

## Rat Troponin I, Slow Skeletal Muscle (TNNI1) ELISA Kit | TNNI1 elisa kit

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CATALOG #  
**AAA330194**

REACTIVITY  
**Rat**

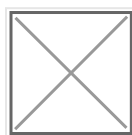
### PRODUCT SYNONYMS

Troponin I; Slow Skeletal Muscle (TNNI1); Rat Troponin I; Slow Skeletal Muscle (TNNI1) ELISA Kit; TNNI1; DKFZp451O223; SSTNI; TNN1; OTTHUMP00000033877; OTTHUMP00000033910; slow-twitch skeletal troponin I; troponin I; skeletal; slow; TNNI1 elisa kit

### PRODUCT SPECIFICATIONS

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| Reactivity              | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Specificity             | Rat Troponin I, slow skeletal muscle (TNNI1) ELISA Kit has high sensitivity and excellent specificity for detection of Rat TNNI1. No significant cross-reactivity or interference between Rat TNNI1 and analogues was observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Sequence Length         | 184                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Assay Type              | Sandwich ELISA (Quantitative)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Samples                 | Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Detection Method        | Colorimetric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Usage Notes             | <ul style="list-style-type: none"> <li>* Do not mix components from different kit lots or use reagents beyond the kit expiration date.</li> <li>* Allow all reagents to warm to room temperature for at least 30 minutes before opening.</li> <li>* Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination.</li> <li>* Unused wells must be kept desiccated at 4 degree C in the sealed bag provided.</li> <li>* Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes.</li> <li>* It is recommended that all samples and standards be assayed in duplicate or triplicate.</li> </ul> |
| Preparation and Storage | Store at 2-8 degree C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### IMAGES



Standard Curve (Sample)

Fig.1. Rat Troponin I, slow skeletal muscle (TNNI1) Standard Curve.

ADDITIONAL INFORMATION

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|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for TNNI1 elisa kit | <p>Description: This Rat Troponin I, slow skeletal muscle (TNNI1) ELISA Kit 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.</p> <p>Background: 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.</p> |
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NCBI AND UNIPROT INFORMATION

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|-------------------------|----------------------------------|
| NCBI GI #               | 136221                           |
| UniProt Accession #     | P02645                           |
| NCBI Official Full Name | Troponin I, slow skeletal muscle |
| UniProt Protein Name    | Troponin I, slow skeletal muscle |
| UniProt Gene Name       | TNNI1                            |
| UniProt Entry Name      | TNNI1_RABIT                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.