



# Recombinant Protein Technical Manual

## Recombinant Human Troponin C/TNNC1 Protein

RPES4392

### Product Data:

**Product SKU:** RPES4392

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_003271.1

### Protein Information:

**Molecular Mass:** 18.4 kDa

**AP Molecular Mass:** 20 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 150 mM NaCl, 10 mM Na<sub>2</sub>HPO<sub>4</sub>, pH 7.5

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** CMD1Z;CMH13;TN-C;TNC;TNNC

## Immunogen Information:

**Sequence:** Met 1-Glu161

## Background:

Troponin I, also known as TNNC1, is part of the troponin complex. This complex contains 3 subunits: troponin I (TnI), troponin T (TnT) and troponin C (TnC). Troponin I is the inhibitory subunit, blocking actin-myosin interactions and thereby mediating striated muscle relaxation. It binds to actin in thin myofilaments to hold the actin-tropomyosin complex in place. Because of it myosin cannot bind actin in relaxed muscle. When calcium binds to the Troponin C it causes conformational changes which lead to dislocation of troponin I and finally tropomyosin leaves the binding site for myosin on actin leading to contraction of muscle.