

Product datasheet for **CF807521**

TNNI1 Mouse Monoclonal Antibody [Clone ID: OT18H8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OT18H8
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human TNNI1 (NP_003272) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	21.5 kDa
Gene Name:	troponin I1, slow skeletal type
Database Link:	NP_003272 Entrez Gene 21952 Mouse Entrez Gene 29388 Rat Entrez Gene 7135 Human P19237



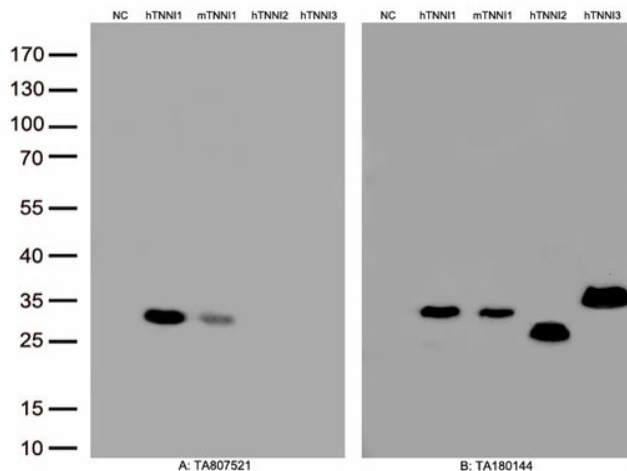
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Background:

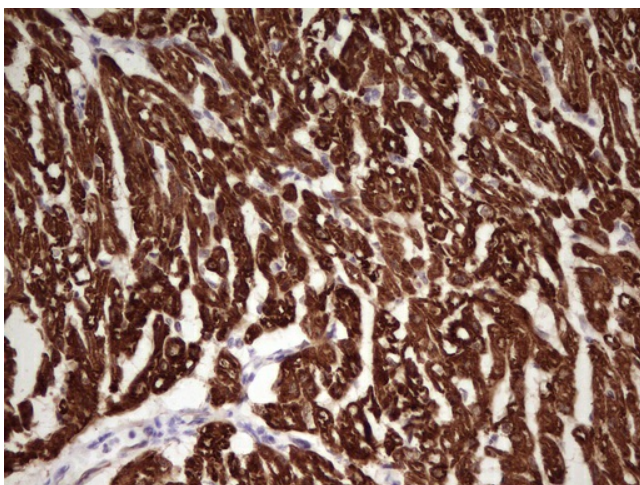
Troponin proteins associate with tropomyosin and regulate the calcium sensitivity of the myofibril contractile apparatus of striated muscles. Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. The TnI-fast and TnI-slow genes are expressed in fast-twitch and slow-twitch skeletal muscle fibers, respectively, while the TnI-cardiac gene is expressed exclusively in cardiac muscle tissue. This gene encodes the Troponin-I-skeletal-slow-twitch protein. This gene is expressed in cardiac and skeletal muscle during early development but is restricted to slow-twitch skeletal muscle fibers in adults. The encoded protein prevents muscle contraction by inhibiting calcium-mediated conformational changes in actin-myosin complexes. [provided by RefSeq, Jul 2008]

Synonyms:

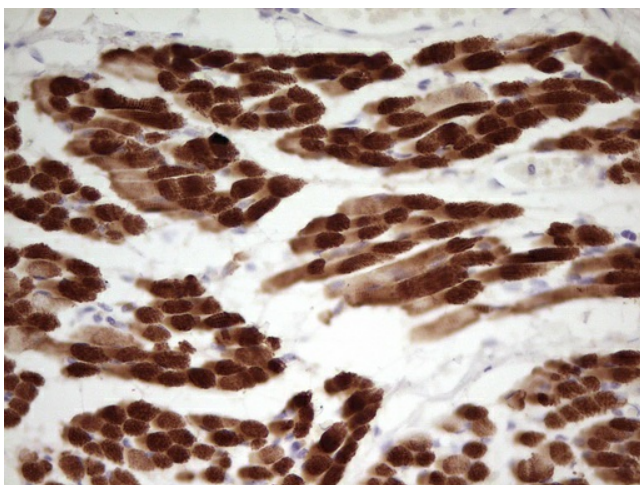
SSTNI; TNN1

Product images:


Western blot analysis of overexpressed lysates (15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], lane 1), human TNNI1 plasmid ([RC203127], lane 2), mouse TNNI1 plasmid ([MR201758], lane 3), human TNNI2 plasmid ([RC205676], lane 4), human TNNI3 plasmid ([RC214740], lane 5), using anti-TNNI1 antibody [TA807521] (1:500).



Immunohistochemical staining of paraffin-embedded Human adult heart tissue using anti-TNNI1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807521])



Immunohistochemical staining of paraffin-embedded Human muscle tissue using anti-TNNI1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807521])