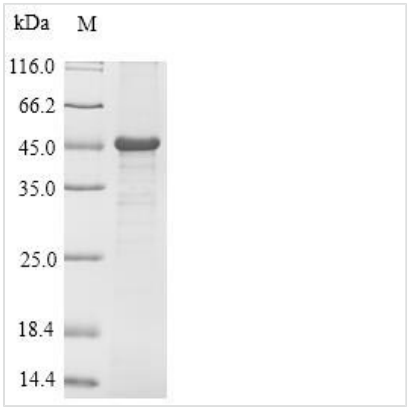
Recombinant Mouse Troponin I, cardiac muscle (Tnni3)

Product Code	CSB-EP341785MO
Relevance	Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.
Abbreviation	Recombinant Mouse Tnni3 protein
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.	P48787
Alias	Cardiac troponin I
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ADESSDAAGEPQPAPAPVRRRSSANYRAYATEPHAKKKSKISASRKLQLKTLM LQIAKQEMEREAEERRGEKGRVLRTRCQPLELDGLGFEELQDLCRQLHARVD KVDEERYDVEAKVTKNITEIADLTQKIYDLRGKFKRPTLRRVRISADAMMQALL GTRAKESLDLRAHLKQVKKEDIEKENREVGDWRKNIDALSGMEGRKKKFEG
Research Area	Signal Transduction
Source	E.coli
Target Names	Tnni3
Protein Names	Recommended name: Troponin I, cardiac muscle Alternative name(s): Cardiac troponin I
Expression Region	2-211aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	40.1kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Troponin I, cardiac muscle (Tnni3) CSB-EP341785MO is a recombinant mouse full-length of mature Tnni3 protein containing amino acid residues of 2-211. It is produced in the E.coli cells through procaryotic expression and fused with a 6xHis-SUMO-tag at the N-terminus. And it has high purity of up to 90% determined by SDS-PAGE. Its predicted molecular weight is 40.11 kDa, but the actual observed molecular mass (46 kDa)via SDS-PAGE analysis is slightly higher due to post-transcriptional modifications such as glycosylation. This recombinant Tnni3 protein is in-stock, allowing for continuous sourcing and no intermediate waiting period for protein preparation. This Tnni3 protein not only acts as an immunogen for antibody production but also finds uses in the studies of Tnni3-mediated signal transduction.

Tnni3 is the inhibitory subunit of the cardiac troponin (cTn) complex that is a sensor of the intracellular Ca2+ levels and modulates the interaction between the thick and thin filaments during muscle contraction. It mainly blocks the interaction between actin and myosin in the absence of Ca2+ and tightly regulated by phosphorylation.

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

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