Recombinant Full Length Human TNNI3 Protein, C-Flag-tagged

Cat. No. TNNI3-809HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human TNNI3 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	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.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Molecular Mass	23.8 kDa

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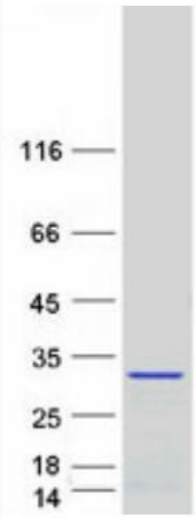
AA Sequence	MADGSSDAAREPRPAPAPIRRRSSNYRAYATEPHAKKKSKISASRKLQLKTLLLQIAK QELEREAEERRG EKGRALSTRCQPLELAGLGFAELQDLCRQLHARVDKVDEERYDI EAKVTKNITEIADLTQKIFDLRGKFK RPTLRRVRISADAMMQALLGARAKESLDLRAH LKQVKKEDTEKENREVGDWRKNIDALSGMEGRKKKFESTRTRPLEQKLISEEDLAA NDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome, ES Cell Differentiation/IPS, Stem cell - Pluripotency
Protein Pathways	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)
Full Length	Full L.

GENE INFORMATION

Gene Name	TNNI3 troponin I3, cardiac type [Homo sapiens (human)]
Official Symbol	TNNI3

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Synonyms	CMH7; RCM1; cTnI; CMD2A; TNNC1; CMD1FF
Gene ID	7137
mRNA Refseq	NM_000363.5
Protein Refseq	NP_000354.4
MIM	191044
UniProt ID	P19429



Coomassie blue staining of purified TNNI3 protein.

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