## abcam

### Product datasheet

### Anti-Cardiac Troponin T antibody ab45932

★★★★★ 7 Abreviews 97 References 3 图像

概述

产**品名称** Anti-Cardiac Troponin T抗体

描述 兔多克隆抗体to Cardiac Troponin T

**宿主** Rabbit

经测试应用 适用于: IHC-P, Sandwich ELISA, WB

种属反应性 与反应: Human

免疫原 Synthetic peptide conjugated to KLH derived from within residues 50 - 150 of Human cardiac

Troponin T.参阅Abcam的专有抗源政策(Peptide available as <u>ab47005</u>.)

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

1

### The Abpromise guarantee

### Abpromise™承诺保证使用ab45932于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Sandwich ELISA		Use a concentration of 0.5 µg/ml. Can be paired for Sandwich ELISA with Mouse monoclonal [1F11] to Cardiac Troponin T (ab10214). For sandwich ELISA, use this antibody as Detection at 0.5 µg/ml with Mouse monoclonal [1F11] to Cardiac Troponin T (ab10214) as Capture.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 40 kDa (predicted molecular weight: 36 kDa).

### 靶标

#### 功能

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

### 组织特异性

# 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.

### 疾病相关

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].

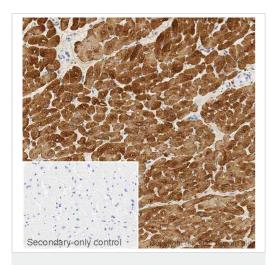
Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

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.

### 序列相似性

### Belongs to the troponin T family.

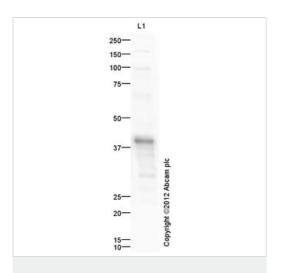
### 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cardiac Troponin T antibody (ab45932)

IHC image of Cardiac Troponin T staining in a section of formalin-fixed paraffin-embedded normal human heart\* 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 20mins. The section was then incubated with ab45932, 1ug/ml, 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. The inset secondary-only control image is taken from an identical assay without primary antibody.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre 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 - Anti-Cardiac Troponin T antibody (ab45932)

Anti-Cardiac Troponin T antibody (ab45932) at 1  $\mu$ g/ml + Heart (Human) Whole Cell Lysate - fetal normal tissue at 10  $\mu$ g

### Secondary

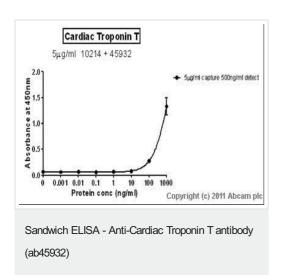
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 36 kDa **Observed band size:** 40 kDa

Exposure time: 30 seconds



Standard Curve for Cardiac Troponin T (Analyte: Cardiac Troponin T protein (His tag) (ab86685)); dilution range 1pg/ml to 1ug/ml using Capture Antibody Mouse monoclonal [1F11] to Cardiac Troponin T (ab10214) at 5ug/ml and Detector Antibody Rabbit polyclonal to cardiac Troponin T (ab45932) at 0.5ug/ml.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

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