

AR50880PU-N**mutY (1-350, His-tag) - Purified****Alternate names:**

Adenine DNA glycosylase, ECK2956, JW2928, mica, mutB

Quantity:

50 µg

Concentration:

0.25 mg/ml (determined by Bradford assay)

Background:

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.

Uniprot ID:[P17802](#)**NCBI:**[NP_417436](#)**GeneID:**[947447](#)**Source:**

E. coli

Format:**State:** Liquid purified protein**Purity:** >90% by SDS - PAGE**Buffer System:** 20 mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 20% glycerol**Description:**

Recombinant E.coli mutY protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MGSMQASQFS AQVLDWYDKY GRKTLPWQID KTPYKVVWLS
VMLQQTQVAT VIPYFERFMA RFPTVTDLAN APLDEVLHLW TGLGYARAR NLHKAQQA
TLHGGKFPET FEEVAALPGV GRSTAGAILS LSLGKHFPII DGNVKRVLAR CYAVSGWPGK
KEVENKLWSL SEQVTPAVGV ERFNQAMMDL GAMICTRSKP KCSLCPLQNG CIAAANNSWA
LYPGKKPKQT LPERTGYFLL LQHEDEVLLA QRPPSGLWGG LYCFPQFADE ESLRQWLAQR
QIAADNLTQL TAFRHTFSHF HLDIVPMWLP VSSFTGCMDE GNALWYNLAQ PPSVGLAAPV
ERLLQQLRTG APV

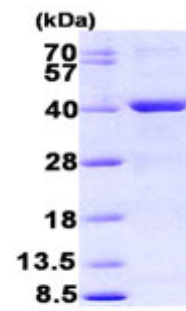
Molecular weight: 41.5 kDa (373aa) confirmed by MALDI-TOF**Storage:**

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

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

Pictures:



15% SDS-PAGE (3ug)