

Diagnostica Vertrieb GmbH, Oehleckerring 11-13

22419 Hamburg, Germany

**Telephone:** +49 (0)89 3799666-6 | **Fax:** +49 (0)89 3799666-99

E-Mail: info@biozol.de

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## **Product Datasheet**

## Human Cardiac Troponin I protein, His tag, Unconjugated GTX00237-PRO

Article Name	Human Cardiac Troponin I protein, His tag, Unconjugated
Biozol Catalog Number	GTX00237-PRO
Supplier Catalog Number	GTX00237-pro
Alternative Catalog Number	GTX00237-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	7137
UniProt	P19429
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Met1~Gly203 (NP_000354.4)

Application Notes

Troponin I Type 3, Cardiac (TNNI3) is a protein that in humans is encoded by the TNNI3 gene. It is a tissue-specific subtype of troponin I, which in turn is a part of the troponin complex. The TNNI3 gene encoding cardiac troponin I (cTnI) is located at 19q13.4 in the human chromosomal genome. Human cTnI is a 24kDa protein consisting of 210 amino acids with isoelectric point (pl) of 9.87. cTnl is exclusively expressed in adult cardiac muscle. Besides, Troponin T Type 2, Cardiac (TNNT2) has been identified as an interactor of TNNI3, thus a binding ELISA assay was conducted to detect the interaction of recombinant human TNNI3 and recombinant human TNNT2. Briefly, TNNI3 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to TNNT2-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-TNNI3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37C. Finally, add 50 μl stop solution to the wells and read at 450nm immediately. The binding activity of TNNI3 and TNNT2 was in a dose dependent manner.