Recombinant Human Cardiac Troponin T protein
ab86685

Overview

Product name  Recombinant Human Cardiac Troponin T protein
Protein length  Full length protein

Description

Nature  Recombinant
Source  Escherichia coli

Amino Acid Sequence

Accession  P45379-11
Species  Human

Sequence

MGSSHHHHHHSSGLVPRGSHMSDIEEVVEE
YEEEEQEEAA VEEQEEAEE DAEAAEETEE
TRAAEDDEEEE EAKEAEDGPM EESKPKPRS
MPNLVPPKIP DGERVDFDDI HKRMEKDLN
ELQAILAEHF ENRKKEEIEL VSLKDRERR
RAERAEQQRI RNEREKRON RLAERARRE
EEENRRKAED EARKKKSALSN MMHFGGYQK
TERKSGKQET EREKKKI LA ERRKVLAIDH
LNEDQREK AKELWQSYNL EAEKFDLQEK
FKQQKYEINV LRNRINDNQK VSKTRGKAKY TGRWK

Amino acids  1 to 285
Tags  His tag N-Terminus

Additional sequence information  Isoform 11 of Cardiac Troponin T.

Specifications

Our Abpromise guarantee covers the use of ab86685 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications  SDS-PAGE
Sandwich ELISA
### Purity
> 90 % SDS-PAGE.

ab86685 is purified using conventional chromatography techniques.

### Form
Liquid

### Preparation and Storage

<table>
<thead>
<tr>
<th>Stability and Storage</th>
<th>Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pH: 8.00</td>
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<tr>
<td></td>
<td>Preservative: 0.0006% Imidazole</td>
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<tr>
<td></td>
<td>Constituents: 0.24% Tris HCl, 50% Glycerol, 1.16% Sodium chloride, 0.0017% PMSF, 0.02% DTT</td>
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</tbody>
</table>

### General Info

<table>
<thead>
<tr>
<th>Function</th>
<th>Troponin T is the tropomyosin-binding subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue specificity</td>
<td>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.</td>
</tr>
<tr>
<td>Involvement in disease</td>
<td>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.</td>
</tr>
<tr>
<td>Sequence similarities</td>
<td>Belongs to the troponin T family.</td>
</tr>
</tbody>
</table>

### Images
15% SDS-PAGE showing ab86685 (3µg).

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

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

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