

For Research Use Only

# Cardiac Troponin I Monoclonal antibody

Catalog Number: 66376-1-Ig

22 Publications



## Basic Information

<b>Catalog Number:</b> 66376-1-Ig	<b>GenBank Accession Number:</b> BC096165	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7137	<b>CloneNo.:</b> 1D5D6
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P19429	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:50-1:500 IF-P: 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> troponin I type 3 (cardiac)	
<b>Immunogen Catalog Number:</b> AG16758	<b>Calculated MW:</b> 210 aa, 24 kDa	
	<b>Observed MW:</b> 26-28 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IF, ISFET	<b>WB :</b> human heart tissue, rat heart tissue, mouse heart tissue, pig heart tissue, rabbit heart tissue
<b>Species Specificity:</b> human, mouse, rat, pig, rabbit	<b>IHC :</b> human heart tissue, mouse heart tissue
<b>Cited Species:</b> human, mouse, rat, pig	<b>IF-P :</b> mouse heart tissue,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

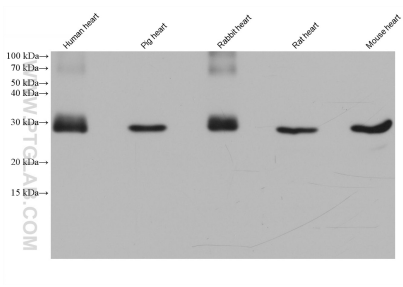
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

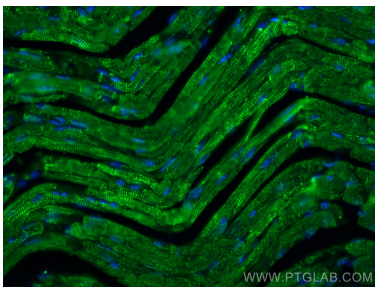
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

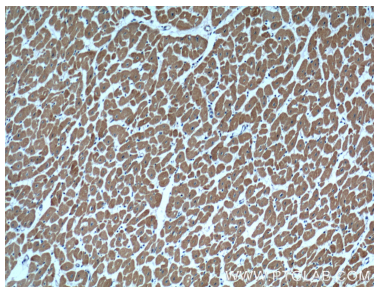
Selected Validation Data



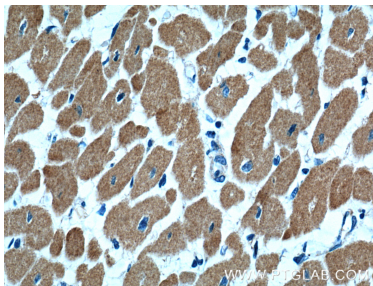
Various lysates were subjected to SDS PAGE followed by western blot with 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



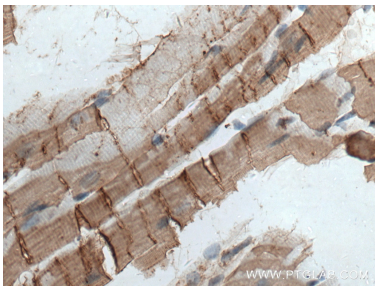
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Cardiac Troponin I antibody (66376-1-Ig, Clone: 1D5D6) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



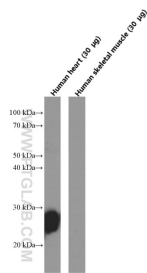
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 10x lens).



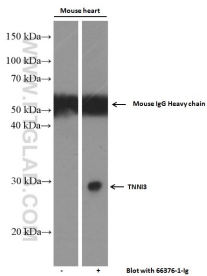
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 40x lens).



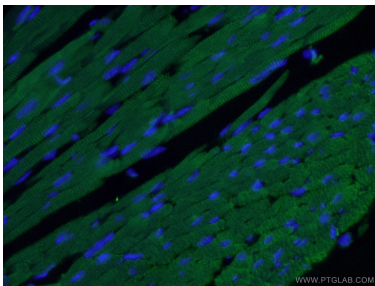
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:2000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).