

## 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 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.

### Product Info

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

