



# 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  
MPEVERKPKITASRLLLLKSLMLAKAKECWEQEHEEREAEKVRYLAERIPTLQTRGLSLS  
ALQDLCRELHAKVEVDEERYDIEAKCLHNTREIKDLKLVMDLRGKFKRPPLRRVRVSA  
DAMLRALLGSKHKVSMDLRANLKS VKKEGTEKERPVEVGDWRKNVEAMSGMEGRKKMFDA  
AKSPTSQ

### Source/Host

Mouse

### Species Reactivity

Human

### Conjugate

Unconjugated

### Applications

WB (Recombinant protein), ELISA,

### Size

50 µl

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

## GENE INFORMATION

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