Best Tools for immunology Research

Cardiac Troponin I (PT0315R) PT® Rabbit mAb

Catalog No :	YM8186
Reactivity :	Human; Mouse; Rat;
Applications :	WB;IHC;IF;IP;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 Gene Id :	21954
Mouse Swiss Prot No :	P48787
Rat Gene Id :	29248
Rat Swiss Prot No :	P23693
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:200-1:1000;WB 1:2000-1:10000;IF 1:200-1:1000;ELISA 1:5000-1:20000;IP 1:50-1:200;
Purification :	Protein A

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

Molecularweight : 24kD

Observed Band : 24kD

Cell Pathway : Cardiac muscle contraction;Hypertrophic cardiomyopathy (HCM);Dilated cardiomyopathy;

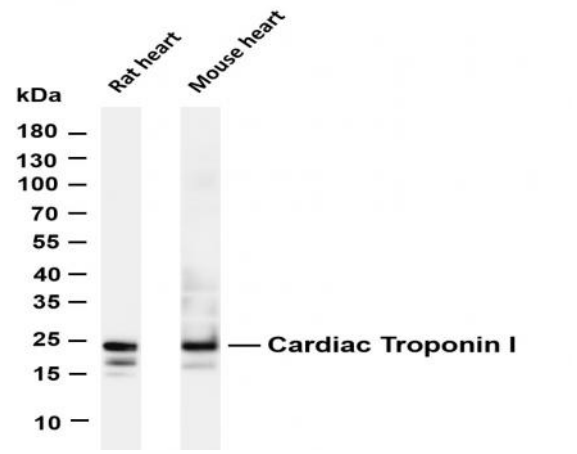
Background : Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily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

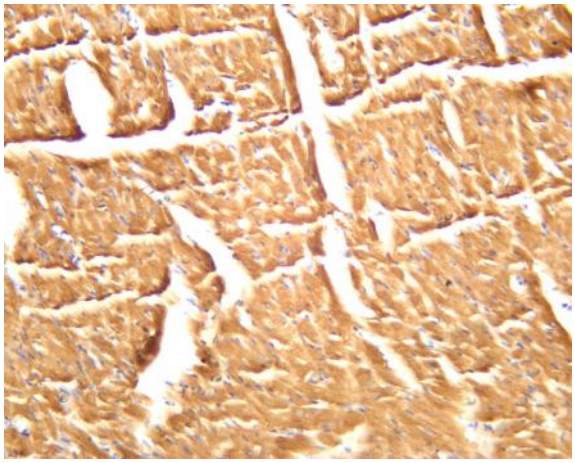
Subcellular Location : Cytoplasm

Expression : Heart,Heart muscle,PCR rescued clones,

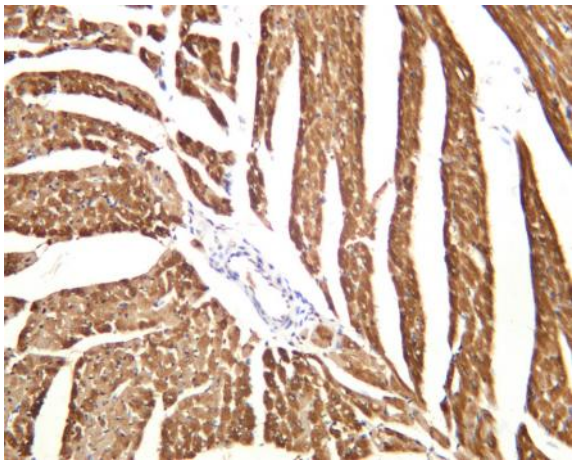
Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cardiac Troponin I (PT0315R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat heart Lane 2: Mouse heart Predicted band size: 24kDa Observed band size: 24kDa



Mouse cardiac muscle was stained with anti-Cardiac Troponin I (PT0315R) rabbit antibody



Rat cardiac muscle was stained with anti-Cardiac Troponin I (PT0315R) rabbit antibody