

Product datasheet for **RC229007**

GCS1 (MOGS) (NM_001146158) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCS1 (MOGS) (NM_001146158) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GCS1
Synonyms:	CDG2B; CWH41; DER7; GCS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC229007 representing NM_001146158
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTCGGGCGAGCGGCGCGCCGCGCAGTCCCGGCAGAGGGAGTCCGGACAGCCGAGAGGGCGGCTC
 GGGAGGCCCGGGCGACGGGACGGCCGGGGCGCGGCCGCTAGCACGGCTGGAGGAGTGGCTCTGGC
 CGTCGTGGTCTGTCTTTGGCCCTGGGTATGTCGGGGCGCTGGGTGCTGGCGTGGTACCGTGCGCCGCGG
 GCGGTACGCTGCACTCCGCGCCTCTGTGTTGCCTGCCGACTCTCCAGCCCGCGCTGGCCCCGGACC
 TCTTCTGGGGAACCTACCGCCCTCACGTCTACTTCGGCATGAAGACCCGACGCCGAAGCCCTCTCAC
 CGGACTGATGTGGGCGCAGCAGGGCACCACCCGGGGACTCCTAAGCTCAGGCACACGTGTGAGCAGGGG
 GACGGTGTGGTCCCTATGGCTGGGAGTCCACGACGGCTCTCCTTCGGGCGCAACACATCCAGGATG
 GGGCCTTAAGGCTCACCCTGAGTTCGTCAGAGGGCTGGGGTACGACGGAGGGGACTGGAGCTGGAG
 AGTGACTGTAGAGCCTCAGGACTCAGTACTTCTGCCCTCCCTTTGGTCTCCCTGTTCTTCTATGTGGT
 ACAGATGGCAAGGAAGTCTACTACCAGAGGTTGGGGCAAGGGGCAAGTTGAAGTTATCAGTGGGCACA
 CCAAGTGAACCTGGTAACCTCCGCTTTACACTTTTGCCACCAACCAGTCCAGGGGATACAGCCCCAAGTA
 TGGCAGCTACAATGTCTTCTGGACTCCAACCCAGGACTGCCCTGCTGACAGAGATGGTAAAGAGTCGC
 CTAATAGCTGGTTTCAGCATCGCCCCAGGGGCTCCCTGAACGCTACCTCGGCTTGCAGGATCCC
 TGAAGTGGGAGGACAGAGTCCAAGTGGCAAGGGCAGGGGCAAGTTCTTGATACAGCAGGTGACCCTGAA
 AATTCCCATTTCCATAGAGTTTGTGTTGAATCAGGCAGTGCACAGGAGGAAATCAAGCCCTGCCA
 AGACTGGCAGGCAGTCTACTGACCCAGGCCCTGGAGAGCCATGCTGAAGGCTTTAGAGAGCGCTTTGAGA
 AGACTTCCAGCTGAAGGAGAAGGGCTGAGCTTGCGCAGCAGGTTTTGGTCAAGCTCCCTCGCCGCGG
 CCTCCTTGGTGGAAATGGCTACTTCTACGACAAAGGGCTGGTATTGCCAGACATCGGGTGGAAAGGTCT
 GAGCAGAAGTGGACCCAGCCCTCTTCCACCCGTACCTCTTTTACAGCAGTGCCTCCCGGTATTCT
 TCCACAGAGGCTTCTTTGGGATGAAGGCTTCCACAGCTGGTGGTTAGCGGTGGGATCCCTCCCTCAC
 CCGGGAAGCCCTTGGCCACTGGCTGGGGCTGCTAAATGCTGATGGCTGGATTGGGAGGAGCAGATACTG
 GGGGATGAGGCCCGAGCCGGGTGCTCCAGAATTCTAGTACAACGAGCAGTCCACGCCAACCCCCAA
 CCCTACTTTTGCCTGTAGCCATATGCTAGAGGTTGGTGACCCTGACGACTTGGCTTTCCTCGAAAGGC
 CTTGCCCCGCTGCATGCCTGGTTTTCTGGCTCCATCAGAGCCAGGCAGGCCACTGCCACTATCTTAC
 CGCTGGCGGGGACGGGACCTGCCTTACCAACCTTACTGAACCCAAAGACCTACCTCTGGGCTGGATG
 ACTACCCCGGGCTTACACCCTTCAGTAACCGAGCGGCACCTGGACTGCGATGTTGGGTGGCACTGGG
 TGCCCGTGTGCTGACCGGCTGGCAGAGCATCTGGGTGAGGCTGAGGTAGCTGCTGAGCTGGGCCACTG
 GCTGCCTCACTGGAGGCAGCAGAGAGCCTGGATGAGCTGCACTGGGCCCCAGAGCTAGGAGTCTTTGCGA
 ACTTTGGGAACACACAAAAGCAGTACAGCTGAAGCCAGGCCCTCAGGGGCTCGTTCGGGTGGTGGG
 TCGGCCCAACCTCAACTGCAGTATGTAGATGCTCTTGGCTATGTGAGTCTTTTCCCTTGTGCTGCGA
 CTGCTGGACCCACCTCATCCCGCTTGGGCCCTGCTGGACATTCTAGCCGACAGCCCATCTCTGGA
 GCCCTTTGGTTTACGCTCCCTTGACGCTCCAGCTCCTTTATGGCCAGCGCAATTAGAGCATGATCC
 CCCCTACTGGCGGGTGTGTGGCTCAATGTCAACTACCTGGCTTTGGGAGCACTCCACCACTATGGG
 CATCTGGAGGGTCTCACCAGGCTCGGGCTGCCAACTCCAGGTGAGCTCCGTGCCAACGTGGTAGGCA
 ATGTATGGCGCCAGTACCAGGCTACAGGCTTCTTTGGGAGCAGTACAGTGACCGGATGGGCGAGGCAT
 GGGCTGCCCCCTTCCACGGCTGGACCAGCTTGTCTTACTGGCCATGGCTGAAGACTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229007 representing NM_001146158
 Red=Cloning site Green=Tags(s)

MARGERRRAVPAEGVRTAERAARGGPRRDGRGGGPRSTAGGVALAVVLSLALGMSGRWVLAWYRARR
 AVTLHSAPPVLPADSSSPAVAPDLFWGTYRPHVYFGMKTRSPKPLLTGLMWAQQGTTGTPKLRHTCEQG
 DVGVPYGWFEHDGLSFGRQHIQDGLRLTTEFVKRPGGQHGGDWSWRVTVEPQDSGTSALPLVSLFFYVV
 TDGKEVLLPEVGAKGQLKFI SGHTSELGNFRFTLLPPTSPGDTAPKYGSYNVFWTSNPGLPLLTEMVKSR
 LNSWFQHRPPGASPERYLGLPGSLKWEDRGPSGQGQGLIQQVTLKIPIISIEFVFE SGAQAGGNQALP
 RLAGSLLTQALESHAEGFRERFEKTFQLKEKGLSSGEQVLGQAALSGLLGGIGYFYGQGLVLPDIGVEGS
 EQKVDPALFPPVPLFTAVPSRSFFPRGFLWDEGFHQLVVQRWDPSLTREALGHWLGLLNADGWIGREQIL
 GDEARARVPPEFLVQRAVHANPPTLLLPAHMLEVGD PDDLAFLRKALPRLHAWFSWLHQSQAGPLPLSY
 RWRGRDPALPTLLNPKTLPSGLDDYPRASHPSVTERHDLRCWVALGARVLTRLAEHLGEAEVAELGPL
 AASLEAAESLDELHWAPELGVFADFGNHTKAVQLKPRPPQGLVRVVGRPQPQLQYVDALGYVSLFPLLLR
 LLDPTSSRLGPLLDILADSRHLWSPFGLRSLAASSFYGQRNSEHDPPYWRGAVWLVNLYLALGALHHYG
 HLEGPQARA AKLHGELRANVGNVWRQYQATGFLWEQYSDRDGRGMGCRPFHGWTSLVLLAMAEDY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

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_001146158.1](#), [NP_001139630.1](#)

RefSeq Size: 2584 bp

RefSeq ORF: 2196 bp

Locus ID: 7841

UniProt ID: [Q13724](#)

Cytogenetics: 2p13.1

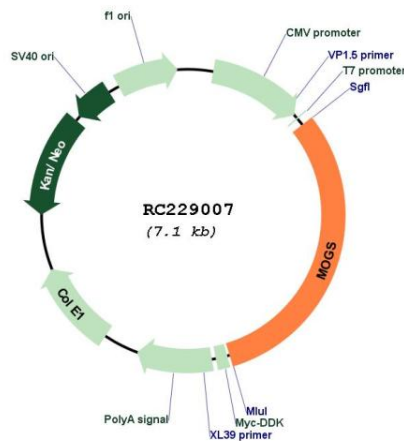
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Metabolic pathways, N-Glycan biosynthesis

MW: 91.9 kDa

Gene Summary: 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]

Product images:



Circular map for RC229007