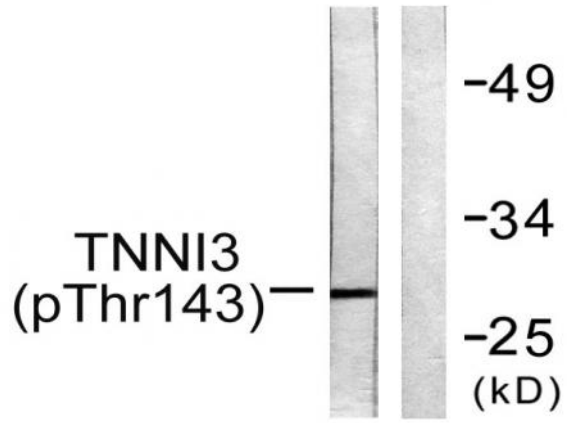
Best Tools for immunology Research

Troponin I-C (phospho Thr142) Polyclonal Antibody

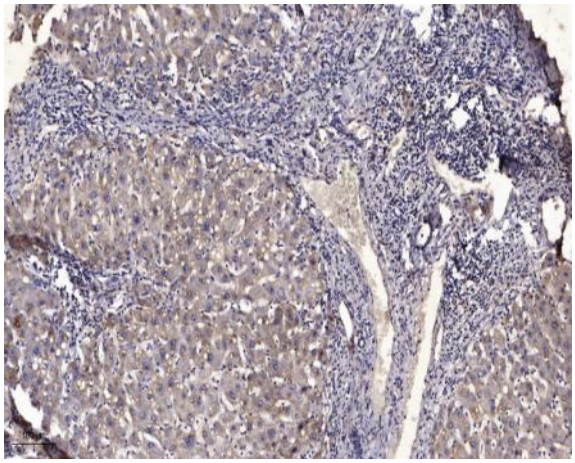
Catalog No :	YP0321
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Troponin I-C
Fields :	>>cAMP signaling pathway;>>Cardiac muscle contraction;>>Adrenergic signaling in cardiomyocytes;>>Hypertrophic cardiomyopathy;>>Dilated cardiomyopathy;>>Diabetic cardiomyopathy
Gene Name :	TNNI3
Protein Name :	Troponin I cardiac muscle
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
Immunogen :	The antiserum was produced against synthesized peptide derived from human TNNI3 around the phosphorylation site of Thr142. AA range:111-160
Specificity :	Phospho-Troponin I-C (T142) Polyclonal Antibody detects endogenous levels of Troponin I-C protein only when phosphorylated at T142.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

Dilution :	WB 1:500 - 1:2000. ELISA: 1:20000.. 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 :	28kD
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 :	cytosol,troponin complex,sarcomere,
Expression :	Heart,Heart muscle,PCR rescued clones,

Products Images



Western blot analysis of lysates from mouse heart, using TNNI3 (Phospho-Thr142) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).