

ARG23738 anti-Cardiac Troponin I antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes Cardiac Troponin I
Tested Reactivity	Hu
Tested Application	ELISA, ICC/IF, IHC-Fr, IHC-P, WB
Specificity	The antibody recognizes human cardiac-specific troponin I, (TnI) an integral inhibitory protein of cardiac muscle which exists as a complex with troponin C (TnC) and troponin T (TnT).
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	Cardiac Troponin I
Species	Human
Immunogen	Native human cardiac troponin I, purity greater than 98%.
Conjugation	Un-conjugated
Alternate Names	RCM1; cTnI; Cardiac troponin I; TNNC1; CMD1FF; CMD2A; Troponin I, cardiac muscle; CMH7

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	1:50 - 200
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
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 or below. 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.

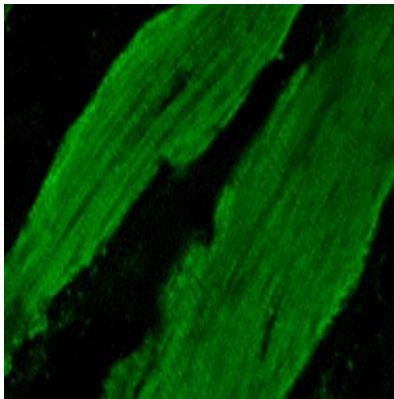
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TNNI3
Gene Full Name	troponin I type 3 (cardiac)
Background	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]
Function	Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity. [UniProt]
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). [UniProt]

Images



ARG23738 anti-Cardiac Troponin I antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human heart tissue stained with ARG23738 anti-Cardiac Troponin I antibody at 1:100 dilution.