Creative Enzymes®

G/U Mismatch-Specific DNA Glycosylase from E.coli, Recombinant

Cat. No. NATE-1911

Lot. No. (See product label)

Introduction

Description G/U mismatch-specific DNA glycosylase (mug) is a part of the TDG/mug DNA glycosylase family. Mug is necessary for DNA damage lesion repair in stationary-phase cells. Mug protein removes three N4-ethenocytosine and takes away s the uracil base from mismatches in the order of U:G>U:A. The enzyme Uracil-N-Glycosylase removes uracil from the DNA leaving an AP position. Mug is also able to hydrolyzing the carbon-nitrogen bond among the sugar-phosphate backbone of the DNA and the mispaired base. The complementary strand guanine plays a role in substrate recognition.

Synonyms Xanthine DNA glycosylase; dug; ECK3058; JW3040; ygjF; G/U mismatch-specific DNA glycosylase; Double-strand-specific uracil glycosylase; Mismatch-specific uracil DNA-glycosylase; mug

Product Information

Species E.coli

Source E.coli

Form Sterile Filtered colorless solution.

Formulation The MUG solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.1M NaCl and 20% glycerol.

EC Number EC 3.2.2.28

Molecular Weight 21.1 kDa

Purity Greater than 90% as determined by SDS-PAGE.

Storage and Shipping Information

Stability Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.