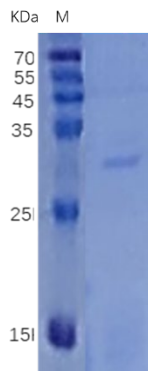


Specification

Product name:	Recombinant human cTnI antigen
Source:	<i>E.coli</i> derived
Accession #:	P19429
SDS-PAGE:	25-35 kDa, reducing conditions
Construction:	cTnI with 6His tag at N-terminal
Predicted Molecular Mass:	30kDa
Activity:	Immunoreactivity was confirmed by reacting with monoclonal antibodies specific to human cTnI.
Application:	ELISA, immunology, others unspecified.
Form:	Liquid
Formulation:	20 mM Tris, 300 mM NaCl, 8M Urea, pH 8.0
Stability & Storage:	Stable at -80°C
Shipping condition:	The product is shipped on ice pack. Upon receiving, store it immediately at the recommended temperature.
Conc. Determined:	BCA
Purity:	>90%

SDS-PAGE



Greater than 90% as determined by reducing SDS-PAGE. (QC verified).

BACKGROUND

Troponin is a heterotrimer that regulates muscle contraction in skeletal and cardiac muscle (but not in smooth muscle). Troponin acts with intracellular calcium to control the interaction of actin and myosin filaments in striated muscle fibers. Though they perform similar functions, cardiac and skeletal troponins differ in sequence and can be differentiated in immunoassays. When muscle tissue is damaged, the troponin-tropomyosin complex breaks down and troponin I and troponin T are released into the blood. Cardiac troponin T (cTnT) and cardiac troponin I (cTnI) can be readily distinguished from their skeletal muscle analogs allowing confirmation of cardiac muscle tissue damage over skeletal muscle tissue damage. Troponins are excellent biomarkers for myocardial injury in cardiotoxicity because of the demonstrated tissue-specificity of cardiac and skeletal troponins.

References:

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2. MAIR J, LINDAHL B, HAMMARSTEN O, et al. How is cardiac troponin released from injured myocardium?[J]. European heart journal: acute cardiovascular care, 2018,7(6): 553-560.