

For Research Use Only

Cardiac Troponin I Monoclonal antibody, PBS Only (Detector)

Catalog Number: 66376-1-PBS



Basic Information

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| Catalog Number: 66376-1-PBS | GenBank Accession Number: BC096165 | Purification Method: Protein G purification |
| Size: 100ug , Concentration: 1 mg/ml by Nanodrop; | GeneID (NCBI): 7137 | CloneNo.: 1D5D6 |
| Source: Mouse | UNIPROT ID: P19429 | |
| Isotype: IgG1 | Full Name: troponin I type 3 (cardiac) | |
| Immunogen Catalog Number: AG16758 | Calculated MW: 210 aa, 24 kDa | |
| | Observed MW: 26-28 kDa | |

Applications

Tested Applications:
WB, IHC, IF-P, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

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

Product Information

66376-1-PBS targets Cardiac Troponin I as part of a matched antibody pair:

MP51198-1: 66376-2-PBS capture and 66376-1-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

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.

Storage

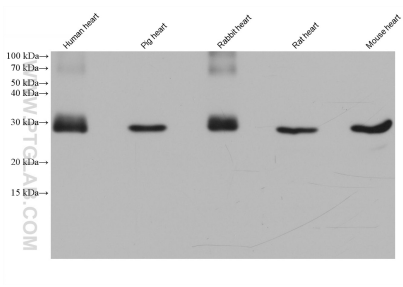
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

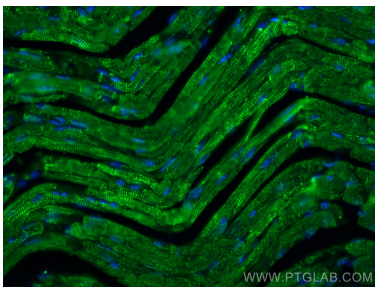
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

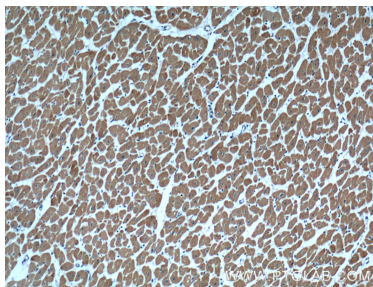
Selected Validation Data



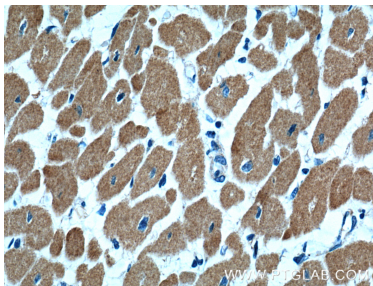
Various lysates were subjected to SDS PAGE followed by western blot with 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



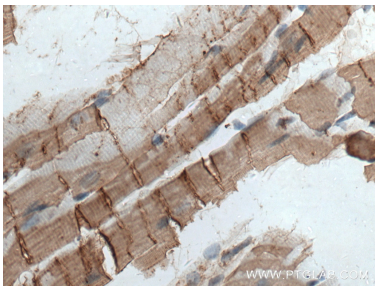
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Cardiac Troponin I antibody (66376-1-Ig, Clone: 1D5D6) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



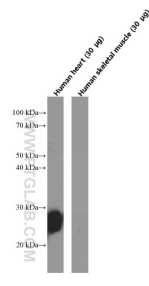
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 10x lens). This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



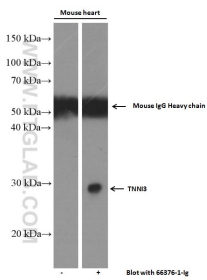
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 40x lens). This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



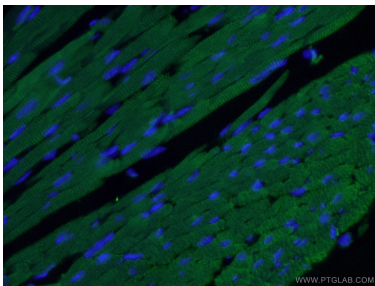
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



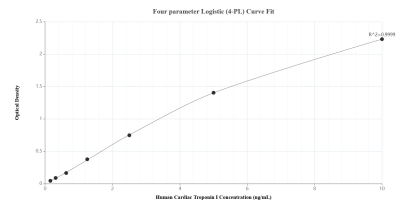
Human heart tissue and skeletal muscle tissue (negative control) were subjected to SDS PAGE followed by western blot with 66376-1-Ig (Cardiac Troponin I Antibody) at dilution of 1:20,000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



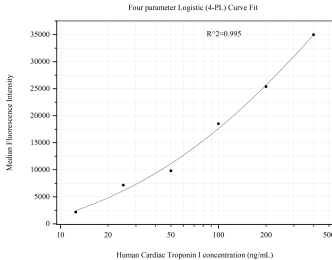
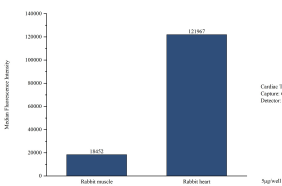
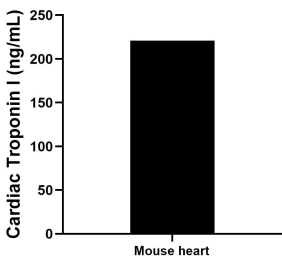
Mouse heart tissue (6 ug/lane) was subjected to SDS PAGE followed by western blot with 66376-1-Ig (Cardiac Troponin I Antibody) at dilution of 1:5,000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66376-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP51198-1, Human Cardiac Troponin I Monoclonal Matched Antibody Pair - PBS only. 66376-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag16758. 66376-1-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL



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| The mean Cardiac Troponin I concentration was determined to be 220.78 ng/mL in mouse heart tissue extract based on a 7.10 mg/mL extract load. | Cytometric bead array in cell lysate using MP51198-1, Cardiac Troponin I Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66376-2-PBS. Detection antibody: 66376-1-PBS. Cell lysate: Rabbit muscle, Rabbit heart. | Cytometric bead array standard curve of MP51198-1, Cardiac Troponin I Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66376-2-PBS. Detection antibody: 66376-1-PBS. Standard:Ag16758. Range: 12.5-400 ng/mL. |
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