

Product datasheet

Anti-Cardiac Troponin T antibody [EPR3696] ab92546

Recombinant RabMAB

[2 References](#) [2 Images](#)

Overview

Product name	Anti-Cardiac Troponin T antibody [EPR3696]
Description	Rabbit monoclonal [EPR3696] to Cardiac Troponin T
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	A synthetic peptide corresponding to residues in human Cardiac Troponin T
Positive control	Human heart lysate; Human skeletal muscle lysate; Mouse heart lysate and Rat heart lysates This antibody gave a positive result in IHC in the following FFPE tissue: Human Heart.
General notes	This product is a recombinant rabbit monoclonal antibody. Our RabMAB [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab[®] patents

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR3696
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab92546** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/20000 - 1/100000. Predicted molecular weight: 36 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Troponin T is the tropomyosin-binding subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.

Tissue specificity

Heart. The fetal heart shows a greater expression in the atrium than in the ventricle, while the adult heart shows a greater expression in the ventricle than in the atrium. Isoform 6 predominates in normal adult heart. Isoforms 1, 7 and 8 are expressed in fetal heart. Isoform 7 is also expressed in failing adult heart.

Involvement in disease

Defects in TNNT2 are the cause of cardiomyopathy familial hypertrophic type 2 (CMH2) [MIM:115195]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.

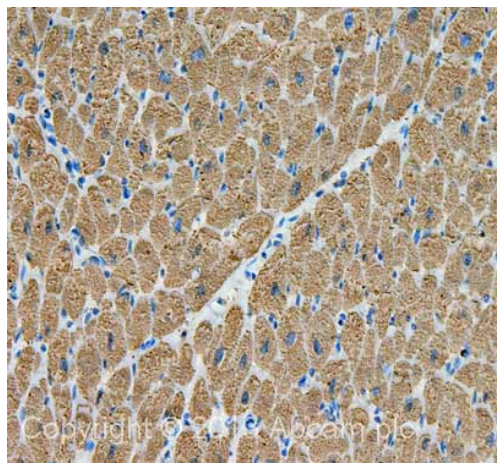
Defects in TNNT2 are the cause of cardiomyopathy dilated type 1D (CMD1D) [MIM:601494]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

Defects in TNNT2 are the cause of cardiomyopathy familial restrictive type 3 (RCM3) [MIM:612422]. Restrictive cardiomyopathy is a heart disorder characterized by impaired filling of the ventricles with reduced diastolic volume, in the presence of normal or near normal wall thickness and systolic function.

Sequence similarities

Belongs to the troponin T family.

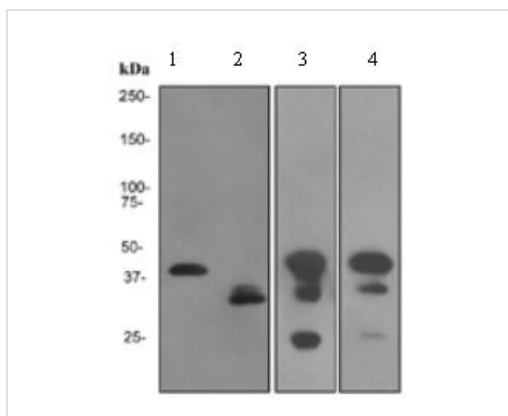
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cardiac Troponin T antibody [EPR3696] (ab92546)

IHC image of Cardiac Troponin T staining in Human Heart formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab92546, 1/100 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Cardiac Troponin T antibody [EPR3696] (ab92546)

All lanes : Anti-Cardiac Troponin T antibody [EPR3696] (ab92546) at 1/20000 dilution

Lane 1 : Human heart lysate

Lane 2 : Human skeletal muscle lysate

Lane 3 : Mouse heart lysate

Lane 4 : Rat heart lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Standard HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 36 kDa

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