

Recombinant Human Troponin C/TNNC1 Protein (His Tag)

Catalog Number: PKSH033520

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

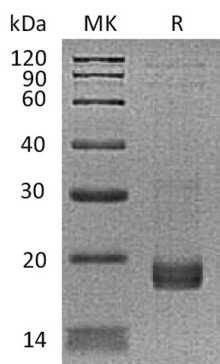
Description

Species	Human
Source	E.coli-derived Human Troponin C/TNNC1 protein Met1-Glu161, with an N-terminal His
Calculated MW	19.8 kDa
Observed MW	17-20 kDa
Accession	P63316
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
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°C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 100mM NaCl, 1mM DTT, 10% Glycerol, pH 8.0.

Data



> 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 hereditary cardiomyopathy. Human cardiac Troponin I shares 93% amino acid sequence identity with mouse and rat cardiac Troponin I.

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