

Product datasheet for SC118052

Ceramide glucosyltransferase (UGCG) (NM_003358) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ceramide glucosyltransferase (UGCG) (NM_003358) Human Untagged Clone
Tag:	Tag Free
Symbol:	Ceramide glucosyltransferase
Synonyms:	GCS; GLCT1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118052 sequence for NM_003358 edited (data generated by NextGen Sequencing)

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ATGGCGCTGCTGGACCTGGCCTTGAGGGAATGGCCGTCTTCGGTTTCGCTCTTCTT
GTGCTGTGGCTGATGCATTTTCATGGCTATCATCTACACCCGATTACACCTCAACAAGAAG
GCAACTGACAAACAGCCTTATAGCAAGCTCCAGGTGTCTCTTCTGAAACCACTGAAA
GGGTAGATCCTAACTTAATCAACAACCTGAAACATTCTTTGAATTGGATTATCCCAA
TATGAAGTGCTCCTTTGTGTACAAGATCATGATGATCCAGCCATTGATGTATGTAAGAAG
CTTCTGGAAAATATCCAAATGTTGATGCTAGATTGTTTATAGGTGGCAAAAAGTTGGC
ATTAATCCTAAAATTAATAATTTAATGCCAGGATATGAAGTTGCAAAGTATGATCTTATA
TGGATTTGTGATAGTGAATAAGAGTAATCCAGATACGCTTACTGACATGGTGAATCAA
ATGACAGAAAAAGTAGGCTTGGTTCACGGGCTGCCTTACGTAGCAGACAGACAGGCTTT
GCTGCCACCTTAGAGCAGGTATATTTGGAACTTACATCCAAGATACTATATCTCTGCC
AATGTAAGTGGTTTCAAATGTGTGACAGGAATGCTTGTTTAATGAGAAAAGATGTGTTG
GATCAAGCAGGAGGACTTATAGCTTTTGCTCAGTACATTGCCGAAGATTACTTTATGGCC
AAAGCGTAGCTGACCGAGGTTGGAGGTTTGCAATGTCCACTCAAGTTGCAATGCAAAAC
TCTGGCTCATATTCAATTTCTCAGTTTCAATCCAGAATGATCAGGTGGACCAAACACGA
ATTAACATGCTTCCTGCTACAATAATTTGTGAGCCAATTCAGAATGCTTTGTTGCCAGT
TGAATTTGGATGGGCAGCCACCATGTGTTCCAGATGGGATATTATGGTATTTTTCATG
TGTCATTGCCTGGCATGGTTTATATTTGACTACATTCAACTCAGGGGTGTCCAGGTTGGC
ACACTGTGTTTTTCAAACCTTGATTATGCAGTGCCTGGTTCATCCGCGAATCCATGACA
ATATACATTTTTTGTCTGCATTATGGGACCAACTATAAGCTGGAGAACTGGTCTGCTAC
AGATTACGCTGTGGGGTACAGCAGAGGAAATCCTAGATGTATAA

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Clone variation with respect to NM_003358.1
348 t=>c



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003358 unedited
 AGCATTTTGTAAATACGACTCACTTATAGGGCGGCCGGAATTCGCACGAGGCACCCCCCT
 CCGCCCTTTCCTCTCCCCACCTTCTCTCGCCTCCCGCGCCCCCGCACCGGGCGCCACC
 CTGTCTCTCTCTGCGGGAGCGTTGTCCGTGTTGGCGGCCGACGCGGGCCGGCCGGTCC
 GGCGGGCCGGGGATGGCGCTGCTGGACCTGGCCTTGGAGGGAATGGCCGTCTTCGGGT
 CGTCCTCTTCTTGGTGTGTGGCTGATGCATTTTCATGGCTATCATCTACACCCGATTACA
 CCTCAACAAGAAGGCAACTGACAAACAGCCTTATAGCAAGCTCCAGGTGTCTCTTCT
 GAAACCACTGAAAGGGGTAGATCCTAACTTAATCAACAACCTGGAAACATTCTTTGAATT
 GGATTATCCCAAATATGAAGTGCTCTTTGTGTACAAGATCATGATGATCCAGCCATTGA
 TGTATGTAAGAAGCTTCTTGAAAAATATCCAAATGTTGATGCTAGATTGTTTATAGGTGG
 CAAAAAAGTTGGCATTAACTCTAAAATTAATAATTTAATGCCAGGATATGAAGTTGCAAA
 GTATGATCTTATATGGATTTGTGATAGTGAATAAGAGTAATTCCAGATACGCTTACTGA
 CATGGTGAATCAAATGACAGAAAAAGTAGGCTTGGTTCACGGGCTGCCTTACGTAGCAGA
 CAGACAGGGCTTTGCTGCCACCTTAGAGCANGTATATTNTGGAACCTCACATCCAAGATA
 CTATATCTCTGCCAATGTAAGTGGTTTCAAATGTGTGACAGGAAATGTCTGTTTTAATGA
 GAAAGATGTGTTGNATCAAGCAGGAGGACTTTATAGCTTTTGCTCAGTACATTGCCCGA
 AGATACTTTATGGCCNAGCGATAGCTGACCGAGGTTGGAGGTTNGCATGTCNCACTCAGT
 GCATGCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003358 unedited
 GCACGCAATCTAAAGTCGAGTTTTTTTTTTTTTTTTTCTGTTTGTCTGCAAGGCCTA
 GCTATCTTATTACAATTTATATTTGCTCTGCAACAACACTACAAGAGGTAGGCATAAAGCAT
 GAAAAAGTTTCTCAGTTAGTACCTCGCCATGTGTTGTTCACTGCACAAAACCACTTCACTT
 TGACATGAATAGTCATTCTTCTATTATCTTCTAAACTCTAAAGCAAAGCTGCTGCCAC
 CCGTAAATGTTCTAAAAGAGTGTACTCACAAGTAAGAACTTTCTCTACTGAAGGATACT
 GTCACAGAGTTTGTGTCAGAGCATCTATATATATATTTATTTATTTTAAAAAATA
 AACAAATGATGAACGAACCCAGGTTCTAGAACCAATTCTCTTGATTCTACTTCCA
 CAAAAAAAGTGTATCATTTGGCCAAGACTACAGATGTGTTTTTTTTTTTTTTCACAGAT
 GCAAGTGCCATGCAAAAAATAAATAAAGAACAGATCCCAAAACATACATGTGATAAACT
 ACAGAAGGTAGATTTTTAAAAGCATTTATATAACATAATTTATAATACTTCTCTTTTTT
 CCTTTATATACAGTCACAAAGCTGTAGTTATACATCTAGGATTTCTCTGCTGTACCCCC
 ACAGCGTAATCTGTAGCGACCAAGTCTCCAGCTTATAGTTGGGTCCCATAAATGCAGACAA
 AAAAATGTATATTGTCATGGATTGCGGGATGAACCANGCGACTGCATAATCAAGTTTGAA
 AAAACAGTGTGCACCCTGGACACCCTGAGTTGATGTGGCAAAAATAAACCTGCCCGCCATG
 ACCCTGAAAAACCTATTTCCCTCTGACCCTGGGGGCTGCCATCCATATTAACCTGGCAC
 AAGCATCCGAATTGGCTCACAATTATGACCAGAAACATGTATCCGANTTGGCCCACCGAT
 C

Restriction Sites:

NotI-NotI

ACCN:

NM_003358

Insert Size:

1710 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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: [NM_003358.1](#), [NP_003349.1](#)

RefSeq Size: 1637 bp

RefSeq ORF: 1185 bp

Locus ID: 7357

UniProt ID: [Q16739](#)

Cytogenetics: 9q31.3

Domains: Glycos_transf_2

Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, Sphingolipid metabolism

Gene Summary: This gene encodes an enzyme that catalyzes the first glycosylation step in the biosynthesis of glycosphingolipids, which are membrane components containing lipid and sugar moieties. The product of this reaction is glucosylceramide, which is the core structure of many glycosphingolipids. [provided by RefSeq, Dec 2014]