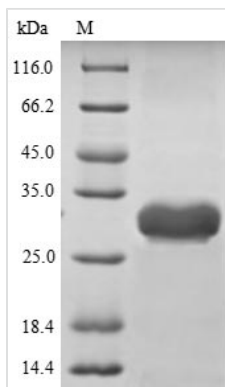




Recombinant Staphylococcus aureus Enterotoxin type B (entB)

Product Code	CSB-YP360703FKZ
Relevance	Staphylococcal enterotoxins cause the intoxication staphylococcal food poisoning syndrome. The illness characterized by high fever, hypotension, diarrhea, shock, and in some cases death.
Abbreviation	Recombinant Staphylococcus aureus entB 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.	P01552
Alias	SEB
Product Type	Recombinant Protein
Immunogen Species	Staphylococcus aureus
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ESQPDPKPDELHKSSKFTGLMENMKVLYDDNHVSAINVKSIDQFLYFDLIYSIK DTKLGNYDNVRVEFKNKDLADKYKDKYVDVFGANYYYQCYFSKKTNDINSHQ TDKRKTCMYGGVTEHNGNQLDKYRSITVRVFEDGKNLLSFDVQTNKKKVTAQ ELDYLTRHYLVKNKKLYEFNNSPYETGYIKFIENENSWYDMMPAPGDKFDQS KYLMMYNDNKMVDSKDVKIEVYLTTKKK
Research Area	others
Source	Yeast
Target Names	entB
Protein Names	Recommended name: Enterotoxin type B Alternative name(s): SEB
Expression Region	28-266aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	30.4kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

Full-length of mature *Staphylococcus aureus* Enterotoxin type B (entB) cDNA carrying an N-terminal 6xHis-tag was expressed in the yeast cells. The resulting protein is the recombinant fusion protein consisting of 28-266aa of *Staphylococcus aureus* entB. The SDS-PAGE showed an about 28-33 kDa molecular mass of this protein and determined its purity of over 90%. In-stock entB proteins are offered now. In addition to producing specific anti-entB antibodies, this recombinant entB protein may also find uses in the microbiology.

Staphylococcus aureus-secreted exotoxin entB is one of the most potent bacterial superantigens (SAGs) that exerts toxic effects upon the immune system, inducing cytokine release and eliciting inflammation. EntB mainly targets T-cell receptors (TCRs) on the T cells and major histocompatibility complex (MHC) class II molecules on Ag-presenting cells (APCs), forming a ternary complex between specific V β chains and MHC class II molecules through cross-link. It is water-soluble, heat unstable, and resistant to the proteolytic enzyme, including trypsin, papain, and pepsin. And it also possesses emetic activity. EntB can cause multi-organ system failure and death at low concentrations. The involvement of entB in the pathogenesis of some diseases such as atopic dermatitis, asthma, and chronic rhinitis, has been documented.

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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