

Product datasheet for **SC116210**

GCS1 (MOGS) (NM_006302) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | GCS1 (MOGS) (NM_006302) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | GCS1 |
| Synonyms: | CDG2B; CWH41; DER7; GCS1 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >NCBI ORF sequence for NM_006302, the custom clone sequence may differ by one or more nucleotides

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ATGGCTCGGGGCGAGCGGCGCGCCGCGCAGTGCCGGCAGAGGGAGTGCCGGACAGCCGAGAGGGCGGCTC
GGGGAGGCCCGGGCGACGGGACGGCCGGGGCGCGGGCCGCGTAGCACGGCTGGAGGAGTGGCTCTGGC
CGTCGTGGTCTGTCTTTGGCCCTGGGTATGTCGGGGCGCTGGGTGCTGGCGTGGTACCGTGC CGCGGG
GCGGTACAGCTGCACTCCGCGCCTCCTGTGTTGCCTGCCGACTCCTCCAGCCCGCGCTGGCCCCGACC
TCTTCTGGGGAACCTACCGCCCTCACGTCTACTTCGGCATGAAGACCCGAGCCCGAAGCCCTCCTCAC
CGGACTGATGTGGGCGCAGCAGGGCACCACCCGGGGACTCCTAAGCTCAGGCACACGTGTGAGCAGGGG
GACGGTGTGGGTCCCTATGGCTGGGAGTTCACGACGGCCTCCTCTCGGGCGCCAACACATCCAGGATG
GGGCCTTAAGGCTCACCCTGAGTTCGTCGCAAGAGGCTGGGGGTGAGCAGCGAGGGGACTGGAGCTGGAG
AGTGACTGTAGAGCCTCAGGACTCAGTACTTCTGCCCTCCCTTTGGTCTCCCTGTTCTTCTATGTGGT
ACAGATGGCAAGGAAGTCTACTACCAGAGGTTGGGGCCAAGGGGCGATTGAAGTTTATCAGTGGGCACA
CCAGTGAACCTTGGTGACTCCGCTTTACACTTTTCCACCAACCAGTCCAGGGGATACAGCCCCAAGTA
TGGCAGCTACAATGTCTTCTGGACCTCCAACCCAGGACTGCCCTGCTGACAGAGATGGTAAAGAGTCGC
CTAAATAGCTGGTTTCAGCATCGGCCCCAGGGGCCCCCCTGAACGCTACCTCGGCTTGCAGGATCCC
TGAAGTGGGAGGACAGAGGTCCAAGTGGGCAAGGGCAGGGGCGAGTTCTTGATACAGCAGGTGACCCTGAA
AATTCCCATTTCCATAGAGTTTGTGTTTGAATCAGGCAGTGCCAGGCAGGAGGAAATCAAGCCCTGCCA
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CCTCCTTGGTGAATTGGCTACTTCTACGGACAAGGGCTGGTATTGCCAGACATCGGGTGAAGGGTCT
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TCCCACGAGGCTTCCTTTGGGATGAAGGCTTTCACAGCTGGTGGTTTCAGCGGTGGGATCCCTCCCTCAC
CCGGAAGCCCTTGGCCACTGGCTGGGGTCTAAATGCTGATGGCTGGATTGGGAGGGAGCAGATACTG
GGGGATGAGGCCCGAGCCGGGTGCCTCCAGAATTCTAGTACAACGAGCAGTCCACGCCAACCCCCAA
CCCTACTTTTGCCTGTAGCCATATGCTAGAGGTTGGTGACCCTGACGACTTGGCTTTCCTCCGAAAGGC
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CGCTGGCGGGGACGGGACCCTGCCTTACCAACCTTACTGAACCCAAAGACCCTACCCTCTGGGCTGGATG
ACTACCCCGGGCTTACACCCTCAGTAACCGAGCGGCACCTGGACCTGCGATGTTGGGTGGCACTGGG
TGCCCGTGTGCTGACCGGCTGGCAGAGCATCTGGGTGAGGCTGAGGTAGCTGCTGAGCTGGGCCACTG
GCTGCCTCACTGGAGGCAGCAGAGAGCCTGGATGAGCTGCACTGGGCCCCAGAGCTAGGAGTCTTTGCGAG
ACTTTGGGAACACACAAAAGCAGTACAGCTGAAGCCAGGCCCCCTCAGGGGCTCGTTCGGGTGGTGGG
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CTGCTGGACCCACCTCATCCCGCTTGGGCCCTGCTGGACATTCTAGCCGACAGCCCATCTCTGGA
GCCCTTTGGTTTACGCTCCCTTGACGCTCCAGCTCCTTTTATGGCCAGCGCAATTGAGAGCATGATCC
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ATGATGGCGCCAGTACCAGGCTACAGGCTTTCTTTGGGAGCAGTACAGTGACCGGATGGGCGAGGCAT
GGGCTGCCGCCCTTCCACGGCTGGACCAGCCTTGTCTTACTGGCCATGGCTGAAGACTACTGA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006302 unedited
 TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCGGAGGCGCAGGC
 GCTGGCTGGCAGGTGTCGCTAACCGGACGGTGGTCGCCAGGGCGAGAGGCGGGAGCCGGA
 GAGGACTGATGTGGGCGCAGCAGGGCACCACCCGGGGACTCCTAAGCTCAGGCACACGT
 GTGAGCAGGGGGACGGTGTGGGTCCCTATGGCTGGGAGTTCACGACGGCCTCTCCTTCG
 GGGCCAAACACATCCAGGATGGGGCCTTAAGGCTCACCAGTTCGTCGTCAGAGGCCTG
 GGGTCAGCACGGAGGGGACTGGAGCTGGAGAGTACTGTAGAGCCTCAGGACTCAGGTA
 CTCTGCCTCCCTTTGGTCTCCCTGTTCTTCTATGTGGTGACAGATGGCAAGGAAGTCC
 TACTACCAGAGGTTGGGGCCAAGGGCAGTTGAAGTTTATCAGTGGGCACACCAGTGAAC
 TTGGTGACTTCCGCTTTACACTTTTCCACCAACCAGTCCAGGGGATACAGCCCCCAAGT
 ATGGCAGCTACAATGTCTTCTGGACCTCAACCCAGGACTGCCCTGCTGACAGAGATGG
 TAAAGAGTCGCCTAAATAGCTGGTTTCAGCATCGGCCCCAGGGGCCCCCTGAACGCT
 ACCTCGGCTTGCAGGATCCCTGAAGTGGGAGGACAGAGTCCAAGTGGGCAAGGGCGGG
 GGCAGTCTTGATACAGCAGGTGACCCTGAAAATTCCTATTTCCATAGAGATTGGGTTTG
 AATCAGCAGTGGCCAGGAGGAATTAAGCCCTGCCAGATGGCAGGCAGTCTACTG
 ACCCCGGCCCTGGAGACCATGCTGAAGCTTTANAGACGCTCTGAAAGACTTTCAGTGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006302 unedited
 GAGTCGAGTTTTTTTTTTTTTTTTTTGGTTTTTCCAATTTATTTAGAAAAATAGACTCTG
 GATTCACATTCACCCAGGGCTATGTGGGATGACAGCAAGGAGACACCTGAGATGAAATG
 AGGAAGGTTTGAATTACTGGTATCCAAGGGCTGGGGGCAAAAGCCAGAAGCCTTTGTCC
 CTTCAGAGCCAGAGTGGCATGAGTGTCTTGGCTCCCCTCCTCCTCCCTTCAGTAGTC
 TTCAGCCATGGCCAGTAAGACAAGGCTGGTCCAGCCGTGAAAGGGCGGCAGCCATGCC
 TCGCCCATCGCGTCACTGTACTGCTCCCAAAGAAAGCCTGTAGCCTGGTACTGGCGCCA
 TACATTGCCTACCACGTTGGCACGGAGCTCACCGTGGAGTTTGGCAGCCCGAGCCTGGTG
 AGGACCTTNCAGATGCCCATAGTGGTGGAGTGCTCCCAAAGCCAGGTAGTTGACATTGAG
 CCACACAGCACCCCGCCAGTAGGGGGGATCATGCTCTGAAATTGCGCTGCCATAAAAGAG
 CTGGANGCTGCAAGGGAGCGTAAACCAAAGGGGCTCCAGAGATAGCGGCTGTCCGGCTAAA
 ATGTCCACCANGGGCCAAAGCCGGAATAGGTGGGTTTACCAGTCCCACCACCAAGGGA
 AAAGACTGACATAGCCAAGAGCCTCTCCTACTGCAGTTGAGGTTGGGGCCGACCACCCAC
 CCAACCACCCCTGAAGGGGCTGGGCTCACCTGTACTGCTTTTGGGGGTCCCAAAGCTG
 CAAAACCTACTTTGGGGCCAAGGAGTTTTCCAGTTCTTGTGTCGAAGGGAACATGG
 CCCACTTAACCTTCTAACTCCCAAGTTTGGCCCTGTTATACAGGCCCAATGCCCCC
 CAATCCAGGCCGGCCCTCGGTCTGAGGTGTAACCCCGGTTCCATCCACCAAGGGAGGTC
 GGGGTTAAACGGGACAGGGTCCCCCCCCAGTAAAAGTCGGCCCTCTT

Restriction Sites:

NotI-NotI

ACCN:

NM_006302

Insert Size:

2550 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).

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| 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_006302.1 , NP_006293.1 |
| RefSeq Size: | 2910 bp |
| RefSeq ORF: | 2910 bp |
| Locus ID: | 7841 |
| UniProt ID: | Q13724 |
| Cytogenetics: | 2p13.1 |
| Domains: | Glyco_hydro_63 |
| Protein Families: | Druggable Genome, Transmembrane |
| Protein Pathways: | Metabolic pathways, N-Glycan biosynthesis |
| Gene Summary: | <p>This gene encodes the first enzyme in the N-linked oligosaccharide processing pathway. The enzyme cleaves the distal alpha-1,2-linked glucose residue from the Glc(3)-Man(9)-GlcNAc(2) oligosaccharide precursor. This protein is located in the lumen of the endoplasmic reticulum. Defects in this gene are a cause of type IIb congenital disorder of glycosylation (CDGIIb). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).</p> |