abcam

Product datasheet

Anti-Cardiac Troponin I antibody [16A11] (HRP) ab24460

Overview

Product name	Anti-Cardiac Troponin I antibody [16A11] (HRP)
Description	Mouse monoclonal [16A11] to Cardiac Troponin I (HRP)
Host species	Mouse
Conjugation	HRP
Specificity	Reacts with free cardiac troponin I (cTnI) and cTnI forming complexes with other troponin components (in the presence of 5 mM EDTA). Not affected by heparin, phosphorylation, oxidation and troponin complex formation. Does not cross-react with skeletal muscle troponin I.
Tested applications	**Suitable for:** ELISA, Other, Sandwich ELISA, WB
Species reactivity	**Reacts with:** Rat, Rabbit, Goat, Cow, Cat, Dog, Human, Pig **Does not react with:** Fish
Immunogen	Full length protein (Human Cardiac Troponin I)
Epitope	87-91aa

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	Preservative: 0.05% Proclin Constituents: PBS, pH 7.4
Purity	Protein A purified
Clonality	Monoclonal
Clone number	16A11
Myeloma	Sp2/0
Isotype	IgG1

Applications

Our Abpromise guarantee covers the use of **ab24460** 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.
AP		Use at an assay dependent concentration.
Other		Use at an assay dependent concentration.
Sandwich ELISA		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 24 kDa.

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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