



Anti-TNNI1 (full length) polyclonal antibody (DPAB-DC3087)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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.
Immunogen	TNNI1 (AAH12601, 1 a.a. ~ 187 a.a) full-length recombinant protein with GST tag. The sequence is MPEVERKPKITASRKLLLKSLMLAKAKECWEQEHEEREAEKVRYLAERIPTLQTRGLSLS ALQDLCRELHAKVEVVDEERYDIEAKCLHNTREIKDLKLKVMDLRGKFKRPLRRVRVSA DAMLRALLGSKHKVSMDLRANLKSVKKEGTEKERPVEVDWRKNVEAMSGMEGRKKMFDA AKSPTSQ
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl

Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	TNNI1 troponin I type 1 (skeletal, slow) [Homo sapiens (human)]
Official Symbol	TNNI1
Synonyms	TNNI1; troponin I type 1 (skeletal, slow); TNN1; SSTNI; troponin I, slow skeletal muscle; troponin I, slow-twitch isoform;
Entrez Gene ID	7135
Protein Refseq	NP_003272
UniProt ID	P19237
Chromosome Location	1q31.3
Pathway	Muscle contraction;
Function	actin binding; metal ion binding;