Recombinant Human TNNC1 Protein (His Tag)

Catalog Number: PDEH100779

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

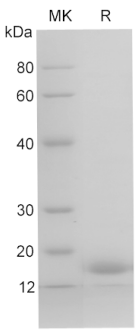
Description

Species	Human
Source	E.coli-derived Human TNNC1 protein Met1-Glu161, with an N-terminal His
Calculated MW	17.6 kDa
Observed MW	17 kDa
Accession	P63316
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
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



SDS-PAGE analysis of Human TNNC1 proteins, 2 μg/lane of Recombinant Human TNNC1 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 17 kDa.

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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