

## Rabbit Anti-OGG1/Cy5 Conjugated antibody

SL3687R-Cy5

<b>Product Name</b>	Anti-OGG1/Cy5
<b>Chinese Name</b>	Cy5 标记的 8-羟基鸟嘌呤 DNA 糖基化酶
<b>Alias</b>	8 hydroxyguanine DNA glycosylase; 8 oxoguanine DNA glycosylase 1; 8-oxoguanine DNA glycosylase; AP lyase; DNA apurinic or apyrimidinic site lyase; DNA lyase; DNA-(apurinic or apyrimidinic site) lyase; HMMH; HOGG 1; HOGG1; MMH; MUTM; N-glycosylase; Ogg 1; OGH 1; OGH1; OGG1_HUMAN.
<b>Research Area</b>	Cell biology immunology Chromatin and nuclear signals Mitochondrion
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human,Mouse,Rat(predicted:Dog,Pig,Cow) IF=1:100-500
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	38-47kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human OGG1/8 hydroxyguanine DNA glycosylase
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Storage</b>	
<b>Product Detail</b>	<b>background:</b> This gene encodes the enzyme responsible for the excision of 8-oxoguanine, a mutagenic base byproduct which occurs as a result of exposure to reactive oxygen. The action of this enzyme includes lyase activity for chain cleavage.

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Alternative splicing of the C-terminal region of this gene classifies splice variants into two major groups, type 1 and type 2, depending on the last exon of the sequence. Type 1 alternative splice variants end with exon 7 and type 2 end with exon 8. All variants share the N-terminal region in common, which contains a mitochondrial targeting signal that is essential for mitochondrial localization. Many alternative splice variants for this gene have been described, but the full-length nature for every variant has not been determined. [provided by RefSeq, Aug 2008].

**Function:**

DNA repair enzyme that incises DNA at 8-oxoG residues. Excises 7,8-dihydro-8-oxoguanine and 2,6-diamino-4-hydroxy-5-N-methylformamidopyrimidine (FAPY) from damaged DNA. Has a beta-lyase activity that nicks DNA 3' to the lesion.

**Subcellular Location:**

Mitochondrion; Nucleus and Nucleus > nucleoplasm. Nucleus speckle. Nucleus matrix. Together with APEX1 is recruited to nuclear speckles in UVA-irradiated cells.

**Tissue Specificity:**

Ubiquitous.

**DISEASE:**

Defects in OGG1 may be a cause of renal cell carcinoma (RCC) [MIM:144700]. It is a heterogeneous group of sporadic or hereditary carcinoma derived from cells of the proximal renal tubular epithelium. It is subclassified into clear cell renal carcinoma (non-papillary carcinoma), papillary renal cell carcinoma, chromophobe renal cell carcinoma, collecting duct carcinoma with medullary carcinoma of the kidney, and unclassified renal cell carcinoma.

**Similarity:**

Belongs to the type-1 OGG1 family.

**Database links:**

[Entrez Gene: 4968](#) Human

[Entrez Gene: 18294](#) Mouse

[Omim: 601982](#) Human



[SwissProt: O15527](#) Human

[SwissProt: O08760](#) Mouse

[Unigene: 380271](#) Human

[Unigene: 43612](#) Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.