

32-2571: MUG Recombinant Protein

Alternative Name xanthine DNA glycosylase,dug,ECK3058,JW3040,ygjF,G/U mismatch-specific DNA glycosylase,Double-strand-specific uracil glycosylase,Mismatch-specific uracil DNA-glycosylase,mug.

Description

Source : E.coli. MUG Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 191 amino acids (1-168) and having a molecular mass of 21.1kDa. MUG is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. 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 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.

Product Info

Amount :	10 µg
Purification :	Greater than 90% as determined by SDS-PAGE.
Content :	The MUG solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.1M NaCl and 20% glycerol.
Storage condition :	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.
Amino Acid :	MGSSHHHHHH SSSLVPRGSH MGSMVEDILA PGLRVVFCGI NPGLSSAGTG PFAHPANRF WKVIYQAGFT DRQLKPQEAQ HLLDYRCGVT KLVDRPTVQA NEVSKQELHA GGRKLIKIE DYQPQALAIL GKQAYEQGFS QRGAQWGKQT LTIGSTQIWW LPNPSGLSRV SLEKLVEAYR ELDQALVVRG R.