



## Rabbit Anti-phospho-cardiac Troponin I (Thr143) antibody

SL9860R

<b>Product Name:</b>	phospho-cardiac Troponin I (Thr143)
<b>Chinese Name:</b>	磷酸化心肌肌钙蛋白抗体
<b>Alias:</b>	cardiac Troponin I (phospho Thr143); p-cardiac Troponin I (Thr143); cardiac Troponin I (phospho T143); p-cardiac Troponin I (T143); Cardiac troponin I; Cardiomyopathy, familial hypertrophic, 7, included; CMD1FF; CMD2A; CMH7; cTnI; Familial hypertrophic cardiomyopathy 7; MGC116817; RCM1; p-Tn1; p-Tni; TNN I3; p-TNNC 1; p-TNNC1; p-TNNI3; p-Troponin I cardiac; Troponin I cardiac muscle; Troponin I cardiac muscle isoform; Troponin I type 3 cardiac; troponin I, cardiac 3; TroponinI; TNNI3 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Sheep,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	24 kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthesised phosphopeptide derived from human cardiac Troponin I around the phosphorylation site of Thr143:RP(p-T)LR
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>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].</p> <p><b>Function:</b> Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.</p> <p><b>Subunit:</b> Binds to actin and tropomyosin. Interacts with TRIM63. Interacts with STK4/MST1.</p> <p><b>Post-translational modifications:</b> Phosphorylated at Ser-42 and Ser-44 by PRKCE; phosphorylation increases myocardium contractile dysfunction. Phosphorylated at Ser-23 and Ser-24 by PRKD1; phosphorylation reduces myofilament calcium sensitivity. Phosphorylated preferentially at Thr-31. Phosphorylation by STK4/MST1 alters its binding affinity to TNNC1 (cardiac Tn-C) and TNNT2 (cardiac Tn-T).</p> <p><b>DISEASE:</b> Defects in TNNI3 are the cause of familial hypertrophic cardiomyopathy type 7 (CMH7) [MIM:613690]. 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. Defects in TNNI3 are the cause of familial restrictive cardiomyopathy type 1 (RCM1) [MIM:115210]. RCM1 is a heart muscle disorder characterized by impaired filling of the ventricles with reduced diastolic volume, in the presence of normal or near normal wall thickness and systolic function. 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. Defects in TNNI3 are the cause of cardiomyopathy dilated type 1FF (CMD1FF) [MIM:613286]. 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.</p>

**Similarity:**

Belongs to the troponin I family.

**SWISS:**

P19429

**Gene ID:**

7137

**Database links:**

[Entrez Gene: 7137](#)Human

[Entrez Gene: 21954](#)Mouse

[Entrez Gene: 100049696](#)Pig

[Entrez Gene: 29248](#)Rat

[Omim: 191044](#)Human

[SwissProt: P19429](#)Human

[SwissProt: P48787](#)Mouse

[SwissProt: P23693](#)Rat

[Unigene: 709179](#)Human

[Unigene: 27674](#)Mouse

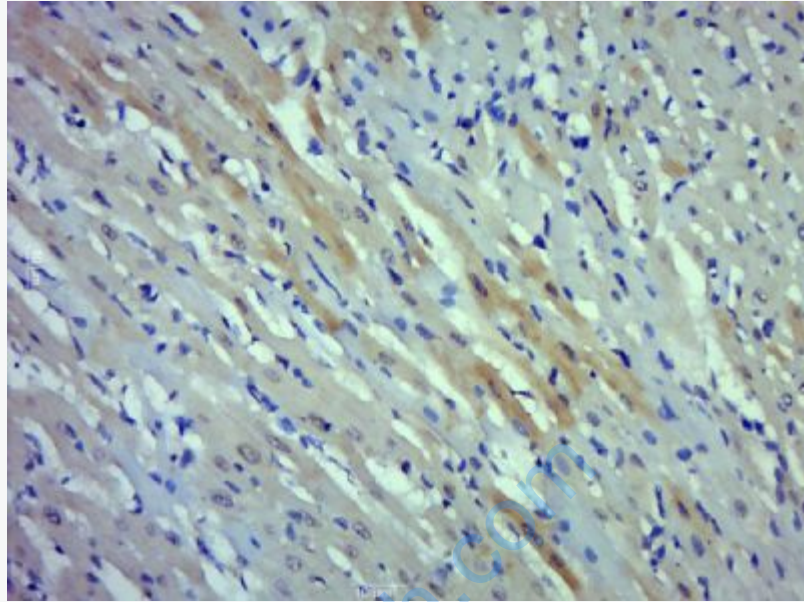
[Unigene: 64141](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

心肌肌钙蛋白 (Cardiac Troponin

CTn1) 是心肌收缩的调节蛋白, 存在于心肌收缩蛋白的细肌丝上。肌钙蛋白的作用之一是把原肌凝蛋白 (Tropomyosin.Tm) 附着于肌动蛋白 (Action.A) 上、主要用于心肌功能方面的研究。



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Rat heart); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-cardiac Troponin I (Thr143)) Polyclonal Antibody, Unconjugated (SL9860R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.