

Recombinant e.coli mutY protein

Catalog Number: ATGP2056

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-350aa

UniProt No.

P17802

NCBI Accession No.

NP_417436

Alternative Names

Adenine DNA glycosylase, ECK2956, JW2928, mica, mutB

PRODUCT SPECIFICATION

Molecular Weight

41.5 kDa (373aa) confirmed by MALDI-TOF

Concentration

0.25mg/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

Adenine DNA glycosylase, also known as mutY, is an adenine DNA glycosylase active on DNA substrates containing A/G, A/8-oxoG, or A/C mismatches and also has a weak guanine glycosylase activity on G/8-oxoG-containing DNA. mutY is crucial for the avoidance of mutations resulting from oxidative DNA damage. Increasing levels of mutY in A549 cells exposed to oxygen and infrared radiation leads to improvements in cell survival. It is abundant in neurons where mitochondrial genomes exposed to reactive oxygen species (ROS) that damage DNA must maintain integrity over the entire mammalian life span. Recombinant E. coli mutY protein, fused to His-tag

Recombinant e.coli mutY protein

Catalog Number: ATGP2056

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

Amino acid Sequence

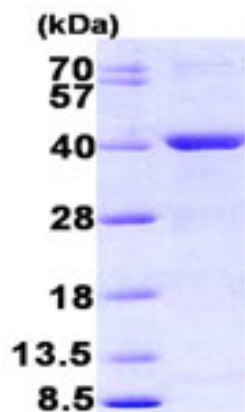
MGSSHHHHHH SSSLVPRGSH MGSMQASQFS AQVLDWYDKY GRKTLPWQID KTPYKWWLSE VMLQQTQVAT
VIPYFERFMA RFPTVTDLAN APLDEVLHLW TGLGYYARAR NLHKAAQQA TLHGKFPET FEEVAALPGV GRSTAGAILS
LSLGKHPIL DGNVSRVLAR CYAVSGWPGK KEVENKLWLS SEQVTPAVGV ERFNQAMMDL GAMICTRSKP KCSLCPLQNG
CIAAANNSWA LYPGKKPKQT LPERTGYFLL LQHEDEVLLA QRPPSGLWGG LYCFPQFADE ESLRQWLAQR QIAADNLTQL
TAFRHTFSHF HLDIVPMWLP VSSFTGCMDE GNALWYNLAQ PPSVGLAAPV ERLQLLRTG APV

General References

Lee H M., et al. (2004) J Neurochem. 88:394-400
Tao H., et al. (2004) Carcinogenesis. 25:1859-1866.

DATA

SDS-PAGE



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

15% SDS-PAGE (3ug)