

OGG1 Protein, Human

Cat. No.:	HY-P70968
Synonyms:	N-Glycosylase/DNA Lyase; 8-Oxoguanine DNA Glycosylase; DNA-(Apurinic or Apyrimidinic Site) Lyase; AP Lyase; OGG1; MMH; MUTM; OGH1
Species:	Human
Source:	E. coli
Accession:	AAH00657.1 (M1-G345)
Gene ID:	4968
Molecular Weight:	Approximately 38.0 kDa

PROPERTIES

AA Sequence	<pre> M P A R A L L P R R M G H R T L A S T P A L W A S I P C P R S E L R L D L V L P S G Q S F R W R E Q S P A H W S G V L A D Q V W T L T Q T E E Q L H C T V Y R G D K S Q A S R P T P D E L E A V R K Y F Q L D V T L A Q L Y H H W G S V D S H F Q E V A Q K F Q G V R L L R Q D P I E C L F S F I C S S N N N I A R I T G M V E R L C Q A F G P R L I Q L D D V T Y H G F P S L Q A L A G P E V E A H L R K L G L G Y R A R Y V S A S A R A I L E E Q G G L A W L Q Q L R E S S Y E E A H K A L C I L P G V G T K V A D C I C L M A L D K P Q A V P V D V H M W H I A Q R D Y S W H P T T S Q A K G P S P Q T N K E L G N F F R S L W G P Y A G W A Q A V L F S A D L R Q C R H A Q E P P A K R R K G S K G P E G </pre>
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Solution.
Formulation	Supplied as a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, pH 8.5.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	OGG1 (8-Oxoguanine DNA Glycosylase 1) is a DNA repair enzyme crucial for maintaining genomic integrity. Specializing in the repair of oxidative DNA damage, OGG1 specifically incises DNA at 8-oxoG (8-oxoguanine) residues. Additionally, it excises
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other oxidatively damaged bases, such as 7,8-dihydro-8-oxoguanine and 2,6-diamino-4-hydroxy-5-N-methylformamidopyrimidine (FAPY), contributing to the removal of mutagenic lesions from the DNA. Notably, OGG1 possesses a beta-lyase activity, enabling it to nick the DNA strand 3' to the lesion, initiating the repair process. This enzymatic versatility highlights OGG1's critical role in safeguarding the genome by counteracting the detrimental effects of oxidative stress on DNA integrity.

Caution: Product has not been fully validated for medical applications. For research use only.

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