





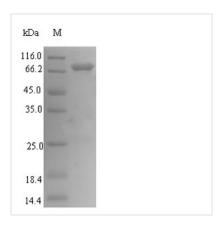
## Recombinant Escherichia coli Exopolyphosphatase (ppx)

<b>Product Code</b>	CSB-EP365319ENV
Relevance	Degradation of inorganic polyphosphates. Orthophosphate is released progressively from the ends of polyphosphate of circa 500 residues long, while chains of circa 15 residues compete poorly with polyphosphate as substrate.
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.	P0AFL6
Alias	Metaphosphatase
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli (strain K12)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	PIHDKSPRPQEFAAVDLGSNSFHMVIARVVDGAMQIIGRLKQRVHLADGLGPD NMLSEEAMTRGLNCLSLFAERLQGFSPASVCIVGTHTLRQALNATDFLKRAEK VIPYPIEIISGNEEARLIFMGVEHTQPEKGRKLVIDIGGGSTELVIGENFEPILVES RRMGCVSFAQLYFPGGVINKENFQRARMAAAQKLETLTWQFRIQGWNVAMG ASGTIKAAHEVLMEMGEKDGIITPERLEKLVKEVLRHRNFASLSLPGLSEERKT VFVPGLAILCGVFDALAIRELRLSDGALREGVLYEMEGRFRHQDVRSRTASSL ANQYHIDSEQARRVLDTTMQMYEQWREQQPKLAHPQLEALLRWAAMLHEVG LNINHSGLHRHSAYILQNSDLPGFNQEQQLMMATLVRYHRKAIKLDDLPRFTLF KKKQFLPLIQLLRLGVLLNNQRQATTTPPTLTLITDDSHWTLRFPHDWFSQNAL VLLDLEKEQEYWEGVAGWRLKIEEESTPEIAA
Lead Time	3-7 business days
Research Area	Microbiology
Source	E.coli
Gene Names	ррх
Expression Region	2-513aa
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	74.0kDa
<b>Protein Description</b>	Full Length of Mature Protein
Image	

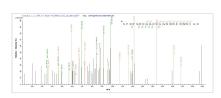




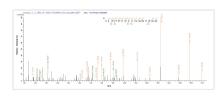




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP365319ENV could indicate that this peptide derived from E.coli-expressed Escherichia coli (strain K12) ppx.



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## **Description**

The DNA fragment encoding the 2-513aa of the E.coli ppx protein was fused with N-terminal 6xHis-SUMO tag gene and then was inserted into the expression vector, which was subsequently transformed into the E.coli for expression. The resulting product was further purified to obtain the recombinant E.coli ppx protein. The purity of this recombinant ppx protein is greater than 90% assessed by Bandscan software analysis combined with SDS-PAGE. This recombinant ppx protein showed a band on the gel with a molecular weight of approximately 68-91 kDa.

ppx is a gene encoding a protein named Exopolyphosphatase and belongs GppA/Ppx family. Exopolyphosphatase (PPX), a phosphatase enzyme, was discovered by the lab of Nobel laureate Arthur Kornberg in 1993. The structure of PPX is characterized by the actin-like ATPase domain. This protein catalyzes and releases orthophosphate processively from the ends of the polyP chain which is a polymer composed of a few to hundreds of phosphate residues supporting cell survival in the stationary phase. This enzyme plays important role in the bacterial stringent response.

## 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.