# **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 1-229aa

**UniProt No.** P12295

NCBI Accession No. NP\_417075

Alternative Names Uracil-DNA-glycosylase, ECK2578, JW2564, UDG, UNG1, UNG2, HIGM4

# **PRODUCT SPECIFICATION**

Molecular Weight 28.1 kDa (252aa) confirmed by MALDI-TOF

**Concentration** 0.5mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

**Purity** > 90% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

## Description

ung, also known as uracil-DNA glycosylase, is to prevent mutagenesis by eliminating uracil from DNA molecules by cleaving the N-glycosylic bond and initiating the base-excision repair (BER) pathway. uracil bases occur from cytosine deamination or misincorporation of duMP residues. After a mutation occurs, the mutagenic threat of uracil propagates through any subsequent DNA replication steps. Recombinant E. coli ung protein, fused to Histag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.



#### **Amino acid Sequence**

<MGSSHHHHHH SSGLVPRGSH MGS>MANELTW HDVLAEEKQQ PYFLNTLQTV ASERQSGVTI YPPQKDVFNA FRFTELGDVK VVILGQDPYH GPGQAHGLAF SVRPGIAIPP SLLNMYKELE NTIPGFTRPN HGYLESWARQ GVLLLNTVLT VRAGQAHSHA SLGWETFTDK VISLINQHRE GVVFLLWGSH AQKKGAIIDK QRHHVLKAPH PSPLSAHRGF FGCNHFVLAN QWLEQRGETP IDWMPVLPAE SE

### **General References**

Lindahl T. et al. (1977) J Biol Chem. 252 : 3286-3294. Pearl, L. H. et al. (2000) Mutation research 460 : 165-181.

## DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

