## Recombinant Human TNNC1 protein (His Tag)

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Catalog Number: PDEH100779



Description **Species** Human 17.6 kDa Mol Mass Accession P63316 Not validated for activity **Bio-activity Properties** >95% as determined by reducing SDS-PAGE. Purity Endotoxin < 10 EU/mg of the protein as determined by the LAL method Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at  $< -20^{\circ}$ C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs. Shipping Formulation Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol. Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data

kDa	ΜК	R	
80			
60			
40			
30	-		
20			
12			

> 95 % as determined by reducing SDS-PAGE.

## 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.

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