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TNNT3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17019b

Specification

TNNT3 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P45378
Other Accession	P09739, Q9QZ47, NP_001036246.1, NP_001036245.1
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**31825**
Antigen Region	**217-245**

TNNT3 Antibody (C-term) - Additional Information

Gene ID 7140

Other Names
Troponin T, fast skeletal muscle, TnTf, Beta-TnTF, Fast skeletal muscle troponin T, fTnT, TNNT3

Target/Specificity
This TNNT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 217-245 amino acids from the C-terminal region of human TNNT3.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
TNNT3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TNNT3 Antibody (C-term) - Protein Information

Name TNNT3

Function Troponin T is the tropomyosin-binding subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.

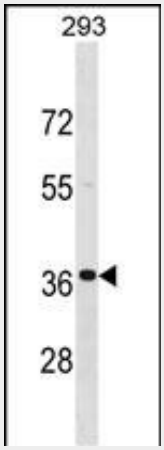
Tissue Location
In fetal and adult fast skeletal muscles, with a higher level expression in fetal than in adult muscle

TNNT3 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TNNT3 Antibody (C-term) - Images



TNNT3 Antibody (C-term) (Cat. #AP17019b) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the TNNT3 antibody detected the TNNT3 protein (arrow).

TNNT3 Antibody (C-term) - Background

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).

TNNT3 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Turnbull, C., et al. Nat. Genet. 42(6):504-507(2010)
Vihola, A., et al. Acta Neuropathol. 119(4):465-479(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)