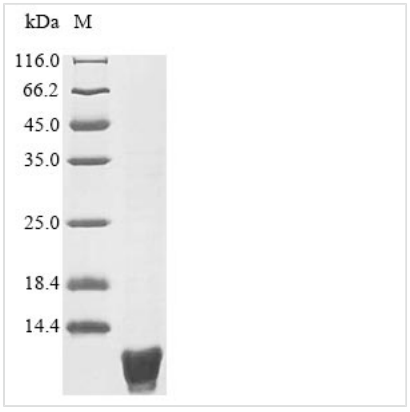
Recombinant Escherichia coli Translational regulator CsrA (csrA)

Product Code	CSB-EP543019ENTe1
Relevance	Affects glycogen biosynthesis, gluconeogenesis, cell size and surface properties. Regulates glycogen synthesis under both aerobic and anaerobic conditions. Seems to accelerate the degradation of glg gene transcripts, potentially through selective RNA binding. Acts to inhibit interaction between the LetD protein and the A subunit of DNA gyrase. Also required for motility and flagellum biosynthesis through the post-transcriptional activation of flhDC expression. This involves binding to and stabilization of the flhDC message by CsrA.
Abbreviation	Recombinant E.coli csrA 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.	B1XCM4
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli (strain K12 / DH10B)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MLILTRRVGETLMIGDEVTVTVLGVKGNQVRIGVNAPKEVSVHREEIYQRIQAE KSQQSSY
Research Area	Others
Source	E.coli
Target Names	csrA
Expression Region	1-61aa
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	6.9 kDa
Protein Length	Full Length
Image	



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

Description

The recombinant E.coli csrA protein is encoded by the gene of csrA (1-61aa). The gene of csrA was cloned in a system (E.coli) that supported the expression of csrA and translation of messenger RNA. Modification of csrA by recombinant DNA technology could lead to the expression of the target protein. The purity is 85% determined by SDS-PAGE.

CsrA is a protein coding gene that encodes Translational regulator CsrA. According to some research, CsrA may have the following features.
Global regulation of small RNA binding protein CsrA and non-coding RNA molecule CsrB. Post-transcriptional global regulation of CsrA in bacteria. Under the influence of Escherichia coli global regulator CsrA, the formation and spread of biofilms. The RNA molecule CsrB binds to the global regulatory protein CsrA and antagonizes its activity in E. coli. CsrA regulates the translation of the carbon starvation gene cstA in E. coli by blocking ribosome access to cstA transcripts. The regulatory loops of E. coli CsrA/CsrB and BarA/UvrY systems. Identification and molecular characteristics of the polymorphic gene csrA in Escherichia coli, which affects glycogen biosynthesis, glucose production, cell size and surface characteristics.

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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