



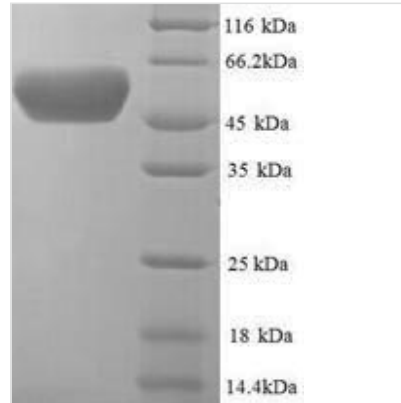
# Recombinant Escherichia coli Periplasmic serine endoprotease DegP (degP)

|                          |   |
|--------------------------|---|
| <b>Product Code</b>      | CSB-YP314631ENV   |
| <b>Relevance</b>         | DegP acts as a chaperone at low temperatures but switches to a peptidase (heat shock protein) at higher temperatures. It degrades transiently denatured and unfolded proteins which accumulate in the periplasm following heat shock or other stress conditions. DegP is efficient with Val-Xaa and Ile-Xaa peptide bonds, suggesting a preference for beta-branched side chain amino acids. Only unfolded proteins devoid of disulfide bonds appear capable of being cleaved, thereby preventing non-specific proteolysis of folded proteins. Its proteolytic activity is essential for the survival of cells at elevated temperatures. It can degrade IciA, ada, casein, globin and PapA. DegP shares specificity with DegQ. DegP is also involved in the biogenesis of partially folded outer-membrane proteins (OMP). |
| <b>Abbreviation</b>      | Recombinant E.coli degP 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>       | P0C0V0  |
| <b>Alias</b>             | Heat shock protein DegP<br>Protease Do  |
| <b>Product Type</b>      | Recombinant Protein   |
| <b>Immunogen Species</b> | Escherichia coli (strain K12)   |
| <b>Purity</b>            | ≥ 90% as determined by SDS-PAGE.  |
| <b>Sequence</b>          | AETSSATTAQQMPSLAPMLEKVMPSVVSINVEGSTTVNTPRMPRNFQQFFGD<br>DSPFCQEGSPFQSSPFCQGGQGGNGGGQQQKFMALGSGVIIDADKGYVVTN<br>NHVVDNATVIKQVQLSDGRKFDKMGKDPKSDIALIQIQNPKNLTAIKMADSDA<br>LRVGDYTVAINPFGGLGETVTSGIVSALGRSGLNAENYENFIQTDAAINRGN<br>S GALVNLNGELIGINTAILAPDGGNIGIGFAIPSNMVKNLTSQMVEYGGV<br>KRGEL GIMGTELNSELAKAMKVDAQRGAFVSQVLPNSSAAKAGIKAGDVITSL<br>NGKPIS SFAALRAQVGTMPVGSKLTLLGLLRDQKQVNVNLELQQSSQNV<br>DSSSIFNGIE GAEMSNKGGKQGVVNNVKTGTPAAQIGLKKGDVIIGANQQAV<br>KNIAELRKVL DSKPSVLALNIQRGDSTIYLLMQ  |
| <b>Research Area</b>     | Others  |
| <b>Source</b>            | Yeast   |
| <b>Target Names</b>      | degP  |
| <b>Protein Names</b>     | Recommended name: Periplasmic serine endoprotease DegP EC= 3.4.21.107<br>Alternative name(s): Heat shock protein DegP<br>Protease Do  |
| <b>Expression Region</b> | 27-474aa  |
| <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-tagged       |
| <b>Mol. Weight</b>    | 48.8kDa                       |
| <b>Protein Length</b> | Full Length of Mature Protein |

**Image**

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

**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.