

Troponin I-C (phospho Ser43) Polyclonal Antibody

Catalog No: YP0723

Reactivity: Human; Mouse; Rat

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

P48787

Human Gene Id: 7137

Human Swiss Prot P19429

No:

Mouse Gene Id: 21954

Mouse Swiss Prot

No:

Rat Gene Id: 29248

Rat Swiss Prot No: P23693

Immunogen: The antiserum was produced against synthesized peptide derived from human

TNNI3 around the phosphorylation site of Ser43. AA range:11-60

Specificity: Phospho-Troponin I-C (S43) Polyclonal Antibody detects endogenous levels of

Troponin I-C protein only when phosphorylated at S43.

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

Source: Polyclonal, Rabbit, lgG

1/3



Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 26kD

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. Tnl is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The Tnl subfamily contains three genes: Tnl-skeletal-fast-twitch, Tnl-skeletal-slow-twitch, and Tnl-cardiac. This gene encodes the Tnl-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

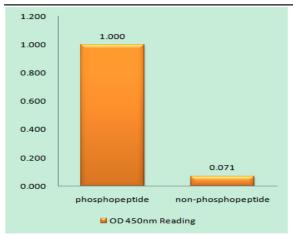
death., disease: Defects in TNNI3 are the cau

Subcellular Location:

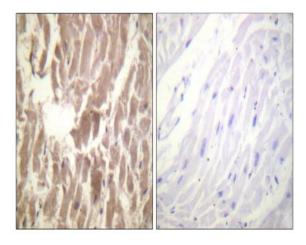
cytosol,troponin complex,sarcomere,

Expression : Heart, Heart muscle, PCR rescued clones,

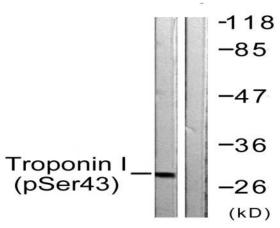
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using TNNI3 (Phospho-Ser43) Antibody



Immunohistochemistry analysis of paraffin-embedded human heart, using TNNI3 (Phospho-Ser43) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells, using TNNI3 (Phospho-Ser43) Antibody. The lane on the right is blocked with the phospho peptide.