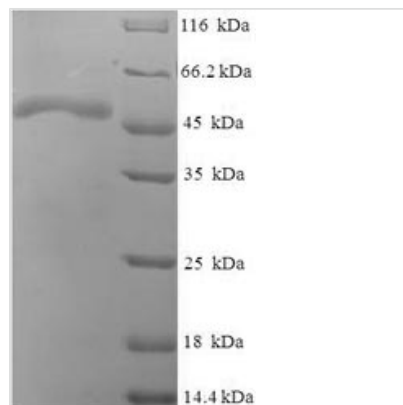




Recombinant Escherichia coli Phosphoserine phosphatase (serB)

Product Code	CSB-EP018938ENV
Relevance	Catalyzes the dephosphorylation of phosphoserine (P-Ser). Also catalyzes the hydrolysis of phosphothreonine (P-Thr).
Abbreviation	Recombinant E.coli serB 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.	P0AGB0
Alias	O-phosphoserine phosphohydrolase
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli (strain K12)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MPNITWCDLPEDVSLWPGPLPLSLSGDEVMPLDYHAGRSGWLLYGRGLDKQR LTQYQSKLGAAMVIVAAWCVEDYQVIRLAGSLTARATRLAHEAQLDVAPLGKIP HLRTPGLLVMDMDSTAIQIECIDEIAKLAGTGEMVAEVTERRAMRGELDFTASLR SRVATLKGADANILQQVRENPLMPGLTQLVLKLETLGWKVAIASGGFTFFAEY LRDKLRLTAVVANELEIMDGKFTGNVIGDIVDAQYKAKTLTRLAQEYEIPLAQTV AIGDGANDLPMIKAAGLGIAYHAKPKVNEKAEVTIRHADLMGVFCILSGSLNQK
Research Area	Others
Source	E.coli
Target Names	serB
Expression Region	1-322aa
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	51.0kDa
Protein Length	Full Length
Image	



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

Description

This Escherichia coli serB recombinant protein was produced in E.coli, where the gene sequence encoding Escherichia coli serB (1-322aa) was expressed with the N-terminal 6xHis-SUMO tag. The purity of this serB protein was greater than 90% by SDS-PAGE.

SerB encodes the SerB enzyme. In E. coli and other bacteria, the expression of the serB gene is regulated by various factors to ensure the synthesis of an adequate amount of serine under appropriate conditions. SerB is one of the key enzymes in the serine biosynthesis pathway. Serine is an essential amino acid crucial for the survival of organisms as it is one of the building blocks for protein synthesis. The role of the SerB enzyme is to hydrolyze the product of serine phosphorylation (3-phosphoserine) into serine, thereby providing the organism with the required serine. SerB enzyme also has importance in the field of genetic engineering. It can be used to regulate the serine biosynthesis pathway, thereby altering the serine synthesis capability of bacteria or other microorganisms.

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.

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.