# abcam

## Product datasheet

## Anti-Cardiac Troponin T antibody [1F11] ab10214

★★★★★ <u>5 Abreviews</u> <u>59 References</u> 画像数 2

#### 製品の概要

製品名 Anti-Cardiac Troponin T antibody [1F11]

製品の詳細 Mouse monoclonal [1F11] to Cardiac Troponin T

由来種 Mouse

特異性 Suitable for use in Surface Plasmon Resonance Biosensing (PubMed: 20633583 and 20694813)

アプリケーション 適用あり: Sandwich ELISA, ICC

種交差性 交差種: Human, Recombinant fragment

免疫原 Tissue, cells or virus corresponding to Human Cardiac Troponin T. Free human cardiac troponin T

エピトープ Peptide 146-160.

ポジティブ・コントロール ICC: ioSkeletal Myocytes - Human iPSC-Derived Skeletal Myocytes (ab277612)

特記事項 This product was changed from ascites to tissue culture supernatant on 30<sup>th</sup> May 2018. Please

note that the dilutions may need to be adjusted accordingly. If you have any questions, please do

not hesitate to contact our scientific support team.

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

Does not cross-react with skeletal muscle troponin T, cTnl or TnC.

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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**バッファー** pH: 7.40

Preservative: 0.1% Sodium azide

Constituent: PBS

精製度 Protein A purified

1

特記事項(精製) Purity tested by electrophoresis.

一次抗体 備考 Does not cross-react with skeletal muscle troponin T, cTnl or TnC.

**ポリ/モノ** モノクローナル

クローン名1F11ミエローマSp2/0アイソタイプIgG2b

#### 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ab10214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
Sandwich ELISA		Use a concentration of 5 µg/ml. Can be paired for Sandwich ELISA with <b>Rabbit polyclonal to Cardiac Troponin T</b> (ab45932). For sandwich ELISA, use this antibody as Capture at 5 µg/ml with <b>Rabbit polyclonal to cardiac Troponin T</b> (ab45932) as Detection.
ICC	<b>★★★★</b> <u>(2)</u>	Use a concentration of 1 - 5 μg/ml.

#### ターゲット情報

機能 Troponin T is the tropomyosin-binding subunit of troponin, the thin filament regulatory complex

which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.

組織特異性 Heart. The fetal heart shows a greater expression in the atrium than in the ventricle, while the adult

heart shows a greater expression in the ventricle than in the atrium. Isoform 6 predominates in normal adult heart. Isoforms 1, 7 and 8 are expressed in fetal heart. Isoform 7 is also expressed in

failing adult heart.

**関連疾患** Defects in TNNT2 are the cause of cardiomyopathy familial hypertrophic type 2 (CMH2)

[MIM:115195]. 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 TNNT2 are the cause of cardiomyopathy dilated type 1D (CMD1D) [MIM:601494].

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

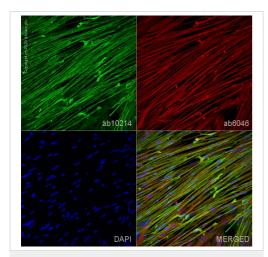
death.

Defects in TNNT2 are the cause of cardiomyopathy familial restrictive type 3 (RCM3)

[MIM:612422]. Restrictive cardiomyopathy is a heart 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.

**配列類似性** Belongs to the troponin T family.



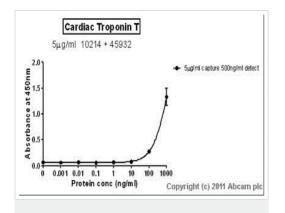
Immunocytochemistry - Anti-Cardiac Troponin T antibody [1F11] (ab10214)

Immunofluorescence staining of Cardiac Troponin T using ab10214 in ioSkeletal Myocytes - Human iPSC-Derived Skeletal Myocytes (ab277612), which were differentiated for 10 days post induction.

The cells were fixed with 100% MeOH (5 min) and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab10214 at 1  $\mu$ g/mL and <u>ab6046</u>, rabbit polyclonal to beta Tubulin, at 1/1000 dilution. Cells were then incubated with <u>ab150117</u>, Goat Anti-Mouse lgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and <u>ab150088</u>, Goat Anti-Rabbit lgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown. Gamma is adjusted to 1.5 in all channels.

The antibody ab10214 also gave a positive staining using 4% formaldehyde fixation (10 min).



Sandwich ELISA - Anti-Cardiac Troponin T antibody [1F11] (ab10214)

Standard Curve for Cardiac Troponin T (Analyte: Cardiac Troponin T protein (His tag) (ab86685)); dilution range 1pg/ml to 1 $\mu$ g/ml using Capture Antibody Mouse monoclonal [1F11] to Cardiac Troponin T (ab10214) at 5 $\mu$ g/ml and Detector Antibody Rabbit polyclonal to cardiac Troponin T (ab45932) at 0.5 $\mu$ g/ml.

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

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