

Cardiac Troponin T (PT0443R) PT® Rabbit mAb

Catalog No :	YM8282
Reactivity :	Human; Mouse; Rat;
Applications :	WB;IHC;IF;IP;ELISA
Target :	Troponin T-C
Fields :	>>Cardiac muscle contraction;>>Adrenergic signaling in cardiomyocytes;>>Hypertrophic cardiomyopathy;>>Dilated cardiomyopathy
Gene Name :	TNNT2
Protein Name :	Troponin T cardiac muscle
Human Gene Id :	7139
Human Swiss Prot No :	P45379
Mouse Gene Id :	21956
Mouse Swiss Prot No :	P50752
Rat Gene Id :	24837
Rat Swiss Prot No :	P50753
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 : 36kD

Observed Band : 36kD

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

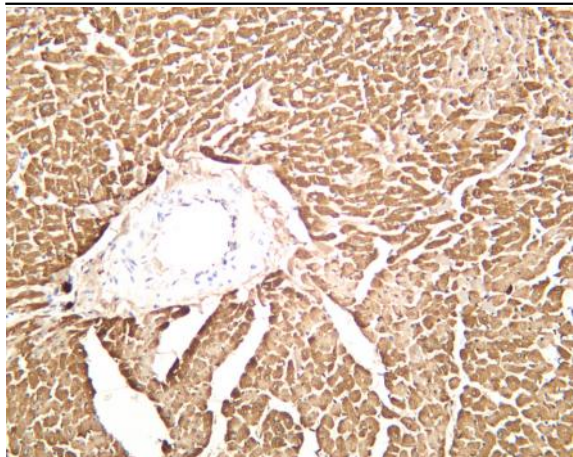
Background : The protein encoded by this gene is the tropomyosin-binding subunit of the troponin complex, which is located on the thin filament of striated muscles and regulates muscle contraction in response to alterations in intracellular calcium ion concentration. Mutations in this gene have been associated with familial hypertrophic cardiomyopathy as well as with dilated cardiomyopathy. Transcripts for this gene undergo alternative splicing that results in many tissue-specific isoforms, however, the full-length nature of some of these variants has not yet been determined. [provided by RefSeq, Jul 2008],

Function : alternative products:Additional isoforms seem to exist. Experimental confirmation may be lacking for some isoforms,disease: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.,disease: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

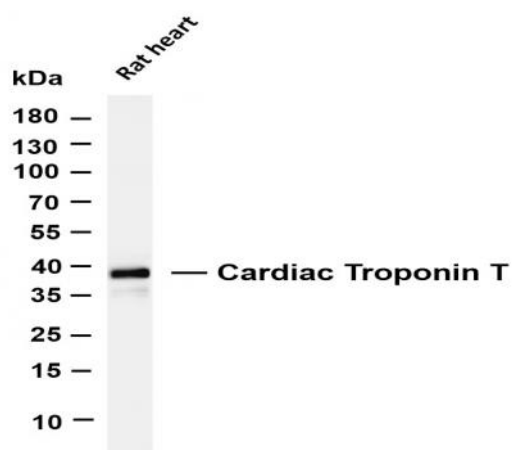
Subcellular Location : Cytoplasm

Expression : 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.

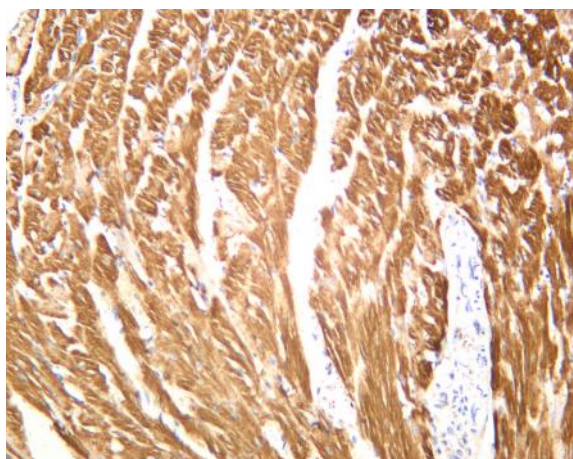
Products Images



Rat cardiac muscle was stained with anti-Cardiac Troponin T (PT0443R) rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cardiac Troponin T (PT0443R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat heart Predicted band size: 36kDa Observed band size: 36kDa



Mouse cardiac muscle was stained with anti-Cardiac Troponin T (PT0443R) rabbit antibody