**Product Information**

**Uracil-DNA Glycosylase from *Escherichia coli*** recombinant, expressed in *Escherichia coli*

Catalog Number U6760  
Storage temperature –20 °C

**Synonyms**: UDG, UND, DGU, HIGM4, UNG1, UNG15

**Product Description**  
Uracil-N-glycosylase (UNG) belongs to the family of highly conserved Uracil DNA glycosylases (UDGs) and is present in a large number of eukaryotes, bacteria, and DNA viruses.  

UNG removes uracil resulting from deamination of cytosine or replicative incorporation of dUMP instead of dTMP by cleaving the N-glycosylic bond between uracil and deoxyribose, leaving an apyrimidinic site in uracil-containing single or double-stranded DNA. The removal of uracil by UDG is accomplished by a base excision repair pathway.

The human *UNG* gene encodes two isoforms: hUNG1 isoform (304 amino acids) and hUNG2 isoform (313 amino acids). hUNG1 is widely expressed with the highest expression in skeletal muscle and contains a mitochondrial leader peptide at the N-terminus. hUNG2 is a nuclear protein highly expressed in tissues containing proliferating cells. Defects in the *UNG* gene are a cause of immunodeficiency with hyper-IgM type 5 syndrome (HIGM5).

The product is supplied as a solution in 20 mM Tris-HCl buffer containing 1 mM EDTA, 1 mM DTT, 50 mM NaCl, and 50% glycerol (v/v), pH 7.5.

**Purity**: ≥90% (SDS-PAGE)

**Activity**: 3,000 units/mL

**Unit definition**: One unit of enzyme is defined as the amount of enzyme that catalyzes the release of 60 pmol of uracil per minute from double-stranded, uracil-containing DNA at 37 °C.

**Precautions and Disclaimer**  
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

**Storage/Stability**  
Store the product at –20 °C.

Repeated freezing and thawing is not recommended. Storage in frost-free freezers is not recommended.

**References**

KAA,EM,SG,MAM 10/11-1