

## **Product datasheet for TP314740L**

## OriGene Technologies, Inc.

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## Cardiac Troponin I (TNNI3) (NM\_000363) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human troponin I type 3 (cardiac) (TNNI3), 1 mg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC214740 representing NM\_000363 or AA Sequence: Red=Cloning site Green=Tags(s)

MADGSSDAAREPRPAPAPIRRRSSNYRAYATEPHAKKKSKISASRKLQLKTLLLQIAKQELEREAEERRG EKGRALSTRCQPLELAGLGFAELQDLCRQLHARVDKVDEERYDIEAKVTKNITEIADLTQKIFDLRGKFK RPTLRRVRISADAMMQALLGARAKESLDLRAHLKQVKKEDTEKENREVGDWRKNIDALSGMEGRKKKFES

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK

**Predicted MW:** 23.8 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 000354

**Locus ID:** 7137

**UniProt ID:** <u>P19429</u>, <u>Q6FGX2</u>

RefSeq Size: 2073



Cytogenetics: 19q13.42

RefSeq ORF: 630

Synonyms: CMD1FF; CMD2A; CMH7; cTnl; RCM1; TNNC1

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

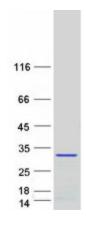
moderate/severe Coronavirus Disease 2019 (COVID-19). Such elevation has also been associated with higher risk of mortality in cardiovascular disease patients hospitalized due to

COVID-19. [provided by RefSeq, Aug 2020]

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Stem cell - Pluripotency

**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

## **Product images:**



Coomassie blue staining of purified TNNI3 protein (Cat# [TP314740]). The protein was produced from HEK293T cells transfected with TNNI3 cDNA clone (Cat# [RC214740]) using MegaTran 2.0 (Cat# [TT210002]).