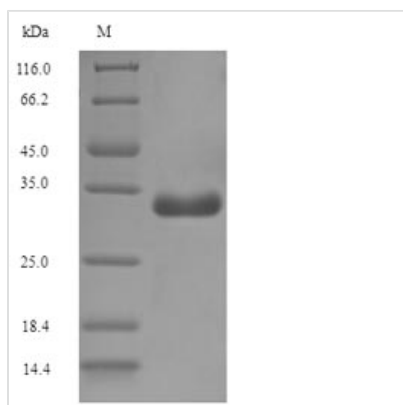


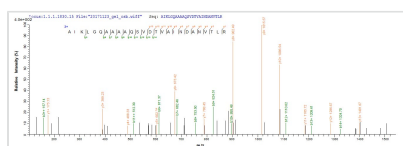


# Recombinant Escherichia coli F17 fimbrial protein (F17a-A)

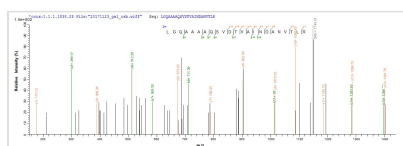
|                          |                                                                                                                                                                                                                                                                                 |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>      | CSB-EP318126ENL                                                                                                                                                                                                                                                                 |
| <b>Relevance</b>         | 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.                                                 |
| <b>Abbreviation</b>      | Recombinant E.coli F17a-A protein                                                                                                                                                                                                                                               |
| <b>Storage</b>           | 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. |
| <b>Uniprot No.</b>       | P11312                                                                                                                                                                                                                                                                          |
| <b>Alias</b>             | F17 fimbrial adhesive antigen F17 pilin                                                                                                                                                                                                                                         |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                             |
| <b>Immunogen Species</b> | Escherichia coli                                                                                                                                                                                                                                                                |
| <b>Purity</b>            | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                     |
| <b>Sequence</b>          | YDGKITFNGKVVDQTCSVTTESKNLTVKLPTVSANSLASSGKVVGGLTPFTILLE<br>GCNTPAVTGAQNVNAYFEPNANTDYTTGNLTNTASSGASNVQIQLLNADGVK<br>AIKLGQAAAAQSVDTVAINDANVTLRYNAYATGVATAGDVTSTVNYTIAYQ                                                                                                          |
| <b>Research Area</b>     | Microbiology                                                                                                                                                                                                                                                                    |
| <b>Source</b>            | E.coli                                                                                                                                                                                                                                                                          |
| <b>Target Names</b>      | F17a-A                                                                                                                                                                                                                                                                          |
| <b>Protein Names</b>     | F17 fimbrial adhesive antigen F17 pilin                                                                                                                                                                                                                                         |
| <b>Expression Region</b> | 22-180aa                                                                                                                                                                                                                                                                        |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                             |
| <b>Tag Info</b>          | N-terminal 6xHis-SUMO-tagged                                                                                                                                                                                                                                                    |
| <b>Mol. Weight</b>       | 32.4 kDa                                                                                                                                                                                                                                                                        |
| <b>Protein Length</b>    | Full Length of Mature Protein                                                                                                                                                                                                                                                   |
| <b>Image</b>             |                                                                                                                                                                                                                                                                                 |



(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-EP318126ENL could indicate that this peptide derived from E.coli-expressed Escherichia coli F17a-A.



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## Description

Amino acids 22-180 constitute the expression domain of recombinant Escherichia coli F17a-A. The theoretical molecular weight of the F17a-A protein is 32.4 kDa. Expression of this F17a-A protein is conducted in e.coli. The N-terminal 6xHis-SUMO tag was smoothly integrated into the coding gene of F17a-A, which enables a simple process of detecting and purifying the F17a-A recombinant protein in the following steps.

The Escherichia coli F17 fimbrial protein (F17a-A) is a structural component of the F17 fimbriae, which are hair-like appendages on the surface of certain pathogenic E. coli strains. These fimbriae play a crucial role in the adhesion of bacteria to host cells, facilitating colonization and the establishment of infection. F17a-A is involved in the assembly and structural integrity of these appendages. The adhesion of E. coli expressing F17 fimbriae to host tissues is a key step in the pathogenesis of infections, particularly those affecting the intestines of animals. Understanding the structure and function of F17a-A can contribute to insights into bacterial virulence mechanisms and may inform the development of strategies to prevent or treat infections caused by F17-positive E. coli strains.

## 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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of lyophilized form is 12 months at -20°C/-80°C.