

TNNT3 Polyclonal Antibody

catalog number: E-AB-91119

Note: Centrifuge before opening to ensure complete recovery of vial contents.

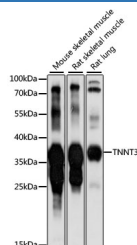
Description

Reactivity	Mouse;Rat
Immunogen	Recombinant fusion protein of human TNNT3
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.

Applications

WB	1:200-1:2000
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Data



Western blot analysis of extracts of various cell lines using TNNT3 Polyclonal Antibody at 1:1000 dilution.

Observed-MW:37 kDa

Calculated-MW:29 kDa/30 kDa/31 kDa

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

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).

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