



Recombinant Protein Technical Manual  
Recombinant Human Uracil-DNA glycosylase/UNG  
Protein (GST Tag)  
RPES4736

Product Data:

**Product SKU:** RPES4736

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P13051-2

Protein Information:

**Molecular Mass:** 52 kDa

**AP Molecular Mass:** 48 kDa

**Tag:** N-GST

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 40mM Tris, 0.15M NaCl, 2mM GSH, pH 7.5

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** DGU;HIGM4;HIGM5;UDG;UNG1;UNG15;UNG2

## Immunogen Information:

**Sequence:** Phe 85-Leu 304

## Background:

Isoform 1 is widely expressed with the highest expression in skeletal muscle, heart and testicles. Isoform 2 has the highest expression levels in tissues containing proliferating cells. Uracil-DNA glycosylase exists in two forms: mitochondrial uracil-DNA glycosylase 1 (UNG1) and nuclear uracil-DNA glycosylase 2 (UNG2). uracil-DNA glycosylase. This gene encodes one of several uracil-DNA glycosylases. One important function of uracil-DNA glycosylases 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. Alternative promoter usage and splicing of this gene leads to two different isoforms: the mitochondrial UNG1 and the nuclear UNG2. The UNG2 term was used as a previous symbol for the CCNO gene (GeneID 10309), which has been confused with this gene, in the literature and some databases. Defects in UNG are a cause of immunodeficiency with hyper-IgM type 5 (HIGM5). A rare immunodeficiency syndrome characterized by normal or elevated serum IgM levels with absence of IgG, IgA, and IgE. It results in a profound susceptibility to bacterial infections.