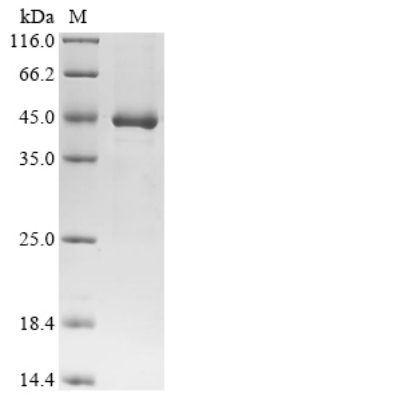
Recombinant Unknown prokaryotic organism Phosphate-binding protein

Product Code	CSB-EP306384UAH
Abbreviation	Recombinant Unknown prokaryotic organism Phosphate-binding 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.	P85173
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Unknown prokaryotic organism
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	DINGGGATLPQKLYLTPDVLTAGFAPYIGVGSGKGKIAFLENKYNQFGTDTTKN VHWAGSDSKLTATELATYAADKEPGWGKLIQVPSVATSVAIPFRKAGANAVDL SVKELCGVFSGRIADWSGITGAGRSGPIQVVYRAESSGTTELFTRFLNAKCTT EPGTFAVTTTFANSYSLGLTPLAGAVAATGSDGVMAALNDTTVAEGRITYISPD FAAPTLAGLDDATKVARVGKGVVNGVAVEGKSPAAANVSAAISVVPLPAAADR GNPDVWVPVFGATTGGGVVAYPDSGYPILGFTNLIFSQCYANATQTGQVRDF FTKHYGTSANNDAAIEANAFVPLPSNWKAAVRASFLTASNALSIGNTNVCNGK GRPQ
Research Area	Others
Source	E.coli
Target Names	N/A
Expression Region	1-376aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	46.0 kDa
Protein Length	Full Length
Image	



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

Description

In order to produce the recombinant unknown prokaryotic organism phosphate-binding protein, the gene fragment encompassing the full-length protein (amino acids 1-376) and an N-terminal 10xHis-tag and C-terminal Myc-tag is cloned into a suitable expression vector. The cloning process involves inserting the gene fragment downstream of the appropriate promoter and regulatory elements. The resulting expression construct is then introduced into E. coli host cells through a transformation method. The transformed cells are selected to confirm the presence of the recombinant plasmid. Large-scale culture of the transformed E. coli cells is subsequently established in a growth medium optimized for protein expression. The presence of an N-terminal 10xHis-tag and C-terminal Myc-tag enables easy purification and detection of the recombinant phosphate-binding protein. Following cell lysis, the recombinant phosphate-binding protein is extracted and purified from the cell lysate. The purity of the recombinant phosphate-binding protein is evaluated through SDS-PAGE analysis, demonstrating a purity level of up to 90%. On the gel, the purified protein appears as a distinct band with an approximate molecular weight of 45 kDa.

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.
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