For Research Use Only

Cardiac Troponin I Monoclonal antibody

Catalog Number:66376-1-lg 21 Publications



Basic Information

Catalog Number: GenBank Accession Number: 66376-1-lg BC096165 GeneID (NCBI): Concentration: 1000 ug/ml **UNIPROT ID:** Source: Mouse P19429

Isotype: Full Name: lgG1 troponin I type 3 (cardiac)

Calculated MW: AG16758 210 aa, 24 kDa

> Observed MW: 26-28 kDa

Immunogen Catalog Number:

Positive Controls:

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

Purification Method:

Protein G purification

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:50-1:500

IF-P 1:200-1:800

CloneNo.:

1D5D6

IHC: human heart tissue, mouse heart tissue

IF-P: mouse heart tissue,

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

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 cTnl 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 |
| Chandong Ding | 28962131 | Exp Ther Med | |

Storage

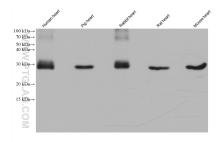
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

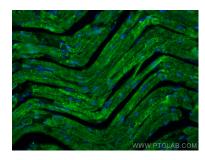
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

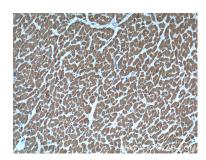
Selected Validation Data



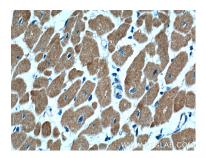
Various lysates were subjected to SDS PAGE followed by western blot with 66376-1-1g (Cardiac Troponin I antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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).



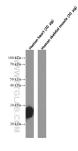
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 10x lens).



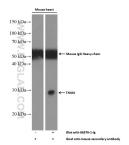
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 66376-1-Ig (Cardiac Troponin I antibody) at dilution of 1:600 (under 40x lens).



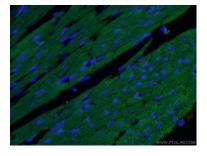
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66376-1-1g (Cardiac Troponin I antibody) at dilution of 1:2000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Human heart tissue and skeletal muscle tissue (negative control) were subjected to SDS PAGE followed by western blot with 66376-1-lg (Cardiac Troponin | 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-lg(Cardiac Troponin I antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).