

eptA Protein, E.coli strain K12 (Cell-Free, His)

Cat. No.:	HY-P702271
Synonyms:	Phosphoethanolamine transferase EptA; Polymyxin resistance protein PmrC
Species:	E.coli
Source:	E. coli Cell-free
Accession:	P30845 (M1-E547)
Gene ID:	75169632
Molecular Weight:	64.5 kDa

PROPERTIES

AA Sequence	<pre> MLKRL LKRPS LNLLAWLLLA AFYISICLNI AFFKQVLQAL PLDSLHNVLV FLSMPVVAFS VINIVLTLSS FLWLNRP LAC LFI L VGAAAQ YFIMTYGIVI DRSMIANIID TTPAESYALM TPQMLLTLGF SGVLAALIAC WIKIKPATSR LRSVLF RGAN ILVSVLLILL VAALFYKDYA SLFRNKNELV KSLSPSNSIV ASWSWYSHQR LANLPLVRIG EDAHRNPLMQ NEKRKNLTIL IVGETSRAEN FSLNGYPRET NPRLAKDNVV YFPNTASCGT ATAVSVPCMF SDMPREHYKE ELAQHQEGVL DIIQRAGINV LWNDNDGGCK GACDRVPHQN VTALNLPDQC INGECYDEVL FHGLEEYINN LQGDGVI VLH TIGSHGPTY Y NRYPPQFRKF TPTCDTNEIQ TCTKEQLVNT YDNTLVYVDY IVDKAINLLK EHQDKFTTSL VYLSDHGESL GENGIYLHGL PYAIA PDSQK QVPMLLWLSE DYQKRYQVDQ NCLQKQAQTQ HYSQDNLFST LLGLTG VETK YYQAADDILQ TCRRVSE </pre>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

EptA is an enzyme that catalyzes the addition of a phosphoethanolamine moiety to lipid A, a component of lipopolysaccharides (LPS) in bacterial cell membranes. This modification is crucial for conferring resistance to polymyxin, an antibiotic that targets the bacterial outer membrane. The phosphoethanolamine addition to lipid A modifies its structure, contributing to bacterial defense mechanisms against polymyxin-induced membrane disruption. EptA has been identified as part of a complex, with one known component being the ZipA-EptA fusion, along with an unidentified 24 kDa protein. This suggests that EptA's function is intricately linked to other proteins in the complex, possibly forming a coordinated system involved in bacterial membrane integrity and resistance to antimicrobial agents.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA