

Product datasheet for SC308890

OGG1 (NM_016828) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: OGG1 (NM 016828) 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: >SC308890 representing NM_016828.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCCTGCCCGCGCGCTTCTGCCCAGGCGCATGGGGCATCGTACTCTAGCCTCCACTCCTGCCCTGTGG GCCTCCATCCCGTGCCCTCGCTCTGAGCTGCGCCTGGACCTGGTTCTGCCTTCTGGACAATCTTTCCGG TGGAGGGAGCAAAGTCCTGCACACTGGAGTGGTGTACTAGCGGATCAAGTATGGACACTGACTCAGACT GAGGAGCAGCTCCACTGCACTGTGTACCGAGGAGACAAGAGCCAGGCTAGCAGGCCCACACCAGACGAG CTGGAGGCCGTGCGCAAGTACTTCCAGCTAGATGTTACCCTGGCTCAACTGTATCACCACTGGGGTTCC GTGGACTCCCACTTCCAAGAGGTGGCTCAGAAATTCCAAGGTGTGCGACTGCTGCGACAAGACCCCATC GAATGCCTTTTCTCTTTTATCTGTTCCTCCAACAACAACATCGCCCGCATCACTGGCATGGTGGAGCGG CTGTGCCAGGCTTTTGGACCTCGGCTCATCCAGCTTGATGATGTCACCTACCATGGCTTCCCCAGCCTG CAGGCCCTGGCTGGGCCAGAGGTGGAGGCTCATCTCAGGAAGCTGGGCCTGGGCTATCGTGCCCGTTAC ATCTGCCTGATGGCCCTAGACAAGCCCCAGGCTGTGCCCGTGGATGTCCATATGTGGCACATTGCCCAA CGTGACTACAGCTGGCACCCTACCACGTCCCAGGCGAAGGGACCGAGCCCCCAGACCAACAAGGAACTG ACTTTTATGACCTTTCTCGGACCCCATAGGCTGGATCAGATGCCTCCTGAAGAATTACAGACTTCTTCC TCTAGACTTGGAGGGCCTCCTTGGCAATGCATTTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

Plasmid Map:



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OGG1 (NM_016828) Human Untagged Clone - SC308890

ACCN: NM_016828

Insert Size: 1071 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: 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 016828.2</u>

 RefSeq Size:
 2258 bp

 RefSeq ORF:
 1071 bp

 Locus ID:
 4968

UniProt ID: O15527

Cytogenetics: 3p25.3

Protein Families: Druggable Genome
Protein Pathways: Base excision repair

MW: 40.1 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 2d contains an alternate exon 8 and a 100 bp insertion, as compared to the predominant transcript variant 1a.