# abcam

## Product datasheet

## Anti-Cardiac Troponin I antibody ab47003

★★★★★ 17 Abreviews 129 References 画像数 5

#### 製品の概要

製品名 Anti-Cardiac Troponin I antibody

製品の詳細 Rabbit polyclonal to Cardiac Troponin I

由来種 Rabbit

アプリケーション 適用あり: ELISA, WB, ICC/IF, IHC-Fr, Flow Cyt, IHC-P

**種交差性 交差種:** Mouse, Rat, Human, Pig

交差が予測される動物種: Chimpanzee 4

免疫原 Synthetic peptide corresponding to Human Cardiac Troponin I aa 1-100 conjugated to keyhole

limpet haemocyanin.

(Peptide available as ab47002)

特記事項

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

製品の特性

製品の状態 Liquid

保存方法 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.

**バッファー** 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.

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

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## アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab47003の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ELISA	**** <u>(1)</u>	Use at an assay dependent concentration.
WB	* * * * * <u>(4)</u>	Use a concentration of 1 µg/ml. Detects a band of approximately 26 kDa (predicted molecular weight: 24 kDa).
ICC/IF	<b>★★★★★</b> ( <u>5</u> )	Use at an assay dependent concentration.
IHC-Fr	<b>★★★★☆ (1)</b>	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. PubMed: 21909276 <a href="mailto:ab171870">ab171870</a> - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P	<b>★★★★★</b> (4)	1/100.

## ターゲット情報

## 機能

#### 関連疾患

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

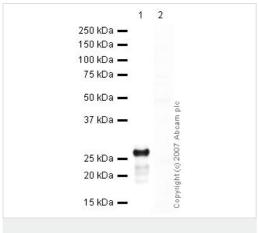
Defects in TNNI3 are the cause of cardiomyopathy familial hypertrophic type 7 (CMH7) [MIM:613690]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include 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 TNNI3 are the cause of cardiomyopathy familial restrictive type 1 (RCM1) [MIM:115210]. RCM1 is an heart muscle 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.

Defects in TNNI3 are the cause of cardiomyopathy dilated type 2A (CMD2A) [MIM:611880]. 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 TNNI3 are the cause of cardiomyopathy dilated type 1FF (CMD1FF) [MIM:613286]. 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.

#### 配列類似性

Belongs to the troponin I family.



Western blot - Anti-Cardiac Troponin I antibody (ab47003)

All lanes : Anti-Cardiac Troponin I antibody (ab47003) at 1  $\mu$ g/ml

Lane 1: Human heart tissue lysate - total protein (ab29431)

Lane 2: Human liver tissue lysate - total protein (ab29889)

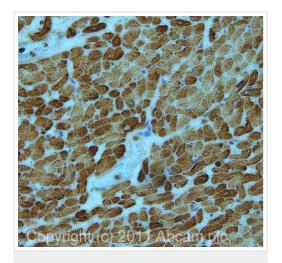
Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** IRDye 680 Conjugated Goat Anti-Rabbit lgG (H+L) at 1/10000 dilution

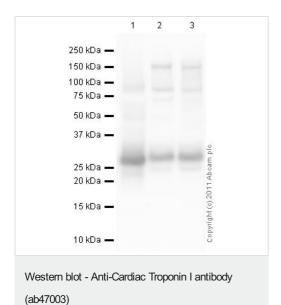
Performed under reducing conditions.

**Predicted band size:** 24 kDa **Observed band size:** 26 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cardiac Troponin I antibody (ab47003)

IHC image of Cardiac Troponin I staining in human heart formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM system using the standard protocol F. The section was pretreated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab47003, 1µg/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.



All lanes: Anti-Cardiac Troponin I antibody (ab47003) at 1 µg/ml

Lane 1 : Human heart tissue lysate - total protein (ab29431)

Lane 2 : Heart (Mouse) Tissue Lysate
Lane 3 : Heart (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

## Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

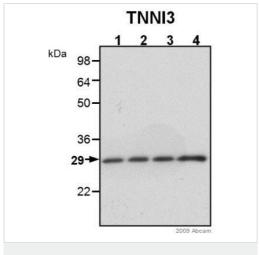
Performed under reducing conditions.

**Predicted band size:** 24 kDa **Observed band size:** 26 kDa

Additional bands at: 160 kDa, 80 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 3 minutes



Western blot - Anti-Cardiac Troponin I antibody (ab47003)

This image is courtesy of an Abreview submitted by Dr. Mario Torrado

**All lanes :** Anti-Cardiac Troponin I antibody (ab47003) at 1/20000 dilution

All lanes: Pig Heart whole cell lysate

Lysates/proteins at 4 µg per lane.

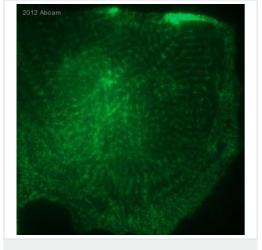
## Secondary

**All lanes :** An HRP-conjugated Goat anti-rabbit polyclonal at 1/20000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 24 kDa Observed band size: 29 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Cardiac Troponin I antibody (ab47003)

This image is courtesy of an anonymous Abreview

Blocking Step: 20% Serum for 3 hours at 24°C

ab47003 staining Cardiac Troponin I in Human cardiomyocytes by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 1% BSA for 30 minutes at 20°C. Samples were incubated with primary antibody (1/200 in PBS + 1% BSA) for 1 hour at 20°C. An undiluted FITC-conjugated Goat anti-rabbit IgG polyclonal was used as the secondary antibody.

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

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