abcam

Product datasheet

Anti-Cardiac Troponin C antibody ab30807

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Overview

Product name	Anti-Cardiac Troponin C antibody
Description	Goat polyclonal to Cardiac Troponin C
Host species	Goat
Specificity	This antibody recognizes cardiac Troponin C. It shows no reactivity with Troponin T.
Tested applications	**Suitable for:** ELISA, IHC-Fr
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat, Rabbit, Chicken, Cow, Pig, Xenopus laevis, Zebrafish
Immunogen	Synthetic peptide: FVLG AEDGCISTKE , corresponding to amino acids 27-40 of Human cardiac Troponin C. Run BLAST with Run BLAST with

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
Storage buffer	Preservative: 0.1% Sodium Azide. Constituents: PBS, pH 7.2.
Purity	Immunogen affinity purified
Purification notes	This antibody was purified by affinity chromatography. No contaminants detected. Single band by SDS PAGE, IEP, and/or RID.
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab30807** 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
ELISA		Use at an assay dependent concentration.
IHC-Fr	★★★★☆	Use at an assay dependent concentration.

Target

Function

Troponin is the central regulatory protein of striated muscle contraction. Tn consists of three components: Tn-I which is the inhibitor of actomyosin ATPase, Tn-T which contains the binding site for tropomyosin and Tn-C. The binding of calcium to Tn-C abolishes the inhibitory action of Tn on actin filaments.

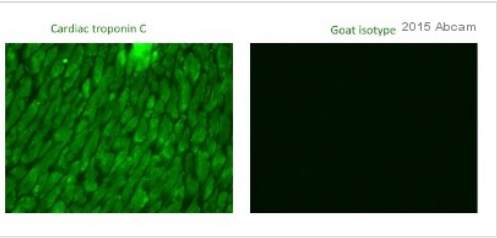
Involvement in disease

Defects in TNNC1 are the cause of cardiomyopathy dilated type 1Z (CMD1Z) [MIM:611879]. 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 TNNC1 are the cause of familial hypertrophic cardiomyopathy type 13 (CMH13) [MIM:613243]. 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.

Sequence similarities

Belongs to the troponin C family.
Contains 4 EF-hand domains.

Images



Immunohistochemistry (Frozen sections) - Anti-Cardiac Troponin C antibody (ab30807)

This image is courtesy of an anonymous Abreview

ab30807 staining Cardiac Troponin C in mouse heart tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with acetone, permeabilized with 0.3% Triton in PBS and blocked with 1% BSA + 5% donkey serum for 45 minutes at room temperature. Samples were incubated with primary antibody (1/500 in PBS + 0.3% Triton + 0.1% BSA + 5% donkey serum) for 16 hours at 4°C. An Alexa Fluor® 594-conjugated donkey anti-goat IgG polyclonal (1/300) was used as the secondary antibody.

Right - goat isotype control.

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