

Product datasheet for **RC214740L4V**

Cardiac Troponin I (TNNI3) (NM_000363) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Cardiac Troponin I (TNNI3) (NM_000363) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Cardiac Troponin I
Synonyms:	CMD1FF; CMD2A; CMH7; cTnI; RCM1; TNNC1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_000363
ORF Size:	630 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC214740).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_000363.3
RefSeq Size:	2073 bp
RefSeq ORF:	633 bp
Locus ID:	7137
UniProt ID:	P19429
Cytogenetics:	19q13.42
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Stem cell - Pluripotency
Protein Pathways:	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)



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MW: 23.8 kDa

Gene Summary: 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). Troponin I is useful in making a diagnosis of heart failure, and of ischemic heart disease. An elevated level of troponin is also now used as indicator of acute myocardial injury in patients hospitalized with moderate/severe Coronavirus Disease 2019 (COVID-19). Such elevation has also been associated with higher risk of mortality in cardiovascular disease patients hospitalized due to COVID-19. [provided by RefSeq, Aug 2020]