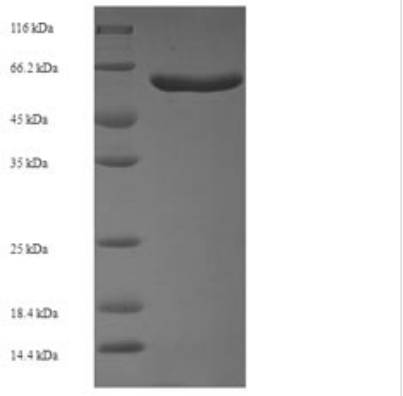
Recombinant Escherichia coli O6:H1 Cell division protein FtsZ (ftsZ)

Product Code	CSB-EP359270EGX
Relevance	Essential cell division protein that forms a contractile ring structure (Z ring) at the future cell division site. The regulation of the ring assbly controls the timing and the location of cell division. One of the functions of the FtsZ ring is to recruit other cell division proteins to the septum to produce a new cell wall between the dividing cells. Binds GTP and shows GTPase activity.
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.	P0A9A7
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli O6:H1 (strain CFT073 / ATCC 700928 / UPEC)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MFEPMELTNDAVIKVIGVGGGGGNAVEHMVRERIEGVEFFAVNTDAQALRKTAVGQTIQIGSGITKGLGAGANPEVGRNAADEDRDALRAALEGADMVFIAAGMGGGTGTGAAPVVAEVAKDLGILTVAVVTKPFNFEGKKRMAFAEQGITELSKHVDSLITIPNDKLLKVLGRGISLLDAFGAANDVLKGAVQGIAELITRPGLMNVDFADVRTVMSEMGYAMMGSGVASGEDRAEEAAEMAISSPLLEDIDLSGARGVLVNITAGFDLRLDEFETVGNTIRAFASDNATVVIGTSLDPDMNDELRVTVVATGIGMDKRPEITLVTNKQVQQPVMDRYQQHGMAPLTQEQKPVAKVVNDNAPQTAKEPDYLDIPAFLRKQAD
Lead Time	3-7 business days
Research Area	Others
Source	E.coli
Gene Names	ftsZ
Protein Names	Recommended name: Cell division protein FtsZ
Expression Region	1-383aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	56.3kDa
Protein Description	Full Length
Image	



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

Description

The expression of the recombinant Escherichia coli O6:H1 (strain CFT073 / ATCC 700928 / UPEC) ftsZ protein involves the construction of a plasmid encoding the Escherichia coli O6:H1 (strain CFT073 / ATCC 700928 / UPEC) ftsZ protein (1-383aa). This resulting plasmid is introduced into e.coli cells. Positive e.coli cells are selected and cultured for the protein expression. The protein is fused with a N-terminal 6xHis-SUMO tag. After that, cultured cells are lysed. The subsequent step includes purifying the recombinant Escherichia coli O6:H1 (strain CFT073 / ATCC 700928 / UPEC) ftsZ protein through affinity purification from the cell lysate and assessing the purity of the protein via SDS-PAGE. The purity of the recombinant ftsZ protein is greater than 90%.

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.