# abcam

# Product datasheet

# Anti-Cardiac Troponin I antibody [19C7] ab92408

## ★★★★ <u>1 Abreviews</u> <u>6 References</u>

#### Overview

Product name Anti-Cardiac Troponin I antibody [19C7]

**Description** Mouse monoclonal [19C7] to Cardiac Troponin I

Host species Mouse

**Specificity** No cross-reaction with skeletal muscle Troponin I

Tested applications Suitable for: WB, Sandwich ELISA

Species reactivity Reacts with: Human

Predicted to work with: Chicken, Xenopus laevis

**Immunogen** Synthetic peptide:

**ISASRKLQL** 

, corresponding to amino acids 41-49 of Human Cardiac Troponin I

Run BLAST with
Run BLAST with

**Epitope** Recognises an epitope included within aa 41-49

General notes

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. Store at +4°C.

Storage buffer pH: 7.40

Preservative: 0.1% Sodium azide

Constituent: PBS

Purity Protein A purified

**Clonality** Monoclonal

Clone number 19C7

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Myeloma Sp2/0 Isotype IgG2b

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab92408 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
WB		Use at an assay dependent concentration.
Sandwich ELISA		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with HRP Mouse monoclonal [16A11] to Cardiac Troponin I (ab24460).  Recommended pairs for quantitative sandwich immunoassay (capture-detection):ab92408 - ab24460.

#### **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.

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