

Troponin I-C Monoclonal Antibody

Catalog No: YM0631

Reactivity: Human

Applications: WB;IHC;IF;ELISA

Target: Troponin I-C

Fields: >>cAMP signaling pathway;>>Cardiac muscle contraction;>>Adrenergic

signaling in cardiomyocytes;>>Hypertrophic cardiomyopathy;>>Dilated

cardiomyopathy;>>Diabetic cardiomyopathy

Gene Name: TNNI3

Protein Name: Troponin I cardiac muscle

Human Gene Id: 7137

Human Swiss Prot P19429

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of Troponin I-C expressed in E. Coli.

Specificity: Troponin I-C Monoclonal Antibody detects endogenous levels of Troponin I-C

protein.

P48787

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

Purification: Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 24kD



Cell Pathway:

Cardiac muscle contraction; Hypertrophic cardiomyopathy (HCM); Dilated

cardiomyopathy;

P References:

1. Cummins B and Cummins P, J Mol Cell Cardiol, 1987, 19(10):999-1010.

2. Cummins B, Auckland ML, and Cummins P, Am Heart J, 1987,

113(6):1333-44.

3. Darnell J, Lodish H, and Baltimore D, Mole

Background:

Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in this gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM). [provided by RefSeq, Jul 2008],

Function:

disease: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.,disease:Defects in TNNI3 are the cause of cardiomyopathy familial hypertrophic type 7 (CMH7) [MIM:191044]. 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., disease:Defects in TNNI3 are the cau

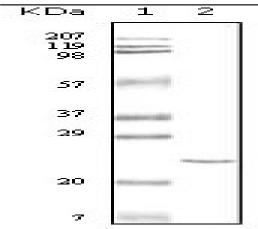
Subcellular Location:

cytosol, troponin complex, sarcomere,

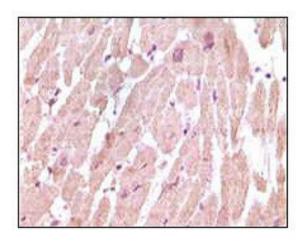
Expression:

Heart, Heart muscle, PCR rescued clones,

Products Images



Western Blot analysis using Troponin I-C Monoclonal Antibody against truncated Troponin I-C recombinant protein.



Immunohistochemistry analysis of paraffin-embedded human normal cardiac muscle tissue, showing cytoplasmic localization with DAB staining using Troponin I-C Monoclonal Antibody.