

## ARG82201 Human Cardiac Troponin I (High sensitive) ELISA Kit

Package: 96 wells

Store at: 4°C

### Summary

Product Description	ARG82201 Human Cardiac Troponin I (High sensitive) ELISA Kit is a high sensitive Enzyme Immunoassay kit for the quantification of Human Cardiac Troponin I in serum, plasma and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	Not react with the following recombinant human proteins: Adiponectin, ApoA1, BMP1, BMP2, BMP3, BMP4, BMP5, BMP7, CCL2, CCL4, CCL5, CRP, HGF, HSP27, IL1 beta, IL1RA, IL1 alpha, IL1RI, 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	18 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	93.75 - 6000 pg/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

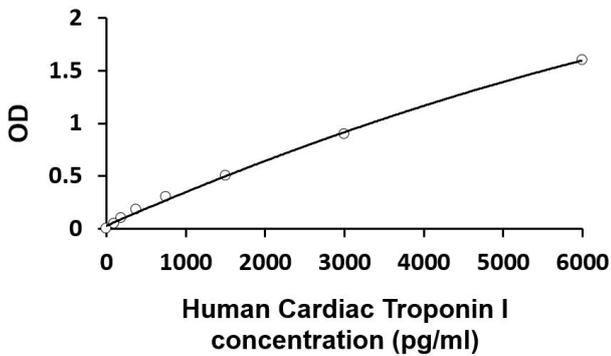
troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes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



ARG82201 Human Cardiac Troponin I (High sensitive) ELISA Kit standard curve image

ARG82201 Human Cardiac Troponin I (High sensitive) ELISA Kit results of a typical standard run with optical density reading at 450 nm.