

ARG41117 anti-Cardiac Troponin I antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Cardiac Troponin I
Tested Reactivity	Ms, Rat
Tested Application	ICC/IF, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Cardiac Troponin I
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-210 of Human Cardiac Troponin I (NP_000354.4).
Conjugation	Un-conjugated
Alternate Names	RCM1; cTnI; Cardiac troponin I; TNNC1; CMD1FF; CMD2A; Troponin I, cardiac muscle; CMH7

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IP	Assay-dependent
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Rat heart	
Observed Size	30 kDa	

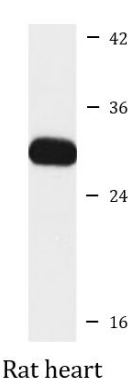
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	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.

Bioinformation

Gene Symbol	TNNI3
Gene Full Name	troponin I type 3 (cardiac)
Background	<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, Jul 2008]</p>
Function	<p>Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity. [UniProt]</p>
Calculated Mw	24 kDa
PTM	<p>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). [UniProt]</p>

Images



ARG41117 anti-Cardiac Troponin I antibody WB image

Western blot: 25 µg of Rat heart lysate stained with ARG41117 anti-Cardiac Troponin I antibody at 1:1000 dilution.