## Recombinant Human Uracil-DNA glycosylase/UNG Protein (GST Tag)

### Catalog No. PKSH030766

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Synonyms	DGU;HIGM4;HIGM5;UDG;UNG1;UNG15;UNG2	
Species	Human	
Expression Host	E.coli	
Sequence	Phe 85-Leu 304	
Accession	P13051-2	
Calculated Molecular Weight	52.0 kDa	
Observed molecular weight	48 kDa	
Tag	N-GST	
Bioactivity	Not validated for activity	
Properties		
Purity	> 90 % as determined by reducing SDS-PAGE.	
Endotoxin	Please contact us for more information.	
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	
Data		

Data

KDa	MK	R
116		
66.2	-	
45.0	-	-
35.0	-	_
25.0	-	-
18.4 14.4	-	

> 90 % as determined by reducing SDS-PAGE.

## 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

#### **For Research Use Only**

Toll-free: 1-888-852-8623 Web: <u>www.elabscience.com</u> Tel: 1-832-243-6086 Email: <u>techsupport@elabscience.com</u>

# **Elabscience**®

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.