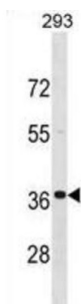


Fast Skeletal Muscle Troponin T (TNNT3) Antibody

Catalogue No.: abx029224



The binding of Ca (2+) to the trimeric troponin complex initiates the process of muscle contraction. Increased Ca (2+) concentrations produce a conformational change in the troponin complex that is transmitted to tropomyosin dimers situated along actin filaments. The altered conformation permits increased interaction between a myosin head and an actin filament which, ultimately, produces a muscle contraction. The troponin complex has protein subunits C, I, and T. Subunit C binds Ca (2+) and subunit I binds to actin and inhibits actin-myosin interaction. Subunit T binds the troponin complex to the tropomyosin complex and is also required for Ca (2+) mediated activation of actomyosin ATPase activity. There are 3 different troponin T genes that encode tissue-specific isoforms of subunit T for fast skeletal-, slow skeletal-, and cardiac-muscle. This gene encodes fast skeletal troponin T protein; also known as troponin T type 3. Alternative splicing results in multiple transcript variants encoding additional distinct troponin T type 3 isoforms. A developmentally regulated switch between fetal/neonatal and adult troponin T type 3 isoforms occurs. Additional splice variants have been described but their biological validity has not been established. Mutations in this gene may cause distal arthrogryposis multiplex congenita type 2B (DA2B).

Target: Fast Skeletal Muscle Troponin T (TNNT3)

Clonality: Polyclonal

Reactivity: Human

Tested Applications: ELISA, WB

Host: Rabbit

Recommended dilutions: WB: 1/1000. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Immunogen: KLH-conjugated synthetic peptide between 217-245 amino acids from the C-terminal region of human TNNT3.

Isotype: IgG

Form: Liquid

Purification: Purified through a protein A column, followed by peptide affinity purification.

Datasheet

Version: 3.0.0

Revision date: 29 Jun 2025



Storage: Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

UniProt Primary AC: P45378 ([UniProt](#), [ExPASy](#))

KEGG: hsa:7140

String: [9606.ENSP00000278317](#)

Molecular Weight: Calculated MW: 31.8 kDa

Buffer: PBS containing 0.09% sodium azide.

Specificity: Predicted to react with Mouse and Rat TNNT3.

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

For Reference Only