Recombinant Bovine Troponin T, fast skeletal muscle (Tnnt3)

Product Code	CSB-EP853993BO-B
Abbreviation	Tnnt3
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8MKI3
Product Type	Recombinant Protein
Immunogen Species	Bos taurus (Bovine)
Purity	>85% (SDS-PAGE)
Sequence	SDEEVEHVE EEYEEEEEAQ EEAPPPPAEV PEVHEEVHEV HEPEEVQEEE KPRPRLTAPK IPEGEKVDFD DIQKKRQNKD LMELQALIDS HFEARKKEEE ELVALKERIE KRRAERAEQQ RIRAEKERER QNRLAEEKAR REEEDAKRRA EDDLKKKKAL SSMGANYSSY LAKADQKRGK KQTAREMKKK VLAERRKPLN IDHLSEDKLR DKAKELWDTL YQLETDKFEY GEKLKRQKYD ITNLRSRIDQ AQKHSKKAGT APKGKVGGRW K
Source	E.coli
Target Names	Tnnt3
Protein Names	Recommended name: Troponin T, fast skeletal muscle Short name= TnTf
Expression Region	2-271
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	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).
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.