Recombinant E.coli mug protein

Catalog Number: ATGP2057

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-168aa

UniProt No.
P0A9H1

NCBI Accession No.
NP_417540

Alternative Names
G/u mismatch-specific DNA glycosylase, xanthine DNA glycosylase, dug, ECK3058, JW3040, ygjF

PRODUCT SPECIFICATION

Molecular Weight
21.1 kDa (191aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 20% glycerol

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
G/u mismatch-specific DNA glycosylase, xanthine DNA glycosylase, also known as mug, belongs to the TDG/mug DNA glycosylase family. It has been proposed that the Mug protein excises 3, N4-ethenocytosine and removes the uracil base from mismatches in the order of u:G>u:A, although the biological role remains unclear. The enzyme uracil-N-Glycosylase removes uracil from the DNA leaving an AP site. It is capable of hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of the DNA and the mispaired base. The complementary strand guanine functions in substrate recognition. Recombinant E. coli mug protein, fused to His-

Recombinant E.coli mug protein

Catalog Number: ATGP2057

tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

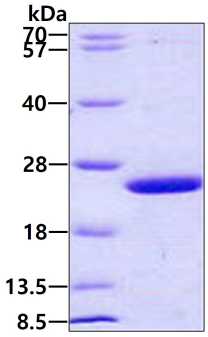
<MGSSHHHHHH SSGLVPRGSH MGS>MVEDILA PGLRVVFCGI NPGLSSAGTG FPFAHPANRF WKVIYQAGFT DRQLKPQEAQ HLLDYRCGVT KLVDRPTVQA NEVSKQELHA GGRKLIEKIE DYQPQALAIL GKQAYEQGFS QRGAQWGKQT LTIGSTQIWV LPNPSGLSRV SLEKLVEAYR ELDQALVVRG R

General References

Lee HW., et al. (2010) J Biol Chem. 285(53):41483-90
Gallinari P., et al. (1996) Nature. 383(6602):735-8.

DATA

SDS-PAGE



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