

Recombinant Human Cardiac Troponin-C

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. PRO-322
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➤ **Background:**

Cardiac troponin C belongs to the EF-hand superfamily of calcium-binding proteins and plays an essential role in the regulation of muscle contraction and relaxation.

➤ **Description :**

Recombinant Human TNC produced in E.Coli is a single, non-glycosylated, polypeptide chain having a molecular mass of 18,020 Dalton. Recombinant Cardiac Troponin-C is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered lyophilized powder.

➤ **Formulation:**

Lyophilized from (1mg/ml) solution containing 150mM NaCl, 10mM sodium phosphate, 0.5mM EDTA and 0.02% NaN₃, (pH 7.0).

➤ **Solubility:**

It is recommended to reconstitute the lyophilized TNC in sterile 18MÙ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

➤ **Stability:**

Lyophilized TNC although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TNC should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of human TNC.

➤ **Protein content:**

Protein quantitation was carried out by:

0.25 - 5.0 mg/ml Bradford assay vs. BSA

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.