ARG52454
anti-Cardiac Troponin I phospho (Ser150) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Cardiac Troponin I phospho (Ser150)
Tested Reactivity	Ms, Rat
Predict Reactivity	Hu, NHuPrm
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Cardiac Troponin I
Species	Mouse
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser150 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	RCM1; cTnI; Cardiac troponin I; TNNC1; CMD1FF; CMD2A; Troponin I, cardiac muscle; CMH7

Application Instructions

Application table

Application	Dilution
WB	1:1000

Application Note: Specific for the ~25k cardiac troponin I protein phosphorylated at Ser150. Immunolabeling is greatly decreased with lambda-phosphatase treatment.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

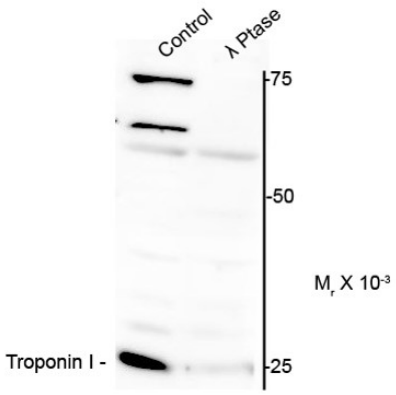
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 21954 Mouse GeneID: 29248 Rat Swiss-port # P23693 Rat Swiss-port # P48787 Mouse
Gene Symbol	TNNI3
Gene Full Name	troponin I, cardiac 3
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. cTnI is phosphorylated by protein kinase C and protein kinase A at Ser23/24 (Noland et al, 1995) and is phosphorylated by AMPK at Ser23 and Ser150 (Solis et al, 2011). Evidence suggests that AMPK, a critical regulator of cardiac energetics, prefers phosphorylating Ser150 over Ser23, and may play a role in regulating energy consumption through altering the phosphorylation status of cTnI (Solis et al., 2011).
Research Area	Cell Biology and Cellular Response antibody; Controls and Markers antibody; Developmental Biology antibody; Signaling Transduction antibody
Calculated Mw	24 kDa
PTM	Phosphorylated at Ser-42 and Ser-44 by PRKCE; phosphorylation increases myocardium contractile dysfunction (By similarity). 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).

Images



ARG52454 anti-Cardiac Troponin I phospho (Ser150) antibody WB image

Western blot: Mouse heart lysate showing specific immunolabeling of ~25 kDa cTnI protein phosphorylated at Ser150
Phosphospecificity is shown in the second lane (lambda-phosphatase: λ-Ptase) stained with ARG52454 anti-Cardiac Troponin I phospho (Ser150) antibody.
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.
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