



Recombinant Staphylococcus aureus Iron-regulated surface determinant protein A (isdA)

Product Code	CSB-EP763937SKW
Relevance	Transfers its hemin to hemin-free IsdC (apo-IsdC) directly probably through the activated holo-IsdA-apo-IsdC complex and driven by the higher affinity of apo-IsdC for the cofactor. The reaction is reversible. Binds transferrin, lactoferrin, heme, hemoglobin, hemin, fetuin, asialofetuin and protein A. Also binds fibronectin and chains B-beta and gamma of fibrinogen. Could play a role in the removal of heme from hemoglobin. The IsdA-mediated iron-acquisition system from transferrin could play only an ancillary role in the iron uptake whereas the siderophore-mediated iron-acquisition system from transferrin seems to play an essential or dominant role. May function as a reservoir for heme. Involved in adherence of S.aureus to human desquamated nasal epithelial cells and is required for nasal colonization. Protects S.aureus against the bactericidal protease activity of apolactoferrin in vitro and confers resistance to bovine lactoferricin. Also IsdA and/or IsdB promote resistance to hydrogen peroxide and killing by neutrophils
Abbreviation	Recombinant Staphylococcus aureus isdA 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.	Q6GA85
Product Type	Recombinant Protein
Immunogen Species	Staphylococcus aureus (strain MSSA476)
Purity	≥ 85% as determined by SDS-PAGE.
Sequence	ATEATNATNNQSTQVSQATSQPINFQVQKDGSSSEKSHMDDYMQHPGKVIKQN NKYYFQTVLNNASFWKEYKFYNANNQELATTVVNDNKKADTRTINVAVEPGYK SLTTKVHIVVPQINYNHRYTTHLEFEKAIPTLADAAKPNNVKPVQPKPAQPKTPT EQTKPVQPKVEKVKPTVTTTTSKVEDNHSTKVVSTDTTKDQTKTQTAHTVKTAQ TAQEONKVQTPVKDVATAKSESNNQAVSDNKSQQTNKVTKHNETPKQASKA KELPKT
Research Area	Others
Source	E.coli
Target Names	isdA
Protein Names	Fur-regulated protein A Staphylococcal transferrin-binding protein A frpA, stbA
Expression Region	47-316aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

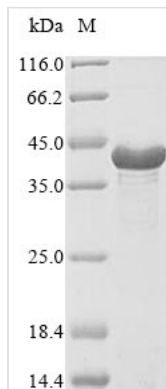


Tag Info N-terminal 10xHis-tagged and C-terminal Myc-tagged

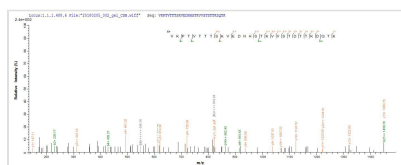
Mol. Weight 35.1 kDa

Protein Length Full Length of Mature Protein

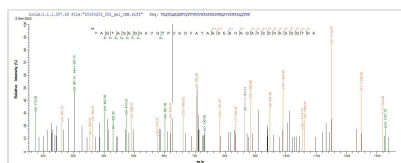
Image



(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-EP763937SKW could indicate that this peptide derived from E.coli-expressed Staphylococcus aureus (strain MSSA476) isdA.



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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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