC: human heart tissue, mouse heart tissue

IF-P: mouse heart tissue,

Background Information

Troponin I (TnI) is the inhibitory subunit of troponin, the structural protein involved in the regulation of striated muscle contraction. Cardiac Troponin I (cTnI) is produced by cardiac muscle. Two other TnI isoforms (slow sTnI and fast sTnI) are produced by slow-twitch and fast-twitch skeletal muscles, respectively. cTnI has been considered as one of the most specific and sensitive markers of myocardial damage like acute myocardial infarction (AMI) for decades. Detection of cTnI in serum is widely accepted as a diagnostic tool in acute coronary syndromes. This antibody is specific to cTnI, but not cross-react with skeletal TnI.

Notable Publications

Author	Pubmed ID	Journal	Application
Karthikeyan Thirugnanam	31718444	J Am Heart Assoc	IF
Anan Huang	35715868	Stem Cell Res Ther	IF
Kai Xu	35722096	Front Cardiovasc Med	

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

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

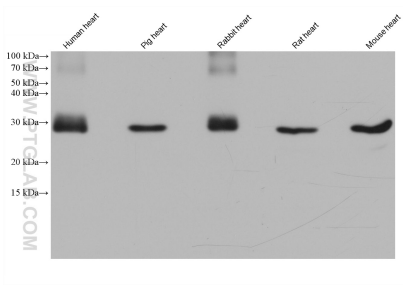
T: 4006900926

E: Proteintech-CN@ptglab.com

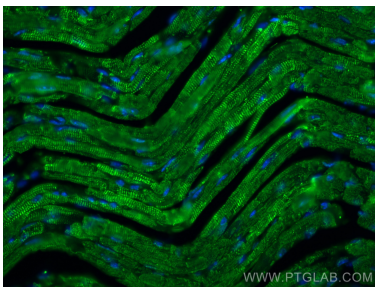
W: ptgcn.com

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

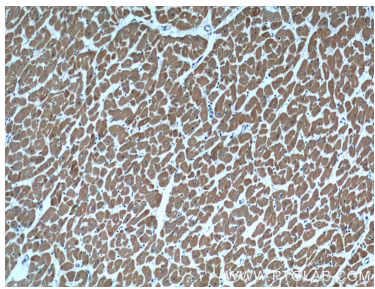
Selected Validation Data



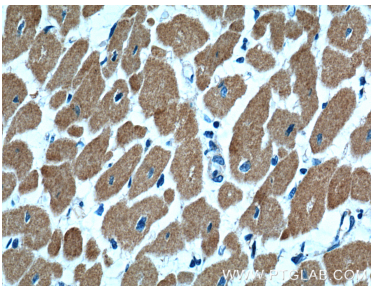
Various lysates were subjected to SDS PAGE followed by western blot with 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



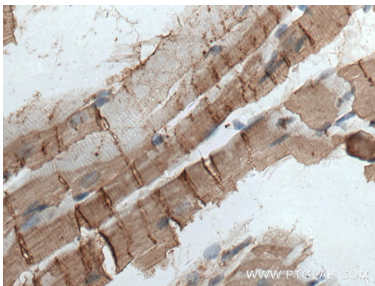
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Cardiac Troponin I antibody (66376-1-Ig, Clone: 1D5D6) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



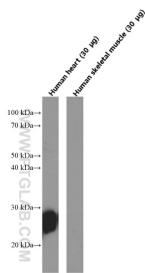
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 10x lens).



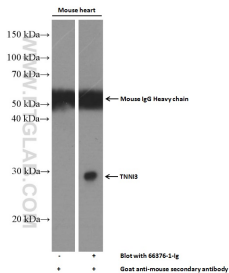
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 40x lens).



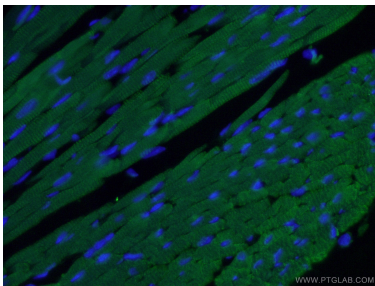
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:2000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Human heart tissue and skeletal muscle tissue (negative control) were subjected to SDS PAGE followed by western blot with 66376-1-Ig (Cardiac Troponin I Antibody) at dilution of 1:20,000 incubated at room temperature for 1.5 hours.



Mouse heart tissue (6 ug/lane) was subjected to SDS PAGE followed by western blot with 66376-1-Ig (Cardiac Troponin I Antibody) at dilution of 1:5,000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 66376-1-Ig(Cardiac Troponin I antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).