

### 32-7133: Recombinant E. coli G/U Mismatch-Specific DNA Glycosylase/Mug (C-6His)(Discontinued)

**Gene :** mug  
**Gene ID :** 947560  
**Uniprot ID :** P0A9H1

#### Description

Source: E.coli.  
MW :19.7kD.

Recombinant E.coli Mug is produced by our E.coli expression system and the target gene encoding Met1-Arg168 is expressed with a 6His tag at the C-terminus. E. coli Mismatch Uracil DNA Glycosylase (Mug protein) is an 18 kDa constitutively expressed protein which belongs to the TDG/mug DNA glycosylase family. It has been proposed that the Mug protein excises 3,N4-ethenocytosine and removes the uracil base from mismatches in the order of U:G>U:A, although the biological role remains unclear. Uracil bases in DNA can arise from deamination of cytosine giving rise to increased spontaneous mutations. The enzyme Uracil-N-Glycosylase removes uracil from the DNA leaving an AP site. It is capable of hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of the DNA and the mispaired base. The complementary strand guanine functions in substrate recognition. It is required for DNA damage lesion repair in stationary-phase cells.

#### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 2.5mM beta-ME, 1mM PMSF, 50% Glycerol, pH 8.0.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MVEDILAPGLRVVFCGINPGLSSAGTGFPFAHPANRFWKVIYQAGFTDRQLKPQEAQHLLDYRCGV  
TKLVDRPTVQANEVSKQELHAGGRKLIKIEDYQPQALAILGKQAYEQGFSQRGAQWGKQTLTIGS  
TQIWVLPNPSGLSRVSLEKLVEAYRELDQALVVRGRLEHHHHHHH

#### Application Note

**Endotoxin :** Less than 0.1 ng/Âµg (1 IEU/Âµg) as determined by LAL test.