

Cardiac Troponin I (TNNI3) Rabbit mAb

Catalog No.: A22387 **Recombinant**

Basic Information

Observed MW

28kDa

Calculated MW

24kDa

Category

Primary antibody

Applications

WB, IF/ICC, IF-P, ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC5109-09

Background

Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in this gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM). Troponin I is useful in making a diagnosis of heart failure, and of ischemic heart disease. An elevated level of troponin is also now used as indicator of acute myocardial injury in patients hospitalized with moderate/severe Coronavirus Disease 2019 (COVID-19). Such elevation has also been associated with higher risk of mortality in cardiovascular disease patients hospitalized due to COVID-19.

Recommended Dilutions

WB 1:20000 - 1:200000**IF/ICC** 1:200 - 1:1000**IF-P** 1:200 - 1:1000

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

7137

Swiss Prot

P19429

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

CMH7; RCM1; cTnI; CMD2A; TNNC1; CMD1FF; Cardiac Troponin I (TNNI3)

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Product Information

Source

Rabbit

Isotype

IgG

Purification

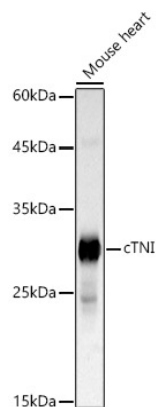
Affinity purification

Storage

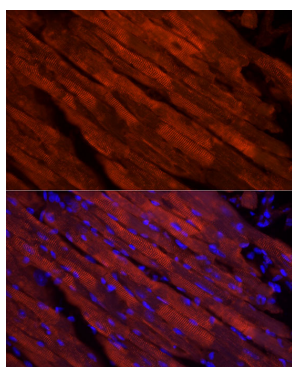
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300, 0.05% BSA, 50% glycerol, pH7.3.

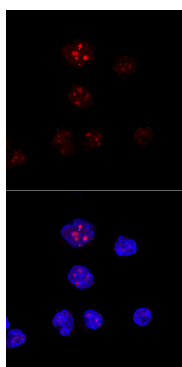
Validation Data



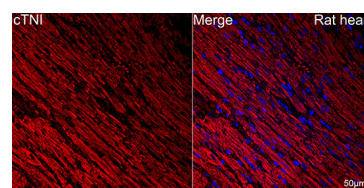
Western blot analysis of lysates from Mouse heart, using cTNI Rabbit mAb (A22387) at 1:20000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.



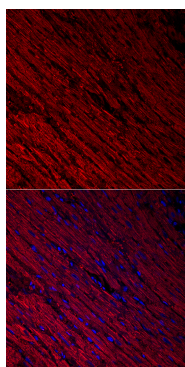
Immunofluorescence analysis of paraffin-embedded mouse heart using Cardiac Troponin I (TNNI3) Rabbit mAb (A22387) at dilution of 1:1000 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Confocal imaging of K-562 cells using Cardiac Troponin I (TNNI3) Rabbit mAb (A22387, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of paraffin-embedded rat heart using Cardiac Troponin I (TNNI3) Rabbit mAb (A22387, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform high pressure antigen retrieval with 0.01M citrate buffer (pH 6.0) prior to IF staining.



Confocal imaging of paraffin-embedded rat heart using Cardiac Troponin I (TNNI3) Rabbit mAb (A22387, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform high pressure antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.