

Product datasheet for **RC208667**

UNG (NM_003362) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UNG (NM_003362) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UNG
Synonyms:	DGU; HIGM4; HIGM5; UDG; UNG1; UNG2; UNG15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208667 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGTCTTCTGCCTTGGGCCGTGGGGTTGGGCCGGAAGCTGCGGACGCCTGGGAAGGGCCGCTGC
AGCTCTTGAGCCGCTCTGCGGGGACCACTTGCAGGCCATCCAGCCAAGAAGGCCCGGCTGGGCAGGA
GGAGCCTGGGACGCCGCTCCTCGCCGCTGAGTCCGAGCAGTTGGACCGGATCCAGAGGAACAAGGCC
GCGGCCCTGCTCAGACTCGCGGCCGCAACGTGCCCGTGGGCTTTGGAGAGAGCTGGAAGAAGCACCTCA
GCGGGGAGTTCGGGAAACCGTATTTTATCAAGCTAATGGGATTTGTTGCAGAAGAAAGAAAGCATTACAC
TGTTTATCCACCCACACCAAGTCTTACCTGGACCCAGATGTGTGACATAAAAGATGTGAAGTTGTC
ATCCTGGGACAGGATCCATATCATGACCTAATCAAGCTCACGGGCTCTGCTTTAGTGTTCAAAGCCCTG
TTCCGCCTCCGCCAGTTTGGAGAACATTTATAAAGAGTTGTCTACAGACATAGAGGATTTTGTTCATCC
TGGCCATGGAGATTTATCTGGGTGGCCAAGCAAGGTGTTCTCCTTCTCAACGCTGTCCTCACGGTTCGT
GCCCATCAAGCCAACCTCATAAGGAGCGAGGCTGGGAGCAGTTCACTGATGCAGTTGTGTCCTGGCTAA
ATCAGAAGCGGCACCATGTACTACAGACGGCTCATCCCTCCCTTTGTGTCAGTGTATAGAGGTTCTTTGGA
TGTAGACACTTTTCAAAGACCAATGAGCTGCTGCAGAAGTCTGGCAAGAAGCCCATTTGACTGGAAGGAGC
TG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208667 protein sequence
Red=Cloning site Green=Tags(s)

MGVFCLGPWGLGRKL RTPGKGPLQLL SRLCGDHLQAIPAKKAPAGQE EPGTPPSSPLSAEQLDRIQRNKA
 AALLRLAARNVPVGFGE SWKKHLSGEFGKPYFIKLMGFVAEERKHYTVYPPPHQVFTWTQMCDIKDVKVV
 ILGQDPYHGPNQAHGLCF SVQRPVPPPPSLENIYKELSTDIEDFVHPGHGDL SGWAKQGVLLLN AVLTVR
 AHQANSHKERGWEQFTDAVVSWLNQNSNGLVFLLLWGSYAQKKGSAIDRKRHHVLQTAHPSPLSVYRGFFG
 CRHFSKTNELLQKSGKKPIDWKEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6362_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_003362

ORF Size: 912 bp

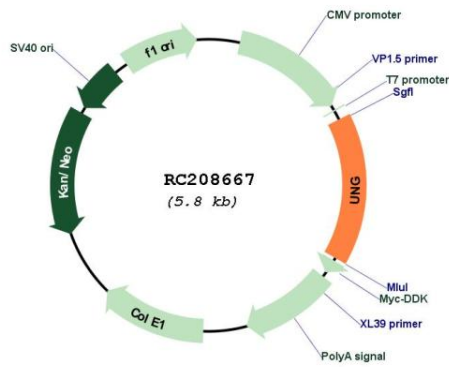
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

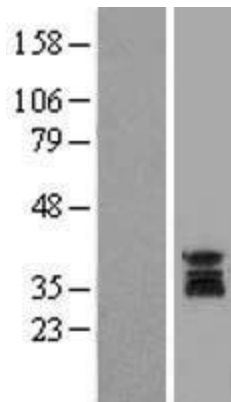
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	NM_003362.4
RefSeq Size:	2166 bp
RefSeq ORF:	915 bp
Locus ID:	7374
UniProt ID:	P13051
Cytogenetics:	12q24.11
Domains:	UDG
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Base excision repair, Primary immunodeficiency
MW:	33.9 kDa
Gene Summary:	<p>This gene encodes one of several uracil-DNA glycosylases. One important function of uracil-DNA glycosylases is to prevent mutagenesis by eliminating uracil from DNA molecules by cleaving the N-glycosylic bond and initiating the base-excision repair (BER) pathway. Uracil bases occur from cytosine deamination or misincorporation of dUMP residues. Alternative promoter usage and splicing of this gene leads to two different isoforms: the mitochondrial UNG1 and the nuclear UNG2. The UNG2 term was used as a previous symbol for the CCNO gene (GeneID 10309), which has been confused with this gene, in the literature and some databases. [provided by RefSeq, Nov 2010]</p>

Product images:



Circular map for RC208667



Western blot validation of overexpression lysate (Cat# [LY418736]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208667 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).