Troponin C/TNNC1 Protein, Human (His)

Cat. No.:	HY-P71372
Synonyms:	CMH7; TNNC1; TNNI3; Troponin I
Species:	Human
Source:	E. coli
Accession:	P63316 (M1-E161)
Gene ID:	7134
Molecular Weight:	17-20 kDa

PROPERTIES

AA Sequence	M D D I Y K A A V E Q L T E E Q K N E F K A A F D I F V L G A E D G C I S T K E L G K V M R M L G Q N P T P E E L Q E M I D E V D E D G S G T V D F D E F L V M M V R C M K D D S K G K S E E E L S D L F R M F D K N A D G Y I D L D E L K I M L Q A T G E T I T E D D I E E L M K D G D K N N D G R I D Y D E F L E F M K G V E
Appearance	Solution.
Formulation	Supplied as a 0.2 μm filtered solution of 20 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 10% Glycerol, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	Troponin C, represented by the TNNC1 gene, serves as the central regulatory protein orchestrating striated muscle contraction. The troponin complex, composed of Tn-I, Tn-T, and Tn-C, plays a pivotal role in this regulatory mechanism. Tn-I functions as the inhibitor of actomyosin ATPase, while Tn-T provides the binding site for tropomyosin. Of particular significance, Tn-C serves as the calcium-binding component, and upon calcium interaction, it nullifies the inhibitory effect of Tn-I on actin filaments. This intricate interplay highlights the pivotal role of Troponin C in translating calcium signals into the modulation of muscle contraction dynamics.

Caution: Product has not been fully validated for medical applications. For research use only.

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