Product datasheet for RC213394

OGG1 (NM_016819) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: OGG1 (NM_016819) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: OGG1
Synonyms: HMMH; HOGG1; MUTM; OGH1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 μg/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC213394 representing NM_016819
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCCATCGCC

ATGCACTCCGACCATGAGGGGAGAGGAGACACACCGGCGGGATCCTGGACTGCGAGCTGGGAGAGGAGC
GGGAGGTGGAGGTGGAGGCTGATGCTGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG

GCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCT
GGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGGCTGGG

ACCGGTACCGCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
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Protein Sequence: >RC213394 representing NM_016819
Red=Cloning site Green=Tags(s)

MPARALLPRRMRHTLASTPALKASIPCPRELSRLDLVLPQGQSFRWRSEQSPAMWSGVLADQVWTLTQTE
EQLHCTYRQDGKSAQRPTPDELEAVRYKQQLQDLQLYHHRNGVSHDFQUEVAQKFQGVRLLRQDPWEC
LFSICSSNNINIRITGMEVLQCGAFPRILQLDDVTYHGFSPTQLAGPEVEAHLRKLGLGVRAYVSA
SARAILKQQGLAWLQPLSSYEEAHKACILIPGYPKGTVADICICLMLALDKPQAOVFDVHMWHIAQRDYS
WHPTTSQAKGSPQTNKELGNFRSLWGPYAGWAQAVSVPRCP

TRTRPLEQKLISEEDDLAAANDILDYYDYYDVK

Chromatograms: https://cdn.origene.com/chromatograms/mk8052_b12.zip
Restriction Sites: Sgfl-MluI
Cloning Scheme:

Plasmid Map:

ACCN: NM_016819
ORF Size: 972 bp

OTI Disclaimer: 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: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

RefSeq: NM_016819.3, NP_058212.1

RefSeq Size: 2801 bp

RefSeq ORF: 975 bp

Locus ID: 4968

Protein Families: Druggable Genome

Protein Pathways: Base excision repair

MW: 36.3 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]

Product images: Western blot validation of overexpression lysate (Cat# LY413835) using anti-DDK antibody (Cat# TAS0011-100). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213394 using transfection reagent MegaTran 2.0 (Cat# TT210002).