

Phospho-Ser43 Troponin I (cardiac) Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1236**Specification**

Phospho-Ser43 Troponin I (cardiac) Antibody - Product Information

Application	WB
Primary Accession	P48787
Reactivity	Mouse, Rat
Predicted	Bovine, Human, Monkey, Xenopus, Zebrafish
Host	Rabbit
Clonality	polyclonal
Calculated MW	25 KDa

Phospho-Ser43 Troponin I (cardiac) Antibody - Additional Information

Gene ID	21954
Gene Name	TNNI3

Other Names

Troponin I, cardiac muscle, Cardiac troponin I, Tnni3

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser43 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephospho-peptide affinity columns.

Antibody Specificity

Specific for the ~25k cardiac troponin I protein phosphorylated at Ser43. Immunolabeling is greatly decreased with lambda-phosphatase treatment.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser43 Troponin I (cardiac) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

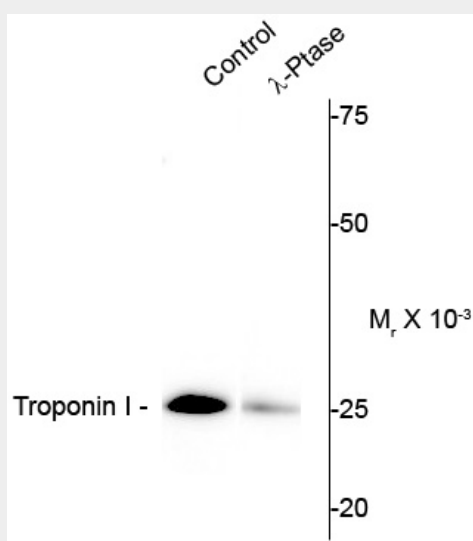
Blue Ice

Phospho-Ser43 Troponin I (cardiac) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-Ser43 Troponin I (cardiac) Antibody - Images



Western blot of mouse heart lysate showing specific immunolabeling of the ~25k cTnI protein phosphorylated at Ser43 (control). Phosphospecificity is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that the lysate was incubated in λ-Ptase (1400 units for 30 min). The immunolabeling is greatly decreased by treatment with λ-Ptase.

Phospho-Ser43 Troponin I (cardiac) Antibody - Background

Troponin I (TnI) is 1 of 3 subunits, along with troponin C (TnC) and Troponin T (TnT) of troponin complex found in cardiac (cTnI) and fast skeletal (fsTnI) muscle (Noland et al, 1995). Protein kinase C-mediated phosphorylation of cardiac myofilament proteins has been shown to depress the actomyosin interaction and may be important during heart failure. (Montgomery et al, 2002) Studies indicate that phosphorylation of Ser43 and Ser45 of cardiac troponin I plays a substantial role in the PKC-mediated depression. (Montgomery et al, 2002).

Phospho-Ser43 Troponin I (cardiac) Antibody - References

David E. Montgomery, Beata M. Wolska, W. Glen Pyle, Brian B. Roman, Jasmine C. Dowell, Peter M. buttrick, Alan P. Koretsky, Pedro Del Nido, R. John Solaro (2002) α-Adrenergic response and myofilament activity in mouse hearts lacking PKC phosphorylation sites on cardiac TnI. *Am J Physiol Heart Circ* 282:H2397-H2405.

Thomas A. Noland, Jr., Xiaodu Guo, Robert L. Raynor, Nathan M. Jideama, Vera Averyhart-Fullard, R. John Solaro, and J.F. Kuo (1995) Cardiac Troponin I Mutants. *J of Biol Chem* 270 (43): 25445-25454.