

Product datasheet for SC309529

OGG1 (NM_016826) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OGG1 (NM_016826) Human Untagged Clone
Tag:	Tag Free
Symbol:	OGG1
Synonyms:	HMMH; HOGG1; MUTM; OGH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC309529 representing NM_016826. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCTGCCCGCGCGCTTCTGCCAGGCGCATGGGGCATCGTACTCTAGCCTCCACTCCTGCCCTGTGG
GCCTCCATCCCGTGCCCTCGCTCTGAGCTGCGCCTGGACCTGGTTCTGCCTTCTGGACAATCTTCCGG
TGGAGGGAGCAAAGTCTGCACACTGGAGTGGTGTACTAGCGGATCAAGTATGGACACTGACTCAGACT
GAGGAGCAGCTCCACTGCACTGTGTACCGAGGAGACAAGAGCCAGGCTAGCAGGCCACACCAGACGAG
CTGGAGGCCGTGCGCAAGTACTCCAGCTAGATGTTACCCTGGCTCAACTGTATCACCCTGGGGTTCC
GTGGACTCCCACTCCAAGAGGTGGCTCAGAAATTCGAAGGTGTGCGACTGCTGCGACAAGACCCCATC
GAATGCCTTTTCTTTTATCTGTTCTCCAACAACAACATCGCCCGCATCACTGGCATGGTGGAGCGG
CTGTGCCAGGCTTTTGGACCTCGGCTCATCCAGCTTGATGATGTACCTACCATGGCTTCCCAGCCTG
CAGGCCCTGGCTGGGCCAGAGGTGGAGGCTCATCTCAGGAAGCTGGGCCTGGGCTATCGTCCCCTTAC
GTGAGTGCCAGTGCCTGAGCCATCCTGGAAGAACAGGGCGGGCTAGCCTGGCTGCAGCAGCTACGAGAG
TCCTCATATGAGGAGGCCCAAGGCCCTCTGCATCCTGCCTGGAGTGGGCACCAAGGGCCTCCTTGGC
AATGCATTTGATGGCCACCAGCTTCTGCGTCTTATCTTCTGCCAGGATCACCTCCGAGAAGGCCCC
CCTATCGGGAGAGGGGATTCACAAGGTGAAGAACTGGAACCCAGCTTCCCTCCAGCCTCCTCCATT
CCCTATGGGTTCTGTGACCACTGCTGGACCAAGGACGTGGATGACCCCTCCCTAGTCACTCATCCATCC
CCTGGCTCCAGAGATGGTCACATGACCCAGGCCCTGGCCAGTCAAAGTAGTCTCTCCCTGGCCACAGTA
ATTGGTCATGTGATGCAAGCCAGCTTACTAGCACTTTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI

Plasmid Map: □



[View online >](#)

ACCN:	NM_016826
Insert Size:	1074 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none">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:	<u>NM_016826.2</u>
RefSeq Size:	1957 bp
RefSeq ORF:	1074 bp
Locus ID:	4968
UniProt ID:	<u>O15527</u>
Cytogenetics:	3p25.3
Protein Families:	Druggable Genome
Protein Pathways:	Base excision repair
MW:	39.7 kDa

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 2b contains an alternate exon 8 and skips exons 5 and 6, as compared to the predominant transcript variant 1a.