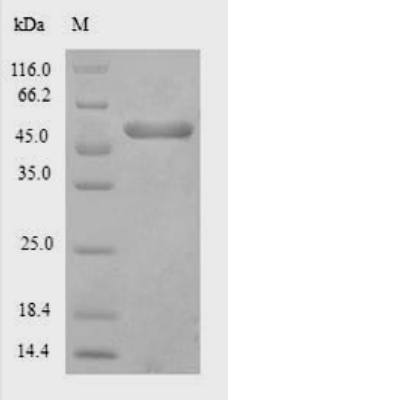
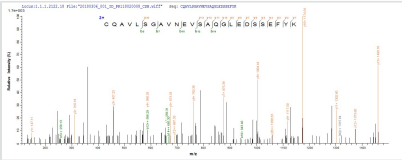
Recombinant Saccharomyces cerevisiae Polyphosphatase (PPX1)

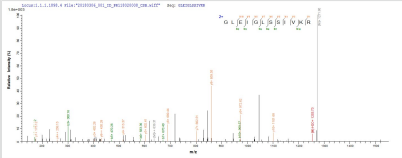
Product Code	CSB-EP334459SVG
Relevance	Degradation of inorganic polyphosphates.
Abbreviation	Recombinant Saccharomyces cerevisiae PPX1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, 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.	P38698
Product Type	Recombinant Proteins
Immunogen Species	Saccharomyces cerevisiae (strain ATCC 204508 / S288c) (Baker's yeast)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MSPLRKTVPEFLAHLKSLPISKIASNDVLTICVGNESADMDSIASAITYSYCQYIY NEGTYSEEKKKGSFIVPIIDIPREDLSLRRDVMYVLEKLKIKEEELFFIEDLKSLK QNVSQGTELNSYLVDNNDTPKNLKNYIDNVVGIIDHHFDLQKHLDAEPRIVKVS GSCSSLVFNYWYEKLQGDREVVMNIAPLLMGAILIDTSNMRRKVEESDKLAIER CQAVLSGAVNEVSAQGLEDSSEFYKEIKSRKNDIKGFSVSDILKKDYKQFNFQ GKGHKGLEIGLSSIVKRMSWLFNEHGGEADFVNQCRRFQAERGLDVLVLLTS WRKAGDSHRELVILGDSNVVRELIERVSDKLQLQLFGGNLDGGVAMFKQLNV EATRKQVVPYLEEAYSNLEE
Research Area	Others
Source	E.coli
Target Names	PPX1
Expression Region	1-397aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	49.1kDa
Protein Length	Full Length
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-EP334459SVG could indicate that this peptide derived from E.coli-expressed Saccharomyces cerevisiae (strain ATCC 204508 / S288c) (Baker



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Description

E.coli-expressed Recombinant Saccharomyces cerevisiae Exopolyphosphatase (PPX1) is a full-length protein carrying an N-terminal 6xHis-tag. It contains 397 amino acids and has a calculated molecular mass of 49.1 kDa. Its purity was determined by SDS-PAGE and reached up to 90%. The purified PPX1 migrated on the SDS–PAGE at a molecular weight of about 50 kDa. It was also identified and quantified using LC-MS/MS. This recombinant PPX1 protein may be used to immunize animals to produce specific antibodies or in the studies of PPX1-participating inorganic polyphosphate hydrolysis. In-stock PPX1 proteins are available.

Exopolyphosphatase PPX1 is a phosphatase enzyme that catalyzes the hydrolysis of inorganic polyphosphate (polyP) and contributes to the maintenance of the polyP dynamic balance in the cells. The polyP is believed to exert a regulatory role in the transition to bacterial dormancy. Seema M. Thayil etc. demonstrated that PPX1 is required for M. tuberculosis (Mtb) growth and persistence in necrotic lung lesions, which may suggest a way to shorten latent tuberculosis (TB) treatment by targeting “persister” bacillia through the repression of a small molecule inhibitor to PPX1. In addition to degrading polyP, PPX1 has been implicated directly in bacterial virulence.

Shelf Life

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