

# Recombinant Human 8-oxoguanine DNA Glycosylase, His-tagged

Cat. No. OGG1-783H Lot. No. (See product label)

## SPECIFICATION

**Product Overview** Recombinant human OGG1 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography. MW =41.2 kDa(368aa), confirmed by MALDI-TOF.

**Species** Human

**Source** E.coli

**Description** OGG1, also known as 8-oxoguanine glycosylase, is a DNA glycosylase enzyme involved in base excision repair. This protein is the primary enzyme responsible for the excision of 7,8-dihydro-8-oxoguanine (8-oxoG), a mutagenic base byproduct which occurs as a result of exposure to reactive oxygen species (ROS). It has a beta lyase activity that nicks DNA 3' to the lesion.

**Sequences Of Amino Acids**

MGSSHHHHHH SSGLVPRGSH TGSMPEARALL PRRMGHRTLA STPALWASIP  
 CPRSELRLDL VLPSGQSFRW REQSPAHWSG VLADQVWTLT QTEEQLHCTV  
 YRGDKSQASR PTPDELEAVR KYFQLDVTLA QLYHHWGSVD SHFQEVAQKF  
 QGVRLLRQDP IECLFSFICS SNNNIARITGMVERLCQAFG PRLIQLDDVT  
 YHGFPQLQAL AGPEVEAHLR KLGLGYRARY VSASARAILE EQGGLAWLQQ  
 LRESSYEEAH KALCILPGVG TKVADCICLM ALDKPQAVPV DVHMMWHIAQ  
 RDYSWHPTTSQ AKGPSPQTNK ELGNFFRSLW GPYAGWAQAV LFSADLRQCR  
 HAQEPPAKRRKGSKGPEG

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<b>Purity</b>	> 90% by SDS – PAGE.
<b>Form</b>	Liquid. In 20 mM Tris-HCl Buffer (pH 8.0) Containing 100 mM NaCl, 40% Glycerol.
<b>Concentration</b>	0.5 mg/ml (determined by Bradford assay).
<b>Storage</b>	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">OGG1 8-oxoguanine DNA glycosylase [ Homo sapiens ]</a>
<b>Synonyms</b>	OGG1; 8-oxoguanine DNA glycosylase; HMMH; MUTM; OGH1; HOGG1; N-glycosylase/DNA lyase; AP lyase; OTTHUMP00000122621; OTTHUMP00000207399; OTTHUMP00000207403; OTTHUMP00000207404; 8-hydroxyguanine DNA glycosylase; DNA-apurinic or apyrimidinic site lyase; EC 4.2.99.18; OGG1 type 1e; OGG1 type 1d; OGG1 type 1g; OGG1 type 1h; MMH
<b>Gene ID</b>	<a href="#">4968</a>
<b>mRNA Refseq</b>	<a href="#">NM_002542</a>
<b>Protein Refseq</b>	<a href="#">NP_002533</a>
<b>MIM</b>	<a href="#">601982</a>
<b>UniProt ID</b>	<a href="#">O15527</a>
<b>Chromosome Location</b>	3p26.2

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**Pathway** Base excision repair


**Function** damaged DNA binding; endonuclease activity; hydrolase activity, acting on glycosyl bonds; lyase activity; oxidized purine base lesion DNA N-glycosylase activity; protein binding

**PDB rendering based on 1ebm.**



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