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TNNT3 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant TNNT3.
Catalog # AT4293a

Specification

TNNT3 Antibody (monoclonal) (M02) - Product Information

Application	**WB, E**
Primary Accession	P45378
Other Accession	NM_006757
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 Kappa**
Calculated MW	**31825**

TNNT3 Antibody (monoclonal) (M02) - Additional Information

Gene ID 7140

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

Target/Specificity
TNNT3 (NP_006748, 161 a.a. ~ 258 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000
E~~N/A

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
TNNT3 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

TNNT3 Antibody (monoclonal) (M02) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot

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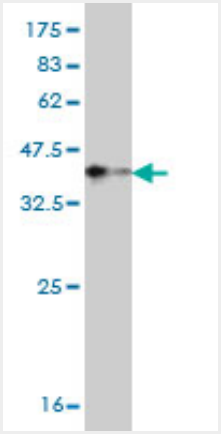
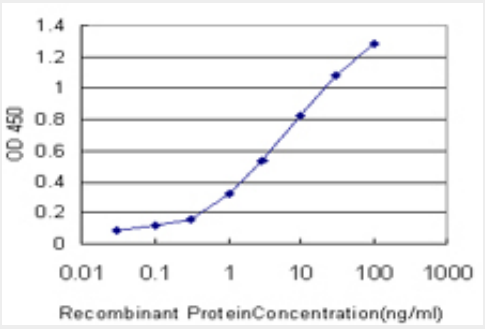
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TNNT3 Antibody (monoclonal) (M02) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.52 KDa) .



Detection limit for recombinant GST tagged TNNT3 is approximately 0.1ng/ml as a capture antibody.

TNNT3 Antibody (monoclonal) (M02) - 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 (monoclonal) (M02) - References

1.Proteome dynamics during contractile and metabolic differentiation of bovine foetal muscle.Chaze T, Meunier B, Chambon C, Jurie C, Picard B.Animal (2009) doi:10.1017 /S1751731 109004315