

## 32-5136: Recombinant Human Cardiac Troponin-I

**Alternative Name :** Troponin I cardiac muscle, Cardiac troponin I, TNNI3, TNNC1, CMH7, RCM1, cTnI, CMD2A, MGC116817.

### Description

Source : Escherichia Coli. Recombinant Human TNNI3 produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 210 amino acids and having a molecular mass of 24,016 Dalton. The TNNI3 is purified by proprietary chromatographic techniques. Troponin I (TnI), troponin T (TnT) and troponin C (TnC) form the troponin complex of the thin filaments of striated muscle. TnI acts as the inhibitory subunit by blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains 3 genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. The TNNI3 gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in the TNNI3 gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM).

### Product Info

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| <b>Amount :</b>            | 50 µg  |
| <b>Purification :</b>      | Greater than 98.0% as determined by both:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.   |
| <b>Content :</b>           | TNNI3 solution containing 6M Urea 50mM Tris PH 8.  |
| <b>Storage condition :</b> | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles. |
| <b>Amino Acid :</b>        | MADGSSDAAREPRPAPAPIRRSSNYRAYATEPHAKKSKISASRKLQLKTLTLLQIAKQELEREAEEERRGEKGRA<br>LSTRCQPLELAGLGF AELQDLCRQLHARVDKVDEERYDIEAKVTKNITEIADLTQKIFDLRGKFKRPTLRRVRISA<br>DAMMQALLGARAKESLDLRAHLKQVKKEDTEKENREVGDWKRNIDALSGMEGRKKKFES.         |

