# abcam

## Product datasheet

# Anti-Cardiac Troponin I antibody [M155] ab10237

# 1 Image

Overview

Product name Anti-Cardiac Troponin I antibody [M155]

**Description** Mouse monoclonal [M155] to Cardiac Troponin I

Host species Mouse

Specificity This antibody is reacting with free cardiac troponin I (cTnI) and cTnI forming complexes with other

troponin components (In the presence of 5 mM EDTA). It is not affected by heparin,

phosphorylation, oxidation and troponin complex formation. This antibody does not cross-react

with skeletal muscle troponin I.

Tested applications Suitable for: ELISA

Species reactivity Reacts with: Mouse, Rat, Dog, Human

**Immunogen** Free human cardiac troponin and/or native troponin complex.

**Epitope** 27-43 aa

General notes Concentration varies from lot to lot and can be provided on request.

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

## **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.40

Preservative: 0.1% Sodium azide

Constituent: PBS

Purity Protein A purified

**Purification notes** Purity tested by electrophoresis.

**Clonality** Monoclonal

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Clone numberM155MyelomaSp2/0IsotypeIgG1

#### **Applications**

# The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab10237 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.

## **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

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.

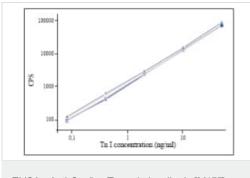
Defects in TNNI3 are the cause of cardiomyopathy dilated type 2A (CMD2A) [MIM:611880]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

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.

# Sequence similarities

Belongs to the troponin I family.

### **Images**



ELISA - Anti-Cardiac Troponin I antibody [M155] (ab10237)

cTnl calibration curve. Monoclonal antibodies used for capture were biotinylated ab10237 (M155) at 200 ng/well. For detection Eulabeled **ab8289** (19C7) was used at 200 ng/well. The Antigens used included Human (grey triangle), Rat (cream circle), Canine (blue circle), and Mouse (blue square). This was then incubated for 20 min at 20°C.

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

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