

# Recombinant Human Troponin I Type 1 (Skeletal, Slow)

**Cat. No.** TNNI1-1282H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human Troponin I Type 1 expressed in <i>E. Coli</i> was suggested to be used as markers of acute and chronic skeletal muscle injuries. In skeletal muscles Troponin I is presented by two forms, slow (21.6 kDa) and fast (21.2 kDa) skeletal.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	TNNI2 is a fast-twitch skeletal muscle protein, belongs to the troponin I gene family, and is part of the troponin complex including troponin T, troponin C and troponin I subunits. The troponin complex, together with tropomyosin, is responsible for the calcium-dependent regulation of striated muscle contraction. TNNI2 is also present in vascular smooth muscle and may play a role in regulation of smooth muscle function. Other than muscle tissues, TNNI2 is found in corneal epithelium, cartilage where it is an inhibitor of angiogenesis to inhibit tumor growth and metastasis, and mammary gland where it functions as a coactivator of estrogen receptor-related receptor alpha. Furthermore, TNNI2 suppresses tumor growth in human ovarian carcinoma. Mutations in the TNNI2 gene cause myopathy and distal arthrogyrosis type 2B.
<b>Physical Appearance</b>	Sterile Filtered colourless liquid formulation.
<b>Formulation</b>	Each mg of protein contains 50% glycerol.
<b>Purity</b>	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Applications</b>	Immunoassays and western blot.
<b>Stability</b>	FsTnI although stable at 10°C for 7 days, should be stored desiccated below -18°C. Please prevent freeze-thaw cycles.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	TNNI1 troponin I type 1 (skeletal, slow) [ Homo sapiens ]
<b>Synonyms</b>	TNNI1; troponin I type 1 (skeletal, slow); TNN1; SSTNI; DKFZp451O223; OTTHUMP00000033877; OTTHUMP00000033910; slow-twitch skeletal troponin I
<b>Gene ID</b>	7135
<b>mRNA Refseq</b>	NM_003281
<b>Protein Refseq</b>	NP_003272
<b>MIM</b>	191042
<b>UniProt ID</b>	P19237
<b>Chromosome Location</b>	1q31.3
<b>Pathway</b>	Muscle contraction
<b>Function</b>	actin binding; tropomyosin binding

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