



Troponin I-C (phospho Ser43) Polyclonal Antibody

Catalog No	YP-Ab-03044
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	TNNI3
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,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Troponin I-C;TNNI3;Troponin I cardiac muscle;TNNC1;Troponin I;cardiac muscle;Cardiac troponin I
Observed Band	26kD
Calculated Molecular Weight	26kD
Cell Pathway	cytosol,troponin complex,sarcomere,
Tissue Specificity	Heart,Heart muscle,PCR rescued clones,
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

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],

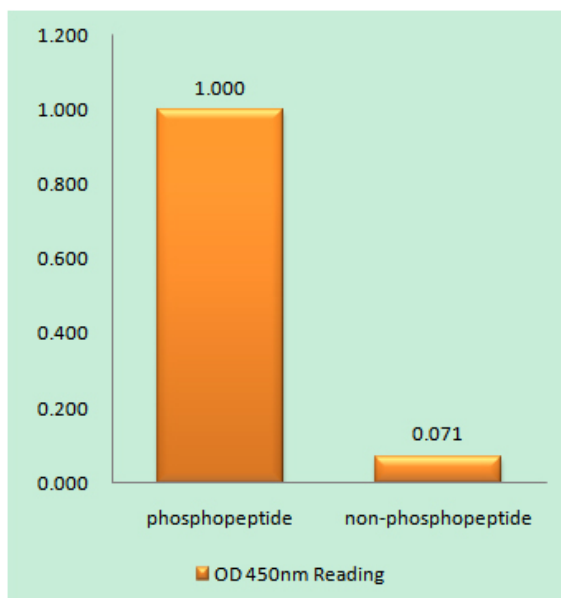
matters needing attention

Avoid repeated freezing and thawing!

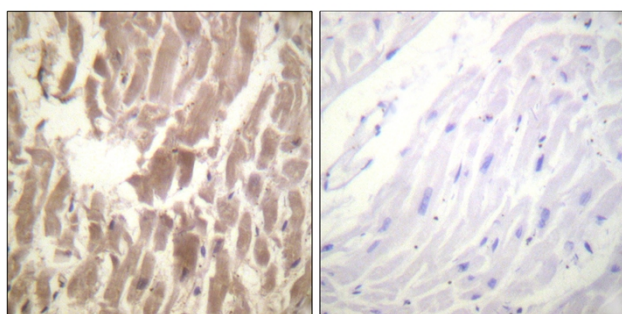
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

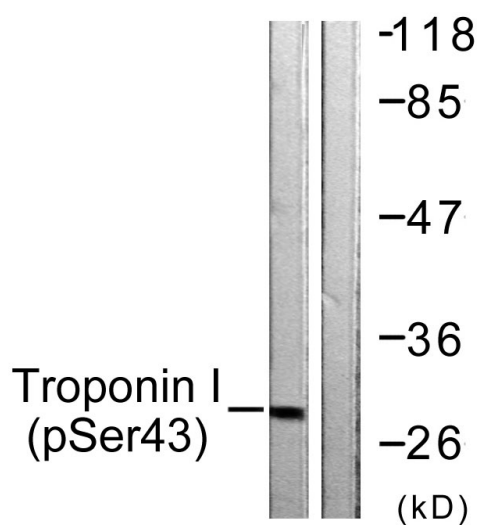
Products Images



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.