Best Tools for immunology Research

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 No :	P19429
Mouse Swiss Prot No :	P48787
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.
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

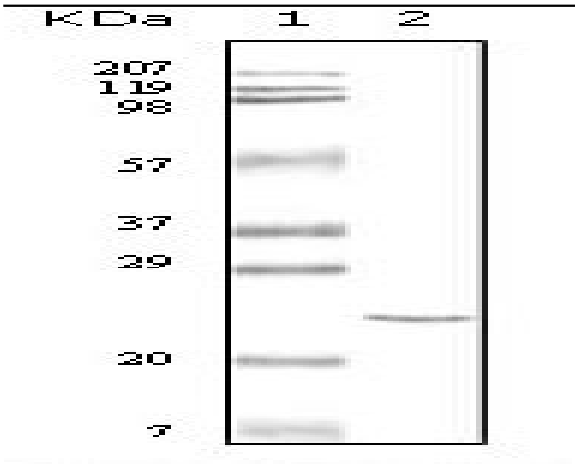
Background : Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily 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

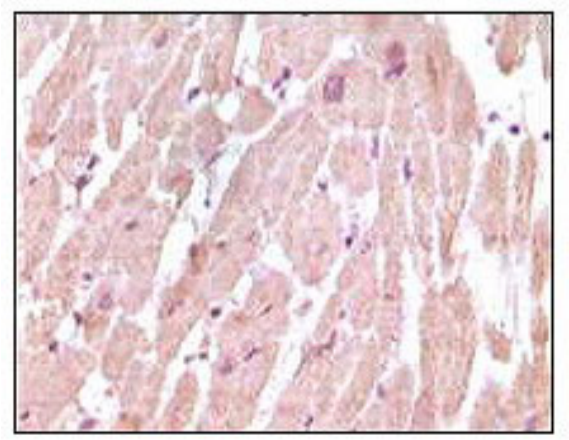
Subcellular Location : cytosol,troponin complex,sarcomere,

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.