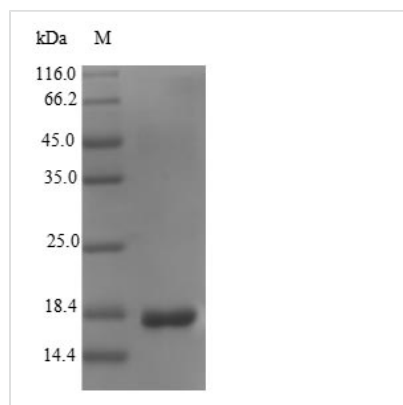




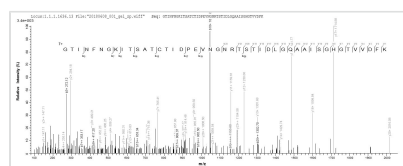
Recombinant Escherichia coli K99 fimbrial protein (fanC)

Product Code	CSB-EP322992ENLe1
Relevance	Fimbriae (also called pili), polar filaments radiating from the surface of the bacterium to a length of 0.5-1.5 micrometers and numbering 100-300 per cell, enable bacteria to colonize the epithelium of specific host organs. FanC is the main component of the K99 fimbriae.
Abbreviation	Recombinant E.coli fanC 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.	P18103
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	NTGTINFNGKITSATCTIDPEVNGNRTSTIDLGQAAISGHGTVVDFKLKPAPGSN DCLAKTNARIDWSGSMNSLGFNNTASGNTAAKGYHMTLRATNVGNGSGGANI NTSFTTAEYTH TSAIQSFNYS AQLKKDDRAPSNGGYKAGVFTTSASFLVTYM
Research Area	others
Source	E.coli
Target Names	fanC
Expression Region	23-181aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag-Free
Mol. Weight	16.5kDa
Protein Length	Full Length of Mature Protein

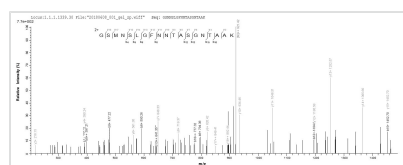
Image



(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-EP322992ENLe1 could indicate that this peptide derived from E.coli-expressed Escherichia coli fanC.



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Description

CUSABIO synthesized the recombinant gene by integrating the Tag-Free sequence into the targeted gene encoding the 23-181aa of the Escherichia coli fanC. The synthesized gene was subsequently cloned into an expression vector. After cloning, the expression vector was introduced into the E.coli for expression. The product was purified to obtain the recombinant Escherichia coli fanC protein carrying Tag-Free. The SDS-PAGE assayed the purity of this recombinant fanC protein greater than 90%. This fanC protein migrated along the gel to a band of about 17 kDa molecular weight.

fanC is a gene providing instruction of making a protein named K99 fimbrial protein in E.coli and belongs to fimbrial protein family. K99 fimbrial protein is the fimbrial type F5 and specifically mediates the attachment of Enterotoxigenic Escherichia coli (ETEC) to mucosal surfaces of calves, lambs, and piglets. ETEC colonize in the intestine by means of specific adhesion factors (fimbriae) and produce enterotoxins resulting in gastric diseases. Production of K99 requires the expression of eight unique proteins: FanA–H. FanC, the major subunit and immunogenic polypeptide of K99 fimbriae is the most highly expressed of the K99 genes.

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.

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