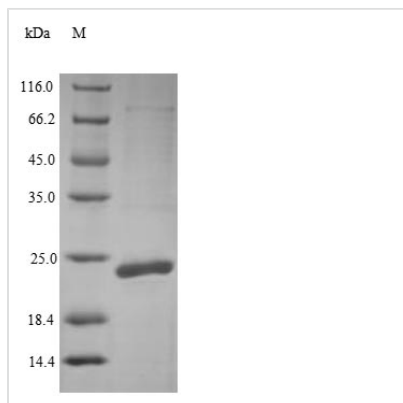


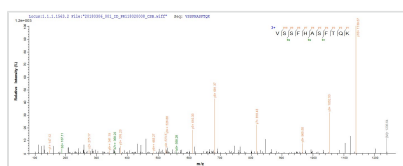


Recombinant Escherichia coli Outer-membrane lipoprotein carrier protein (IolA)

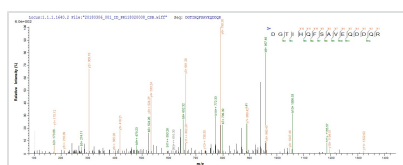
Product Code	CSB-YP419575EJF
Relevance	Participates in the translocation of lipoproteins from the inner mbrane to the outer mbrane. Only forms a complex with a lipoprotein if the residue after the N-terminal Cys is not an aspartate (The Asp acts as a targeting signal to indicate that the lipoprotein should stay in the inner mbrane).
Abbreviation	Recombinant E.coli O9:H4 IolA 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.	A7ZYJ5
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli O9:H4 (strain HS)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	DAASDLKSRLDKVSSFHASFTQKVTDGSGAAVQEGQGDLWVKRPNLFNWHM TQPDESILVSDGKTLWFYNPFVEQATATWLKDATGNTPFMLIARNQSSDWQQ YNIKQNGDDFVLTPKASNGNLKQFTINVGRDGTIHQFSAVEQDDQRSSYQLKS QQNGAVDAAKFTFTPPQGVTVDQQRK
Research Area	Others
Source	Yeast
Target Names	IolA
Protein Names	Recommended name: Outer-membrane lipoprotein carrier protein
Expression Region	22-203aa
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	22.3 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 Yeast host and target protein, the LC-MS/MS Analysis result of CSB-YP419575EJF could indicate that this peptide derived from Yeast-expressed Escherichia coli O9:H4 (strain HS) lolA.



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Description

The expression region of this recombinant Escherichia coli O9:H4 (strain HS) lolA covers amino acids 22-203. This lolA protein is theoretically predicted to have a molecular weight of 22.3 kDa. This lolA protein is produced using yeast expression system. The lolA gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant lolA protein during the following stages.

The Escherichia coli outer-membrane lipoprotein carrier protein LolA, plays a crucial role in the transport of lipoproteins from the inner membrane to the outer membrane through the Sec-dependent pathway. LolA cooperates with another protein, LolB, to facilitate the insertion of lipoproteins into the outer membrane. LolA acts as a periplasmic chaperone, preventing premature interactions between lipoproteins and the outer membrane before their proper insertion. Understanding the function of LolA is essential for unraveling the complex processes involved in the biogenesis of the outer membrane in Escherichia coli.

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.