Recombinant Human Troponin C/TNNC1 Protein (His Tag)

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

Catalog Number: PKSH033520



Description **Species** Human Mol Mass 19.8 kDa Accession P63316 Not validated for activity **Bio-activity Properties** > 95 % as determined by reducing SDS-PAGE. Purity < 1.0 EU per µg of the protein as determined by the LAL method. Endotoxin Store at $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles. Storage Shipping This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at $< -20^{\circ}$ C. Formulation Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 100mM NaCl, 1mM DTT, 10% Glycerol, pH 8.0. Not Applicable Reconstitution

Data

kDa	МК	R
120 90 60		
40		
30	-	
20		-
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> 95 % as determined by reducing SDS-PAGE.

Background

Troponin I, also known as TNI, is a 24 kDa component of a protein complex on striated muscle thin filaments. Troponin is the central regulatory protein of striated muscle contraction. Tn consists of three components: Tn-I which is the inhibitor of actomyosin ATPase, Tn-T which contains the binding site for tropomyosin and Tn-C. The binding of calcium to Tn-C abolishes the inhibitory action of Tn on actin filaments. Troponin I inhibits the calcium-dependent muscle contraction mediated by Troponins C and T. The expression of cardiac Troponin I (TNNI3) is restricted to cardiac muscle, while TNNI1 and TNNI2(encoded by distinct genes) are expressed in skeletal muscle. Mutations of cardiac Troponin I are associated with heriditary cardiomyopathy. Human cardiac Troponin I shares 93% amino acid sequence identity with mouse and rat cardiac Troponin I.

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