

ARG82124 Rat Cardiac Troponin I ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG82124 Rat Cardiac Troponin I ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat Cardiac Troponin I in serum and plasma.
Tested Reactivity	Rat
Tested Application	ELISA
Specificity	The following recombinant Rat proteins were tested and exhibited no cross-reactivity or interference: Adiponectin, ApoAI, BMP1, BMP2, BMP3, BMP4, BMP5, BMP7, CCL2, CCL4, CCL5, CRP, HGF, HSP27, IL1 beta, IL1RA, IL1 alpha, IL1 RI, IL2, IL4, IL5, IL6, IL6R, IL8, IL12, IL13, IL15, IL17C, IL21, IL23, IFN beta, IFN gamma, PDGF, PLA2G7, prolactin, serpin E1, TGF beta 1, TGF beta 2, TGF beta 3, TLR1, TLR2, TL3, TLR9, TNF alpha, TNF RI, TNF RII, VEGF, VEGF R1.
Target Name	Cardiac Troponin I
Conjugation	HRP
Conjugation Note	Read at 450 nm.
Sensitivity	0.15 ng/ml
Sample Type	Serum and plasma.
Standard Range	0.78 - 50 ng/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5% Inter-Assay CV: 8%
Alternate Names	RCM1; cTnI; Cardiac troponin I; TNNC1; CMD1FF; CMD2A; Troponin I, cardiac muscle; CMH7

Application Instructions

Assay Time	~ 3 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
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

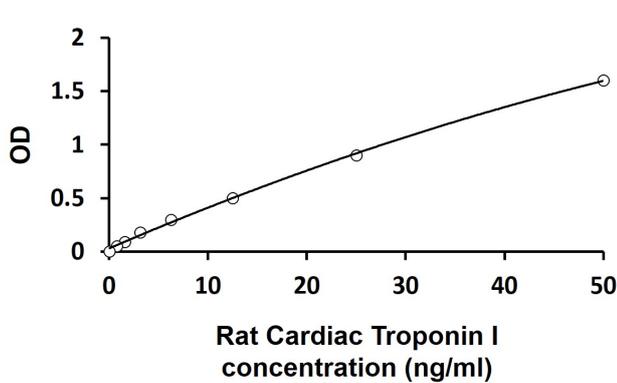
troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes 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]

Highlight Related products:
[Troponin antibodies](#); [Troponin ELISA Kits](#);
New ELISA data calculation tool:
[Simplify the ELISA analysis by GainData](#)

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



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ARG82124 Rat Cardiac Troponin I ELISA Kit results of a typical standard run with optical density reading at 450 nm.