

Product datasheet for SC308889

OGG1 (NM 016827) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: OGG1 (NM_016827) Human Untagged Clone

Tag: Tag Free Symbol: OGG1

Synonyms: HMMH; HOGG1; MUTM; OGH1

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_016827, the custom clone sequence may differ by one or more

nucleotides

ATGCCTGCCCGCGCGCTTCTGCCCAGGCGCATGGGGCATCGTACTCTAGCCTCCACTCCT
GCCCTGTGGGCCTCCATCCCGTGCCCTCGCTCTGAGCTGCGCCTGGACCTGGTTCTGCCT
TCTGGACAATCTTTCCGGTGGAGGGAGCAAAGTCCTGCACACTGGAGTGGTGACCTAGCG
GATCAAGTATGGACACTGACTCAGACTGAGGAGCAGCTCCACTGCACTGTACCGAGGA
GACAAGAGCCAGGCTAGCAGGCCCACACCAGACGAGCTGGAGGCCGTGCGCAAGTACTTC
CAGCTAGATGTTACCCTGGCTCAACTGTATCACCACTGGGGTTCCGTGGACTCCCACTTC
CAAGAGGTGGCTCAGAAATTCCAAGGTGTGCGACTGCTGCGACAAGACCCCATCGAATGC
CTTTTCTCTTTTATCTGTTCCTCCAACAACAACATCGCCCGCATCACTGGCATGGTGGAG
CGGCTGTGCCAGGCTTTTGGACCTCGGCTCATCCAGCTTGATGATGTCACCTACCATGGC

TTCCCCAGCCTGCAGGCCCTGGCTGGCCTCCTTGGCAATGCATTTGA

Restriction Sites: Please inquire ACCN: NM_016827

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).



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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 016827.1</u>, <u>NP 058436.1</u>

RefSeq Size: 1727 bp
RefSeq ORF: 588 bp
Locus ID: 4968
UniProt ID: 015527
Cytogenetics: 3p25.3

Gene Summary:

Protein Families: Druggable Genome
Protein Pathways: Base excision repair

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 2c contains an alternate exon 8 and skips exons 4 to 6,

as compared to the predominant transcript variant 1a.