

Product datasheet for **SC109874**

UNG (NM_003362) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UNG (NM_003362) Human Untagged Clone
Tag:	Tag Free
Symbol:	UNG
Synonyms:	DGU; HIGM4; HIGM5; UDG; UNG1; UNG2; UNG15
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_003362, the custom clone sequence may differ by one or more nucleotides

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ATGGGCGTCTTCTGCCTTGGGCCGTGGGGTTGGGCCGGAAGCTGCGGACGCCTGGGAAGGGCCGCTGC
AGCTCTTGAGCCGCTCTGCGGGGACCACTTGCAGGCCATCCCAGCCAAGAAGGCCCGGCTGGGCAGGA
GGAGCCTGGGACGCCCTCCTCGCCGCTGAGTGCCGAGCAGTTGGACCGGATCCAGAGGAACAAGGCC
GCGGCCCTGCTCAGACTCGCGGCCCGCAACGTGCCCGTGGGCTTTGGAGAGAGCTGGAAGAAGCACCTCA
GCGGGGAGTTCGGGAAACCGTATTTTATCAAGCTAATGGGATTTGTTGCAGAAGAAGAAAGCATTACAC
TGTTTATCCACCCACACCAAGTCTTACCTGGACCCAGATGTGTGACATAAAAAGATGTGAAGGTTGTC
ATCCTGGGACAGGATCCATATCATGGACCTAATCAAGCTCACGGGCTCTGCTTTAGTGTCAAAGGCCTG
TTCCGCCCTCCGCCAGTTTGGAGAACATTTATAAAGAGTTGTCTACAGACATAGAGGATTTTGTTCATCC
TGGCCATGGAGATTTATCTGGGTGGGCCAAGCAAGGTGTTCTCCTTCTCAACGCTGTCCTCACGGTTCGT
GCCCATCAAGCCAACCTCTATAAGGAGCGAGGCTGGGAGCAGTTCACTGATGCAGTTGTGTCCTGGCTAA
ATCAGAAGCTCGAATGGCCTTGTCTTCTGCTCTGGGGCTTTATGCTCAGAAGAAGGGCAGTGCCATTGA
TAGGAAGCGGCACCATGTACTACAGACGGCTCATCCCTCCCTTTGTCAGTGTATAGAGGGTTCTTTGGA
TGTAGACACTTTTCAAAGACCAATGAGCTGCTGCAGAAGTCTGGCAAGAAGCCCATTGACTGGAAGGAGC
TGTA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_003362 unedited</p> <pre>GGGTCAAATTTGTATACGACTCCTATAGGCGGCCGCGNAATTCGCACGAGGGTCACCGCG ACGCTCCTCGGNAAGCCATAGGGCGCCTCCAGCCCGTCTCCCCGCTCCAGTTTAGAAC CTAATTCCTCAATCCCGGAAGCTGCGGACGCCTGGGAAGGGGCCGCTGCAGCTCTTGAGC CGCTCTGCGGGGACCACTTGCAGGCCATCCAGCCAAGAAGGCCCGCTGGGCAGGAG GAGCTGGGACGCGCCCTCTCGCCGCTGAGTGCCGAGCAGTTGGACCGGATCCAGAGG AACAAAGCCGCGCCCTGCTCAGACTCGCGGCCGCAACGTGCCGTAGGCTTTGGAGAG AGCTGGAAGAAGCACCTCAGCGGGAGTTCGAGAAACCGTATTTTATCAAGCTAATGGGA TTTGTTGCAGAAGAAAGAACATTACACTGTTTATCCACCCCAACCAAGTCTTCACC TGGACCCAGATGTGTGACATAAAAGATGTGAAGTTGTGATCCTGGGACAGGATCCATAT CATGGACCTAATCAAGCTCACGGCTCTGCTTTAGTGTTCAAAGGCTGTTCGCCTCCG CCCAGTTTGGAGAACATTTATAAAGAGTTGTCTACAGACATAGAGGATTTTGTTCATCCT GGCCATGGAGATTTATCTGGTGGGCCAAGCAAGGTGTTCTCCTTCTCAACGCTGCCTC ACGTTTCGTGCCATCAAGCCAACTCTCATAAGGAGCGAGGCTGGGAGCAGTTCACTGAT GCAGTTGTCTCGGCTAAATCAGAACTCGAATGGCCCTNNGTTTTCTGCTCTGGGGCTC TTATGCTCAGAAGAAGGCAGTGCCATTGATAGGAAGCGGCACCATGTACTACAGACGGNT CATCCCTCCTNTN</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_003362 unedited</p> <pre>NNNNTATCTCTGNAACCGCGCCCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTTTT ACTTTTAAACAACTTTTATTAACAAACCTCGCGTAGAGCCAACCTAACCAGACTAACAG CAAAAACAGCATTGCTAACAAAGATCAAGGATGGAGGTGCAGACCAATAAAGACCGTCTC TTAAAAAAGGACTGGGAAAAATATATATATATATATCTGCATGAGTACTTCTTAAAAAA CTAAAACCTTCCAGTGTTCAGGAAAAATATCCCAAAGTGATTTCAAGTCCGTTAAAAAA AACAGTACTTGGCAGTCTGTGCTGCCTTAAAAACCCCAACTGGACATAACCCCTAGGAGAA AATCACCCACCCCATAAAGACAAAATCCCTTTTCTCCTTCTCCTTGTCAAATTCCAC TGCTTATTCACCAACACCCAAGGAATAACAAGACCCAGCTTACTTCTCTCGGTCTCTTA TCTGATAAAGCTCACAGCAATCTTAACCTCTACTACAATCAGGAAATTGAGCCCTAATTT CTGGGCCAGATTCTGAAAGTTGCAAAACATCCTTATGCTGCGAGGGGCCTGAGGACTCC TTCAAAGATCAAGGGGGCAGTGGAACTGGCAGAGACTGGCATGCCTGCCCTGCCAGGCTG AGACAAGGGGACCTTTCTAAGCAAAAACCCCACTGTGCACTGAAAAGTCTAACCCAGG CAAAACCAAGGAGCAACAGGCGCCCAAACTAGGCTGTGCCTGAAAAGTGCACATCTCCCC TGTTTACCATAAAGGCGAGGGAAGAAAAAAGAGCCAACCTGAGTATTTGACCTCATTGTG CTCTGCATAATTTAAGCCGAAACCATGTTGCAGAAAAAGACATTGGTCCAAAGGCACCCC TTTGTGGTNTGGGGTGGAAACACTCGGCATTN</pre>
Restriction Sites:	ECoRI-NOT
ACCN:	NM_003362
Insert Size:	915 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).
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_003362.2 , NP_003353.1
RefSeq Size:	2081 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
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> <p>Transcript Variant: This variant (1) uses the downstream promoter and a full-length exon 1B. It encodes the UNG1 isoform, which includes a mitochondrial targeting sequence.</p>