

Product datasheet for **TA332463**

Troponin C1 (TNNC1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50- 1:200
Reactivity:	Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human TNNC1
Formulation:	Store at -20°C (regular) and -80°C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	161
Gene Name:	troponin C1, slow skeletal and cardiac type
Database Link:	NP_003271 Entrez Gene 21924 Mouse Entrez Gene 290561 Rat P63316
Background:	Troponin, working in conjunction with tropomyosin, functions as a molecular switch, regulating muscle contraction in response to changes in the intracellular Ca ²⁺ concentration. Troponin consists of three subunits: the Ca ²⁺ -binding subunit troponin C (TnC), the tropomyosin-binding subunit troponin T (TnT), and the inhibitory subunit troponin I (TnI) (1). In response to Î²-adrenergic stimulation of the heart, Ser23 and Ser24 of TnI (cardiac) are phosphorylated by PKA and PKC. This phosphorylation stimulates a conformational change of the regulatory domain of TnC, reduces the association between TnI and TnC, and decreases myofilament Ca ²⁺ sensitivity by reducing the Ca ²⁺ binding affinity of TnC (1-3).

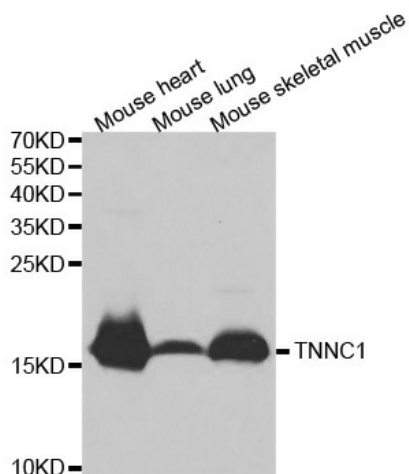


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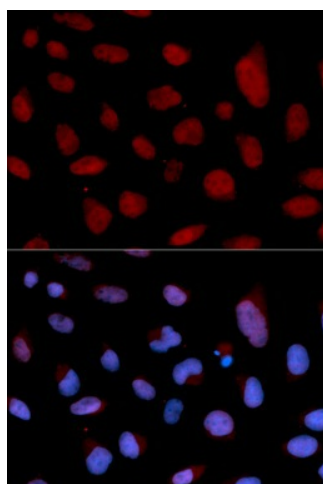
Synonyms: CMD1Z; CMH13; TN-C; TNC; TNNC

Protein Pathways: Calcium signaling pathway, Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

Product images:



Western blot analysis of extracts of various cell lines, using TNNC1 antibody.



Immunofluorescence analysis of U2OS cell using TNNC1 antibody. Blue: DAPI for nuclear staining.