

Recombinant Human TNNI3 Protein, His-tagged

Cat. No. TNNI3-872H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human TNNI3 Protein (Ala2-Ser210) with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Ala2-Ser210
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	Freeze-dried powder

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Molecular Mass	Predicted Molecular Mass: 27.7 kDa; Accurate Molecular Mass: 30 kDa
Purity	> 90%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in PBS or others.

GENE INFORMATION

Gene Name	TNNI3 troponin I3, cardiac type [Homo sapiens (human)]
Official Symbol	TNNI3
Synonyms	TNNI3; troponin I3, cardiac type; CMH7; RCM1; cTnI; CMD2A; TNNC1; CMD1FF; troponin I, cardiac muscle; cardiomyopathy, dilated 2A (autosomal recessive); troponin I type 3 (cardiac)
Gene ID	7137
mRNA Refseq	NM_000363

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Protein Refseq	NP_000354
MIM	191044
UniProt ID	P19429

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