

Product datasheet

Anti-Cardiac Troponin I antibody [EP1106Y] ab52862

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [15 References](#) [8 Images](#)

Overview

Product name	Anti-Cardiac Troponin I antibody [EP1106Y]
Description	Rabbit monoclonal [EP1106Y] to Cardiac Troponin I
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Cardiac Troponin I aa 1-100 (N terminal). The exact sequence is proprietary. Database link: P19429
Positive control	WB: Human fetal heart tissue lysate. IHC-P: Human heart and Human cardiac muscle tissues. Flow Cyt (intra): A-673 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EP1106Y
Isotype	IgG

Applications

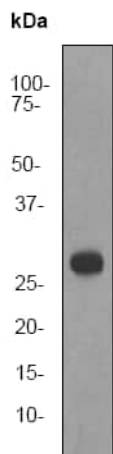
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab52862 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/30.
WB		1/100000 - 1/1e+006. Detects a band of approximately 28 kDa (predicted molecular weight: 28 kDa).
IP		1/50.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function	Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.
Involvement in disease	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Sequence similarities	Belongs to the troponin I family.

Images



Western blot - Anti-Cardiac Troponin I antibody
[EP1106Y] (ab52862)

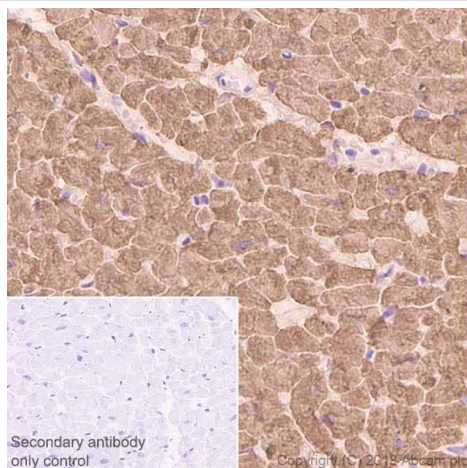
Anti-Cardiac Troponin I antibody [EP1106Y] (ab52862) at
1/1000000 dilution + fetal heart cell lysate at 10 µg

Secondary

Goat anti-rabbit HRP at 1/2000 dilution

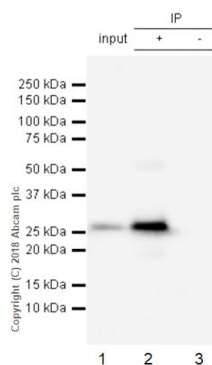
Predicted band size: 28 kDa

Observed band size: 28 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-Cardiac Troponin I
antibody [EP1106Y] (ab52862)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cardiac muscle tissue sections labeling Cardiac Troponin I with Purified ab52862 at 1:300 dilution (1.19 µg/ml). Heat mediated antigen retrieval was performed Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunoprecipitation - Anti-Cardiac Troponin I
antibody [EP1106Y] (ab52862)

ab52862 (purified) at 1:30 dilution (2µg) immunoprecipitating
Cardiac Troponin I in Human fetal heart lysate.

Lane 1 (input): Human fetal heart lysate 10µg

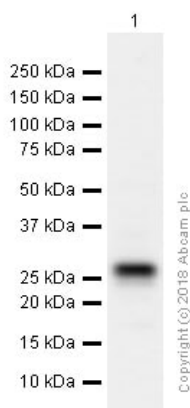
Lane 2 (+): ab52862 & Human fetal heart lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab52862
in Human fetal heart lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP)

(**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-Cardiac Troponin I antibody
[EP1106Y] (ab52862)

Anti-Cardiac Troponin I antibody [EP1106Y] (ab52862) at
1/500000 dilution + Human fetal heart lysates at 15 µg with
NFDM/TBST at 5 %

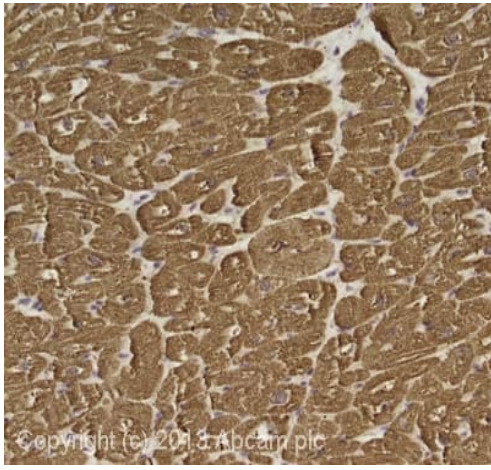
Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with
human IgG at 1/2000 dilution

Predicted band size: 28 kDa

Observed band size: 28 kDa

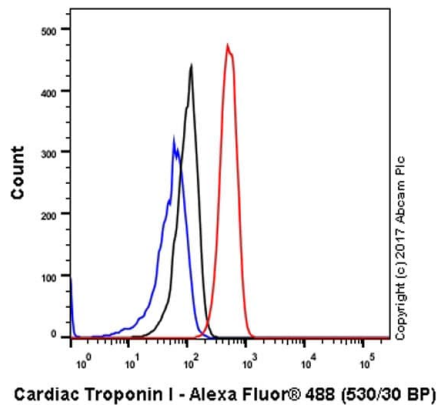
Diluting buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cardiac Troponin I antibody [EP1106Y] (ab52862)

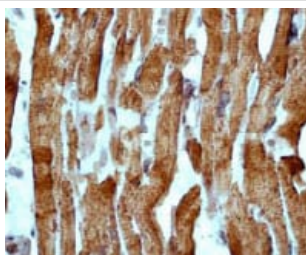
IHC image of Cardiac Troponin I staining in human heart formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab52862, 1/200 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



Flow Cytometry (Intracellular) - Anti-Cardiac Troponin I antibody [EP1106Y] (ab52862)

Intracellular Flow Cytometry analysis of A-673 (Human muscle Ewing's Sarcoma) cells labeling Cardiac Troponin I (red) with ab52862 at a 1/30 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor[®] 488) (**ab150077**) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (Black) (**ab172730**). Blue (unlabeled control) - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cardiac Troponin I antibody [EP1106Y] (ab52862)

ab52862 at 1/250 dilution staining cardiac Troponin I in human cardiac muscle by Immunohistochemistry, Paraffin embedded tissue.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Cardiac Troponin I antibody [EP1106Y]
(ab52862)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors