




Product datasheet

Anti-TNNC1 antibody ab180732

3 Images

Overview

<b>Product name</b>	Anti-TNNC1 antibody
<b>Description</b>	Rabbit polyclonal to TNNC1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat, Rabbit, Chicken, Cow, Pig, Quail 
<b>Immunogen</b>	Recombinant full length protein corresponding to Human TNNC1 aa 1-160. Sequence: MDDYKAAVE QLTEEQNEF KAAFDIFVLG AEDGCISTKE LGKVMRMLGQ NPTPEELQEM IDEVDEDGSG TVDFDEFLVM MVRCKMDDSK GKSEEELSDL FRMFDKNADG YIDLDELKIM LQATGETITE DDIEELMKDG DKNNDGRIDY DEFLEFMKGV E  Database link: <a href="#">P63316</a>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	WB: Mouse heart, lung and skeletal muscle tissue lysates; IHC: Human colon carcinoma ICC/ IF: U-2 OS cells
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p>

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, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 49% PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab180732** 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
ICC/IF		1/50 - 1/200.
IHC-P		1/50 - 1/200. <a href="#">ab171870</a> - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/500 - 1/2000. Predicted molecular weight: 18 kDa.

## Target

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<b>Function</b>	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.
<b>Involvement in disease</b>	Defects in <b>TNNC1</b> 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 <b>TNNC1</b> are the cause of cardiomyopathy familial hypertrophic 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

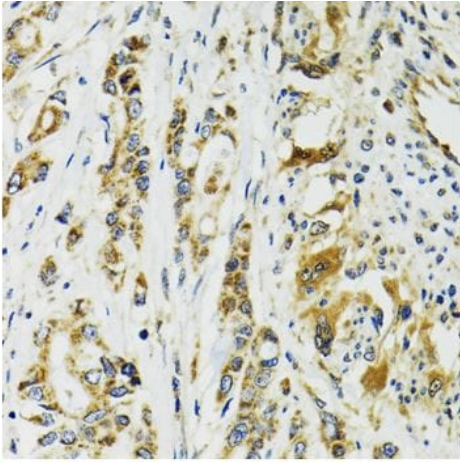
risk of cardiac failure and sudden cardiac death.

### Sequence similarities

Belongs to the troponin C family.

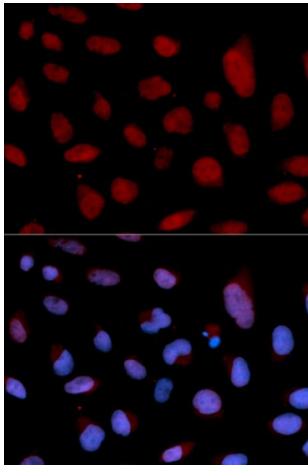
Contains 4 EF-hand domains.

### Images



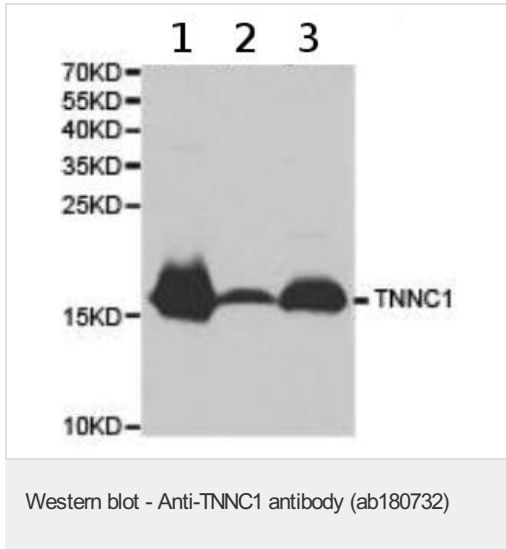
Paraffin-embedded human colon carcinoma tissue stained for TNNC1 using ab180732 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TNNC1 antibody (ab180732)



Immunofluorescence staining of U-2 OS cells stained for TNNC1 with ab180732. Nuclei are labeled with DAPI (Blue).

Immunocytochemistry/ Immunofluorescence - Anti-TNNC1 antibody (ab180732)



**All lanes** : Anti-TNNC1 antibody (ab180732) at 1/1000 dilution

**Lane 1** : Mouse heart tissue lysate

**Lane 2** : Mouse lung lysate

**Lane 3** : Mouse skeletal muscle lysate

Lysates/proteins at 25 µg per lane.

**Secondary**

**All lanes** : HRP Goat Anti-Rabbit IgG (H+L)

**Predicted band size:** 18 kDa

Blocking buffer: 3% nonfat dry milk in TBST.

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

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