

Product datasheet for **RR206473**

Gcs1 (NM_031749) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gcs1 (NM_031749) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gcs1
Synonyms:	Mogs
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RR206473 representing NM_031749
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCCGGGCGAGAGGCGACGGCGCGCTGCGGCCGAGAGGGGCGGCCCGCTGGAGAGGGCGCGGG
 GTGCGGGCCGGCGGATGGCAGAGCCGGCGGGGCGCGGCTCGGCGGGCGCGGCCCTGGCCGTGGT
 GGTTTTGGCGCTGGCCTTCGGCCTGTGGGGCGCTGGGTGCTGGCGTGGCTGGGTGTGCGCCGCGCGCTC
 AACTGCACCCCGCTCCGTACGCGCTACCGCCGACTCCTCCAGTCTGCGGTGGCCCCGGAATTTTTTT
 GGGGTACCTATCGCCACACGTCTATTTTCGGCATGAAGACTCGCAGCCCCAAACCACTGCTCACGGGACT
 GATGTGGGCGCAGCAAGGCGCCACCCCGGGACCCCTCCTAAGCTCAGGCACACATGCGAACAAGGAGAC
 GGCGTGGTCCCTATGGCTGGGAGTTCATGATGGACTCTCCTTTGGTCGGCAACATATCTATGATGGG
 CCTTAAGGCTCACCCTGAGTTCGTCAAGAGATCTGGGGTTCATCAGGAGGGGATTGGAGCTGGAGAGT
 TACCGTAGAGCCTCAGGCCTCAGGTACACCTTCCTTCCCTTTGGTCTCCCTGTTCTTCTAGTGGTAACA
 GATGGGCAAGAGGTCCTACTACCAGAGGTTGGAGCCAAAGGACAGTTGAAGTTCATCAGTGGGCACACCA
 GTGAACCTTGGTGACTTCCGCCTCACACTTCTGCCACCAACCACTCCAGGAGACACTGTCCCTAAGCATGG
 CAGCTACAATGTCTTCTGGTCTCCAACCCAGGGCTGCCTCTGCTCACAGACATGGTAAAGAGCCACCTA
 AACAGCTGGTTTCATCACCGGCCCCAGGAGCCTCTCCGGAACGATACCTTGGCTTGCTGGATCTCTTA
 AGTGGGAAGAGAGAGGCGCTAGTGGGCAAGGCGAGTCTTGGTCCAGCAGGTGACACTGAAAGCCCTTT
 CTCTGTGGAGTTGTGTTGAATCTGGCAGTGCCAGGACAGGAAGAGACCAAGCCTCTGAGCAGCTGGTA
 GGTGGCAACTGACCCGGGCCCTGGAGAGCCATGCTGCAGCATTCAAGGAGCGTTTTGAGAGGACCTTCC
 AGCTAAAGGAGAAGGGCCTGAGCCCTGAGGAGCAGGCTCTGGTCAAGTTGCCCTCAGTGGCCTATTGG
 TGGGATTGGTTACTTCTATGGACAGGGTTTGGTGTGCCAGACACTGGCATGGAAGGGTCTGAACAGAAA
 ATGGACCTTCCCTATTTCCGCCTGTCCCCCTTTCTCTGGGGTCCCTTCCCGGTCATTCTTCCACGAG
 GCTTCTCTGGGATGAAGGCTTTCACCAGCTAGTGGTCCAGCGATGGGATCCCCACCTCACCCGGGAGGC
 CCTAGGACACTGGCTGGGCTGTCAATGCTGACGGTTGGATTGGGCGAGAGCAGATTCTGGGGATGAG
 GCCAGAGCCCGAGTGCCCCGGAATTCCTAGTCAACGTGCAGCCATGCCAACCTCCAACCTGCTCC
 TGCCAGTCATACACATGCTAGAAGGCCGGGCCCTGAGGACTTGGCTTCTCTGCGCAGGGCTTCCCCCG
 CTTGCATGCCTGGTTCTTGGCTCCATCAAAGTCAGGCAGGGCCAGTGCCTTCTACCCTGGCGG
 GGCAGGGATCTAGCTTTGCTACCTACTTAACCCCAAGACACTGCCCTCGGGCCTGGATGACTACCCCA
 GGGCCTACATCCTTCTGACGAGAGCGGCACCTGGACCTGCGGTGCTGGGTGACATTGGGTGCCCGGGT
 GCTGTACAGCTTGCAGAAGAGCTTGGGAGACTGAAGCTGCTGCAGAGTTGGGCCATTGGCTGCCTCT
 CTAGAAGCAGCTGGAAGTCTCGATGAGCTGCACTGGGCTCCTGAGCTGGGTGTCTTTGCCGACTTTGGGA
 ACCACACAAAAGCAGTACAGCTCAAGTCTAGGCCCCACAGGGGCTGGTTAGGGTGGTAGGCAGGCCTCC
 AGCTCGACTGCAGTATGTGGATGCCCTGGGCTATGTCTCTTTTTCTTTGCTGTACAACCTGCTGGAG
 CCCAGCTACCCCGCTTGGGACCCCTGCTGGACGTTCTAGCTGATAGCCGCCATCTCTGGAGCCCTTTG
 GGTTGCGCTCCCTTTCAGCCTCCAGTCTCTTTATAAACAGCGAAATACGGAACACGATCCACCTTACTG
 GCGAGGTGCGGTGTGGCTGAATATCAACTACCTGGCTTTGGGGCACTACACCACTATGGGCGGTGGAG
 GGTCTCACAAAGGTTAGGCTGCCAAACTCTACCGTGAACCTCGGGCCAATGTAGTAAGCAACGTACGGC
 AGCAATACCAGGCTACAGGGTTTCTGTGGAAACAGTACAGTGACCAGGATGGGCGGGCATGGGCTGCCG
 CCCCTTCAAGGATGACCAGTCTGTTTTACTGATCATGGCTGAAGAGTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR206473 representing NM_031749
Red=Cloning site Green=Tags(s)

MARGERRRRAAAE GARPLERARGARRDGRAGGARGSAGGAALAVVVLALAFGLSGRWVLAWLGVRRAL
TLHPAPSALPPDSSSPVAPEFFWGTYRPHVYFGMKTRSPKPLL TGLMWAQQGATPGTPPKLRHTCEQGD
GVGPYGWEFHDGLSFGROHIYDGLRLTTEFVKRSGGHGGDWSWRVTVEPQASGTPSFPLVSLFFYVVT
DGQEVLLPEVGAKGQLKFI SGHTSELGDFRLTLLPPTTPGDTVPKHGSYNVFWSSNPGLPLL TDMVKSHL
NSWFHHRPPGASPERYLGLPGSLKWEERGPSGQGQFLVQQVTLKAPFSVEFVFESGARTGRDQASEQLV
GGQLTRALESHAAAFKERFERTFQLKEKGLSPEEQALGQVALSGLLGGIGYFYGGQLVLPDTGMEGSEQK
MDPSLFPPVPLFSGVPSRSFFPRGFLWDEGFHQLVVQRWDPHLTREALGHWLGLLNADGWI GREQILGDE
ARARVPPEFLVQRAAHANPPTLLLPIHMLEGRAPEDLAFLRRAFPR LHAWFSWLHQSQAGPVPLSYRWR
GRDLALPTLLNPKTLPSGLDDYPRASHPSAAERHLDLRCWVTLGARVLSQLAEELGETEAAAELGPLAAS
LEAAGSLDELHWAPELGVFADFGNHTKAVQLKSRPPQGLVRVVGRRPARLQYVDALGYVSLFPLLLQLE
PSSPRLGPLLDVLA DSRHLWSPFGLRSL SASSLFYKQRNTEHDPPYWRGAVWLNINYLALGALHHYGRVE
GPHKVQAAKLYREL RANVVS NVRQQYQATGFLWEQYSDQDGRGMGCRPFQGWTSLVLLIMAE EY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

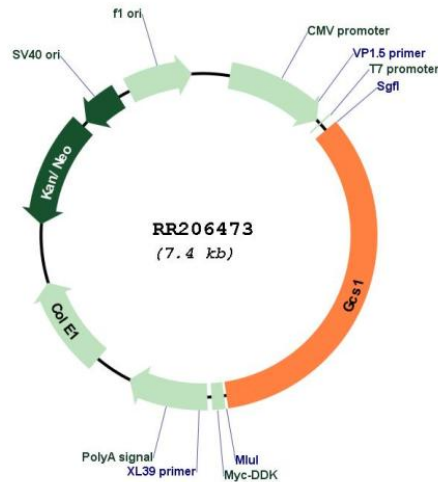
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_031749

ORF Size: 2502 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:

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_031749.2](#), [NP_113937.1](#)

RefSeq Size: 2702 bp

RefSeq ORF: 2505 bp

Locus ID: 78947

UniProt ID: [O88941](#)

Cytogenetics: 4q34

MW: 91.9 kDa

Gene Summary: human homolog cleaves the distal alpha-1,2-linked glucose residue from Glc(3)-Man(9)-GlcNAc(2); involved in the N-linked oligosaccharide processing pathway [RGD, Feb 2006]