

Mouse Troponin I, slow skeletal muscle (TNNI1) ELISA Kit



Catalog No: #EK6160

Orders: order@signalwayantibody.com

Package Size: #EK6160-1 48T #EK6160-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Mouse Troponin I, slow skeletal muscle (TNNI1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (<i>Mus musculus</i>)
Other Names	DKFZp451O223; SSTNI; TNN1; OTTHUMP00000033877 OTTHUMP00000033910 slow-twitch skeletal troponin I troponin I; skeletal; slow
Accession No.	Q9WUZ5
Uniprot	Q9WUZ5
GeneID	21952;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:46.88-3000 pg/mL

Sensitivity:17.59 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:Sandwich Test principle: This assay employs a two-site sandwich ELISA to quantitate TNNI1 in samples. An antibody specific for TNNI1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any TNNI1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TNNI1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of TNNI1 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview: TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. The TnI-fast and TnI-slow genes are expressed in fast-twitch and slow-twitch skeletal muscle fibers, respectively, while the TnI-cardiac gene is expressed exclusively in cardiac muscle tissue. This gene encodes the Troponin-I-skeletal-slow-twitch protein.

TNNI1 is expressed in cardiac and skeletal muscle during early development but is restricted to slow-twitch skeletal muscle fibers in adults. The encoded protein prevents muscle contraction by inhibiting calcium-mediated conformational changes in actin-myosin complexes.

Note: This product is for in vitro research use only