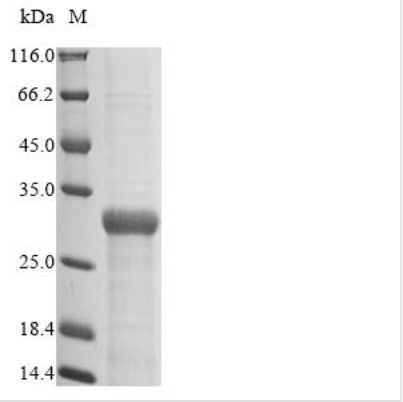
Recombinant Escherichia coli Type 1 fimbrin D-mannose specific adhesin (fimH)

Product Code	CSB-EP362349ENVc7
Relevance	Involved in regulation of length and mediation of adhesion of type 1 fimbriae (but not necessary for the production of fimbriae). Adhesin responsible for the binding to D-mannose. It is laterally positioned at intervals in the structure of the type 1 fimbriae. In order to integrate FimH in the fimbriae FimF and FimG are needed.
Abbreviation	Recombinant E.coli fimH 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.	P08191
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli (strain K12)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	FACKTANGTAIPIGGGSANVYVNLAPVVNVGQNLVVDLSTQIFCHNDYPETITD YVTLQRGSAYGGVLSNFSGTVKYSGSSYPFPTTSETPRVVYNSRTDKPWPVA LYLTPVSSAGGVAIKAGSLIAVLILRQTNNYNSDDFQFVWNIYANNDVVVPTGG CDVSARDVTVTLPDYPGSVPIPLTVYCAKSQNLGYYLSGTTADAGNSIFTNTAS FSPAQGVGVQLTRNGTIIPANNTVSLGAVGTSAVSLGLTANYARTGGQVTAGN VQSIIGVTFVYQ
Research Area	Microbiology
Source	E.coli
Target Names	fimH
Expression Region	22-300aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 6xHis-tagged
Mol. Weight	29.8 kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

The fusion tag C-terminal 6xHis tag gene was added to the gene sequence corresponding to the E.coli of the E.coli fimH protein to form the recombinant DNA. The recombinant DNA was cloned into the expression vector and then transformed into the E.coli for expression. Following purification, the product is the recombinant E.coli fimH protein carrying C-terminal 6xHis tag. The SDS-PAGE assessed the purity of this recombinant fimH protein up to 85%. It had an apparent molecular weight of approximately 30 kDa. This recombinant fimH protein may be used in fimH-mediated microbiology research.

fimH is gene providing instructions for making a protein named Type 1 fimbrin D-mannose specific adhesin (abbreviated fimH) in E.coli and belongs to Fimbrial protein family. FimH can specifically bind to mannose and is the most common adhesion organ for E. coli and other intestinal bacteria. Mannose is common in oligosaccharide chains in mammalian proteins, including urinary plaque at the top of the urinary tract and bladder epithelium, basement membrane adhesion protein, CD48 molecule on rat macrophages, granulocyte membrane antigen, Leukocyte adhesion molecules CD11 and CD18, salivary proteins and glycoproteins in urethral mucus.

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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