Recombinant e.coli phrB protein

Catalog Number: ATGP2044

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-472aa

UniProt No.
P00914

NCBI Accession No.
NP_415236.1

Alternative Names
Deoxyribodipyrimidine photolyase, ECK0697, JW0698, phrB

PRODUCT SPECIFICATION

Molecular Weight
56.1 kDa (495aa)

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 50% glycerol, 1mM DTT

Purity
> 90% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
Deoxyribodipyrimidine photolyase, also known as phrB, is involved in repair of uV radiation-induced DNA damage. This protein catalyzes the light-dependent monomerization (300-600 nm) of cyclobutyl pyrimidine dimers (in cis-syn configuration), which are formed between adjacent bases on the same DNA strand upon exposure to ultraviolet radiation. Recombinant E. coli phrB protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Recombinant e.coli phrB protein

Catalog Number: ATGP2044

Amino acid Sequence

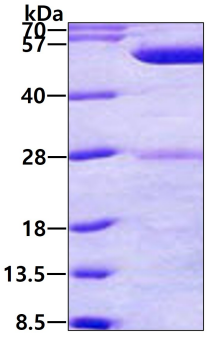
<MGSSHHHHHH SSGLVPRGSH MGS>MTTHLVW FRQDLRLHDN LALAAACRNS SARVLALYIA TPRQWATHNM SPRQAELINA QLNGLQIALA EKGIPLLFRE VDDFVASVEI VKQVCAENSV THLFYNYQYE VNERARDVEV ERALRNVVCE GFDDSVILPP GAVMTGNHEM YKVFTPFKNA WLKRLREGMP ECVAAPKVRS SGSIEPSPSI TLNYPRQSFD TAHFPVEEKA AIAQLRQFCQ NGAGEYEQQR DFPAVEGTSR LSASLATGGL SPRQCLHRLL AEQPQALDGG AGSVWLNELI WREFYRHLIT YHPSLCKHRP FIAWTDRVQW QSNPAHLQAW QEGKTGYPIV DAAMRQLNST GWMHNRLRMI TASFLVKDLL IDWREGERYF MSQLIDGDLA ANNGGWQWAA STGTDAAPYF RIFNPTTQGE KFDHEGEFIR QWLPELRDVP GKVVHEPWKW AQKAGVTLDY PQPIVEHKEA RVQTLAAYEA ARKGK

General References

Byrdin M., et al. (2003) Proc. Natl. Acad. Sci. u.S.A. 100:8676-8681
Weber S., et al. (2005) Biochim. Biophys. Acta. 1707:1-23

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.