Recombinant Human Troponin C/TNNC1 Protein

Catalog No. PKSH031309

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

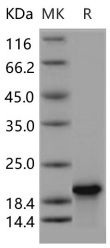
Description

Synonyms	CMD1Z;CMH13;TN-C;TNC;TNNC
Species	Human
Expression Host	E.coli
Sequence	Met 1-Glu161
Accession	NP_003271.1
Calculated Molecular Weight	18.4 kDa
Observed molecular weight	20 kDa
Tag	None
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 150 mM NaCl, 10 mM Na2HPO4, pH 7.5 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % 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

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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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