## **PRODUCT INFORMATION**

Catalog number ATGA0558

Clone No. AT36E7

Product type Monoclonal antibody

**UnitProt No.** P19237

NCBI Accession No. NP\_003272

Alternative Names Troponin I1 slow skeletal muscle, Troponin I, slow skeletal muscle, DKFZp451O223, SSTNI, TNN1

Additional Information This product was produced from tissue culture supernatant.

# **PRODUCT SPECIFICATION**

Antibody Host Mouse

Reacts With Human

Concentration 1mg/ml (determined by BCA assay)

## Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

## Immunogen

Recombinant human TNNI1 (1-187aa) purified from E. coli

**Isotype** IgG2b kappa

**Purification Note** By protein-A affinity chromatography

## Application

ELISA, WB

#### Usage

The antibody has been tested by ELISA and Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.



#### Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

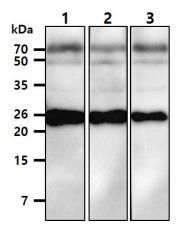
Troponin I, slow skeletal muscle, also known as TNNI1, belongs to the troponin I family. The troponin I subfamily contains three genes: TNNI-skeletal-fast-twitch, TNNI-skeletal-slow-twitch, and TNNI-cardiac. The TNNI-fast and TNNI-slow genes are expressed in fast-twitch and slow-twitch skeletal muscle fibers, respectively, while the TNNI-cardiac gene is expressed exclusively in cardiac muscle tissue. TNNI1 is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation.

#### **General References**

Hunkeler NM, Kullman J, Murphy AM (1991). Circ. Res. 69 (5): 1409-14. Bhavsar PK, Dhoot GK, Cumming DV, et al. (1992). FEBS Lett. 292 (1-2): 5-8. Westfall MV, Borton AR (2003). J. Biol. Chem. 278 (36): 33694-700.

## DATA

### Western blot analysis (WB)



The extracts of mouse muscle (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human TNNI1 antibody (1:500~5000). Proteins were visualized using a goat antimouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: TNNI1 mAb 1:500 Lane 2.: TNNI1 mAb 1:1000 Lane 3.: TNNI1 mAb 1:5000