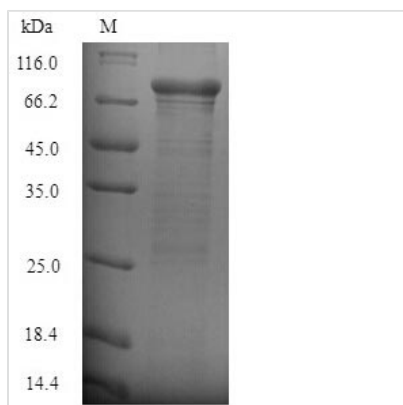


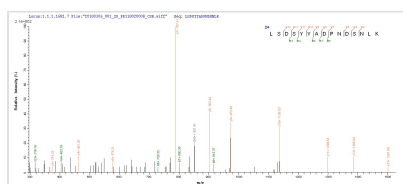


Recombinant Staphylococcus aureus Clumping factor B (clfB), partial

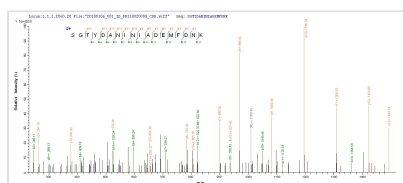
Product Code	CSB-EP753442SKV
Relevance	Cell surface-associated protein implicated in virulence by promoting bacterial attachment to both alpha- and beta-chains of human fibrinogen and inducing the formation of bacterial clumps.
Abbreviation	Recombinant Staphylococcus aureus clfB protein, partial
Storage	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.	Q6GDH2
Alias	Fibrinogen receptor B Fibrinogen-binding protein B
Product Type	Recombinant Protein
Immunogen Species	Staphylococcus aureus (strain MRSA252)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SEQSNDTTQSSKNNASADSEKNNTIETPQLNTTANDTSDISANTNSANVDSTA KTMSTQTSNTTTTEPASTNETPQPTAIKDQATAAKMQDQTVPQEANSQVDNK TTNDANNIATNSELKNPQTLDPQSSPQTISNAQGTSKPSVRTRAVRSLAVAEP VVNAADAKGTVNDKVTASDFKLEKTAFDPNQSGNTFMAANFKVTGQVKSGD YFTAKLPDSVTGNGDGDVYSNSNNTMPIADIKSTNGDVVAKATYDILTKTYTFVF TDYVNDKENINGQFSLPLFTDRAKAPKSGTYDANINIADEMFDNKITYNYSSPIA GIDKPNGANISSQIIGVDTASGQNTYKQTVFVNPKQRVLGNTWVYIKGYQDKIE ESSGKVSATDTKLRIFEVNDTSKLSDSYYADPNDSNLKEVTGEFKDKISYKYDN VASINFGDINKTYVVLVEGHYDNTGKNLKTQVIQENIDPATGKDYSIFGWNNEN VVRVGGSADGDSAVN
Research Area	Others
Source	E.coli
Target Names	clfB
Expression Region	45-542aa
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	69.8kDa
Protein Length	Partial
Image	



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP753442SKV could indicate that this peptide derived from E.coli-expressed Staphylococcus aureus (strain MRSA252) clfB.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP753442SKV could indicate that this peptide derived from E.coli-expressed Staphylococcus aureus (strain MRSA252) clfB.

Description

The region for expressing recombinant Staphylococcus aureus (strain MRSA252) clfB contains amino acids 45-542. The expected molecular weight for the clfB protein is calculated to be 69.8 kDa. The clfB protein was expressed in e.coli. Fusion of the N-terminal 6xHis-SUMO tag into the clfB encoding gene fragment was conducted, allowing for easier detection and purification of the clfB protein in subsequent stages.

Staphylococcus aureus clumping factor B (ClfB) is a microbial surface component recognizing adhesive matrix molecules (MSCRAMM) crucial for bacterial adhesion and biofilm formation. The main function of ClfB involves binding to fibrinogen, facilitating S. aureus colonization on host tissues and medical implants. In infectious disease research, ClfB is a virulence factor and a potential target for therapeutic interventions against S. aureus infections. Investigating ClfB provides insights into bacterial pathogenesis, biofilm formation, and host-pathogen interactions. Additionally, understanding ClfB's role in biofilm-related infections contributes to antimicrobial strategies and the development of novel therapeutics to combat S. aureus-associated diseases, impacting medical and microbiological research.

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.