

Product datasheet for **SC309025**

OGG1 (NM_002542) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OGG1 (NM_002542) Human Untagged Clone
Tag:	Tag Free
Symbol:	OGG1
Synonyms:	HMMH; HOGG1; MUTM; OGH1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_002542 edited ATGCCTGCCCGCGCTTCTGCCAGGGCGCATGGGGCATCGTACTCTAGCCTCCACTCCT GCCCTGTGGGCTCCATCCCGTGCCTCGCTCTGAGCTGCGCCTGGACCTGGTTCTGCCT TCTGGACAATCTTTCCGGTGGAGGGAGCAAAGTCTGCACACTGGAGTGGTGTACTAGCG GATCAAGTATGGACACTGACTCAGACTGAGGAGCAGCTCCACTGCACTGTGTACCGAGGA GACAAGAGCCAGGCTAGCAGGCCACACCAGACGAGCTGGAGGCCGTGCGCAAGTACTTC CAGCTAGATGTTACCCTGGCTCAACTGTATCACCCTGGGGTTCGGTGGACTCCCACTTC CAAGAGGTGGCTCAGAAATTCGAAGGTGTGCGACTGCTGCGACAAGACCCCATCGAATGC CTTTTCTCTTTTATCTGTTCTCCAACAACAACATCGCCCGCATCACTGGCATGGTGGAG CGGCTGTGCCAGGCTTTTGGACCTCGGCTCATCCAGCTTGATGATGTCACCTACCATGGC TTCCCCAGCCTGCAGGCCCTGGCTGGGCCAGAGGTGGAGGCTCATCTCAGGAAGCTGGGC CTGGGCTATCGTGCCCGTTACGTGAGTGCCAGTGCCCGAGCCATCCTGGAAGAACAGGGC GGGCTAGCCTGGCTGCAGCAGTACGAGAGTCCATATGAGGAGGCCCAAGGCCCTC TGCATCTGCCTGGAGTGGGCACCAAGGTGGCTGACTGCATCTGCCTGATGGCCCTAGAC AAGCCCCAGGCTGTGCCCGTGGATGTCCATATGTGGCACATTGCCCAACGTGACTACAGC TGGCACCTACCACGTCCAGGGCAAGGGACCGAGCCCCAGACCAACAAGGAAGTGGGA AACTTTTCCGGAGCCTGTGGGGACCTTATGCTGGCTGGGCCAAGCGGTGCTGTTTCACT GCCGACCTGCGCAATCCCGCCATGCTCAGGAGCCACCAGCAAAGCGCAGAAAGGGTTCC AAAGGGCCGGAAGGCTAG
Restriction Sites:	Please inquire
ACCN:	NM_002542
Insert Size:	1100 bp



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: The ORF of this clone has been fully sequenced and found to be a perfect match to NM_002542.4.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_002542.4](#), [NP_002533.1](#)

RefSeq Size: 2557 bp

RefSeq ORF: 1038 bp

Locus ID: 4968

UniProt ID: [O15527](#)

Cytogenetics: 3p25.3

Domains: HHH, ENDO3c

Protein Families: Druggable Genome

Protein Pathways: Base excision repair

Gene Summary:

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. 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]

Transcript Variant: Transcript variant 1a represents the predominant form of this gene.