

## Product datasheet for **RC214131**

### GCNT1 (NM\_001490) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GCNT1 (NM_001490) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GCNT1
Synonyms:	C2GNT; C2GNT-L; C2GNT1; G6NT; NACGT2; NAGCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC214131 representing NM\_001490  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGAGGACGTTGCTGCGAAGGAGACTTTTTCTTATCCACCAAATACTACTTTATGGTTCTTGTTT  
 TATCCCTAATCACCTTCTCCGTTTTAAGGATTCATCAAAAGCCTGAATTTGTAAGTGTGACACACTTGGA  
 GCTTGCTGGGAGAAATCCTAGTAGTGATATTAATTGCACCAAAGTTTTACAGGGTATGTAATGAAATC  
 CAAAAGGTAAAGCTTGAGATCCTAACAGTGAAATTTAAAAAGCGCCCTCGGTGGACACCTGACACTATA  
 TAAACATGACCAGTGACTGTTCTTTTCATCAAGAGACGCAAATATATTGTAGAACCCTTAGTAAAGA  
 AGAGGCGGAGTTTCCAATAGCATATTCTATAGTGGTTCATCACAAGATTGAAATGCTTGACAGGCTGCTG  
 AGGGCCATCTATATGCCTCAGAATTTCTATTGCATTCATGTGGACACAAAATCCGAGGATTCCTATTTAG  
 CTGCAGTGATGGGCATCGCTTCTGTTTTAGTAATGTCTTTGTGGCCAGCCGATTGGAGAGTGTGGTTTA  
 TGCATCGTGGAGCCGGTTCAGGCTGACCTCAACTGCATGAAGGATCTCTATGCAATGAGTGCAAACCTGG  
 AAGTACTTGATAAATCTTTGTGGTATGGATTTTCCCATTAACCAACCTAGAAAATTGTCAGGAAGCTCA  
 AGTTGTTAATGGGAGAAAACAACCTGGAACCGGAGAGGATGCCATCCCATAAAGAAGAAAGTGGAGAA  
 GCGGTATGAGGTCGTTAATGAAAGCTGACAAACACAGGGACTGTCAAAATGCTTCTCCACTCGAAACA  
 CCTCTCTTTTCTGGCAGTGCCTACTTCTGGTTCAGTAGGGAGTATGTGGGTATGTACTACAGAATGAAA  
 AAATCCAAAAGTTGATGGAGTGGGCACAAGACACATACAGCCCTGATGAGTATCTCTGGGCCACCATCCA  
 AAGGATTCCTGAAGTCCCGGCTCACTCCCTGCCAGCCATAAGTATGATCTGTCTGACATGCAAGCAGTT  
 GCCAGTTTGTCAAGTGGCAGTACTTTGAGGGTATGTTTCCAAGGTGCTCCCTACCCGCCCTGCGATG  
 GAGTCCATGTGCGCTCAGTGTGCATTTTCGGAGCTGGTACTTGAAGTGGATGCTGCGCAACACCCTT  
 GTTTGCCAATAAGTTTGACGTGGATGTTGACCTTTGCCATCCAGTGTGGATGAGCATTGAGACAC  
 AAAGCTTTGGAGACATTAACAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC214131 representing NM\_001490  
 Red=Cloning site Green=Tags(s)

MLRLLRRRLFSYPTKYYFVVLVLSLITFSVLRHLELAGENPSSDINCTKVLQGDVNEI  
 QKVKLEILTVKFKRPRWTPDDYINMTSDCSSFIKRRKYIVEPLSKEEAEFPIAYSIVVHHKIEMLDRLL  
 RAIYMPQNFYCIHVDTKSEDSYLAAVMGIASCFSNVVASRLESVVYASWSRVQADLNCMKDLYAMSANW  
 KYLINLCGMDFPKIKTNLEIVRKLKLLMGENNLETERMPHSHKEERWKKRYEVVNGKLTNTGTVMKLPPL  
 PLFSGSAYFVVSREYVGYVLQNEKIQKLEWAQDTYSPDEYLWATIQRIPVPGSLPASHKYDLSDMQAV  
 ARFVKWQYFEGDVSKGAPYPPCDGVHVRVSVIFGAGDLNWMRLRKHHLFANKFDVDVDFAIQCLDEHLRH  
 KALETLKH

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6106\\_c06.zip](https://cdn.origene.com/chromatograms/mk6106_c06.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001490

**ORF Size:** 1284 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\\_001490.5](#)

**RefSeq Size:** 5536 bp

**RefSeq ORF:** 1287 bp

**Locus ID:** 2650

**UniProt ID:** [Q02742](#)

**Cytogenetics:** 9q21.13

**Domains:** Branch

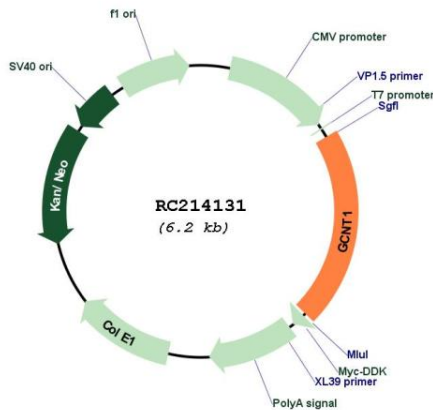
**Protein Families:** Transmembrane

**Protein Pathways:** Metabolic pathways, O-Glycan biosynthesis

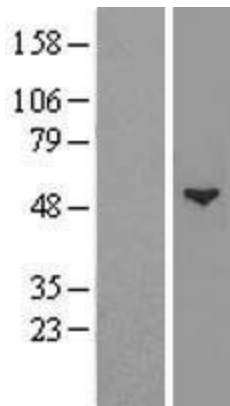
**MW:** 49.6 kDa

**Gene Summary:** This gene is a member of the beta-1,6-N-acetylglucosaminyltransferase gene family. It is essential to the formation of Gal beta 1-3(GlcNAc beta 1-6)GalNAc structures and the core 2 O-glycan branch. The gene coding this enzyme was originally mapped to 9q21, but was later localized to 9q13. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC214131



Western blot validation of overexpression lysate (Cat# [LY420411]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC224441] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).