

Active Recombinant E.coli mutM

Cat. No. mutM-52E **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A recombinant E. coli strain carrying the cloned fpg gene.
Species	E.coli
Source	E.coli
Description	Fpg (also known as Formamidopyrimidine DNA glycosylase, Mut M, FAPY DNA Glycosylase, and 8-oxoguanine DNA glycosylase) participates in the base-excision (BER) pathway of DNA repair enzymes and acts both as a N-glycosylase and an AP-lyase. The N-glycosylase activity releases damaged purines from double stranded DNA, generating an apurinic/apyrimidinic (AP site). The AP-lyase activity cleaves both the 3' and 5' phosphodiester bonds at the AP site, producing a 1 base gap in the DNA and 3' and 5' phosphate termini. Bases recognized and removed by Fpg include 7, 8-dihydro-8-oxoguanine (8-oxoguanine), 8-oxoadenine, fapy-guanine, methy-fapy-guanine, fapy-adenine, aflatoxin B1-fapy-guanine, 5-hydroxy-cytosine and 5-hydroxy-uracil.
Bio-activity	20,513 U/mg
Molecular Mass	30,290 Daltons
Purity	>99% by SDS-PAGE
Unit Definition	One unit is defined as the amount of enzyme required to cleave 1 pmol of a 34mer

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

oligo-nucleotide duplex containing an 8-oxoguanine base paired with a cysteine in 1 hour at 37°C in a total reaction volume of 10µl in reaction buffer.

Storage -25 to -15°C

Concentration 8,000 U/ml

Storage Buffer Supplied in: 20mM Tris-HCL, 50 mM KCl, 1mM DTT, 0.1mM EDTA, 50% glycerol pH 8.0 @ 25°C. Supplied with: 10X Yellow Buffer: 100mM Bis-Tris Propane, 100mM MgCl₂, 10mM DTT pH 7.0 @ 25°C.

GENE INFORMATION

Gene Name [mutM](#) formamidopyrimidine/5-formyluracil/ 5-hydroxymethyluracil DNA glycosylase [Escherichia coli str. K-12 substr. MG1655]

Official Symbol mutM

Synonyms mutM; formamidopyrimidine/5-formyluracil/ 5-hydroxymethyluracil DNA glycosylase; ECK3625; fpg; JW3610; NP_418092.1; EC 3.2.2.23; formamidopyrimidine DNA glycosylase

Gene ID [946765](#)

Protein Refseq [NP_418092](#)

Pathway Base excision repair

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA