

Product datasheet for **RC224441**

GCNT1 (NM_001097636) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCNT1 (NM_001097636) 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:

>RC224441 representing NM_001097636
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGAGGACGTTGCTGCGAAGGAGACTTTTTCTTATCCCACAAATACTACTTTATGGTTCTTGTTT
 TATCCCTAATCACCTTCTCCGTTTTAAGGATTCATCAAAAGCCTGAATTTGTAAGTGTGACACACTTGGA
 GCTTGCTGGGGAGAATCCTAGTAGTGATATTAATTGCACCAAAGTTTTACAGGGTATGTAATGAAATC
 CAAAAGGTAAAGCTTGAGATCCTAACAGTGAAATTTAAAAAGCGCCCTCGGTGGACACCTGACGACTATA
 TAAACATGACCAGTGACTGTTCTTTTCATCAAGAGACGCAAATATATTGTAGAACCCTTAGTAAAGA
 AGAGGCGGAGTTTCCAATAGCATATTCTATAGTGGTTCATCACAAGATTGAAATGCTTGACAGGCTGCTG
 AGGGCCATCTATATGCCTCAGAATTTCTATTGCATTGATGTGGACACAAAATCCGAGGATTCCTATTTAG
 CTGCAGTGATGGGCATCGCTTCTGTTTTAGTAATGTCTTTGTGGCCAGCCGATTGGAGAGTGTGGTTTA
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 AGTTGTTAATGGGAGAAAACAACCTGGAACCGGAGAGGATGCCATCCCATAAAGAAGAAAGTGGAGAA
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 CCTCTCTTTTCTGGCAGTGCCTACTTCTGTGGTCACTAGGGAGTATGTGGGTATGTACTACAGAATGAAA
 AAATCCAAAAGTTGATGGAGTGGGCACAAGACACATACAGCCCTGATGAGTATCTCTGGGCCACCATCCA
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 GTTTGCCAATAAGTTTGACGTGGATGTTGACCTTTGCCATCCAGTGTGGATGAGCATTGAGACAC
 AAAGCTTTGGAGACATTAACAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224441 representing NM_001097636
 Red=Cloning site Green=Tags(s)

MLRLLRRRLFSYPTKYYFVLVLSLITFSVLRIHQKPEFVSVRHLELAGENPSSDINCKVLQGDVNEI
 QKVKLEILTVKFKRPRWTPDDYINMTSDCSSFIKRRKYIVEPLSKEEAEFPIAYSIVVHHKIEMLDRLL
 RAIYMPQNFYCIHVDTKSEDSYLAAVMGIASCFSNVVASRLESVVYASWSRVQADLNCMKDLYAMSANW
 KYLINLCGMDFPKTNLEIVRKLKLLMGENNLETERMPHSHKEERWKKRYEVVNGKLTNTGTVMKLPPL
 PLFSGSAYFVVSREYVGYVLQNEKIQKLEWAQDTYSPDEYLWATIQRIPVPGSLPASHKYDLSDMQAV
 ARFVKWQYFEGDVSKGAPYPPCDGVHVRVSVIFGAGDLNWMLRKHHLFANKFDVDVDFAIQCLDEHLRH
 KALETLKH

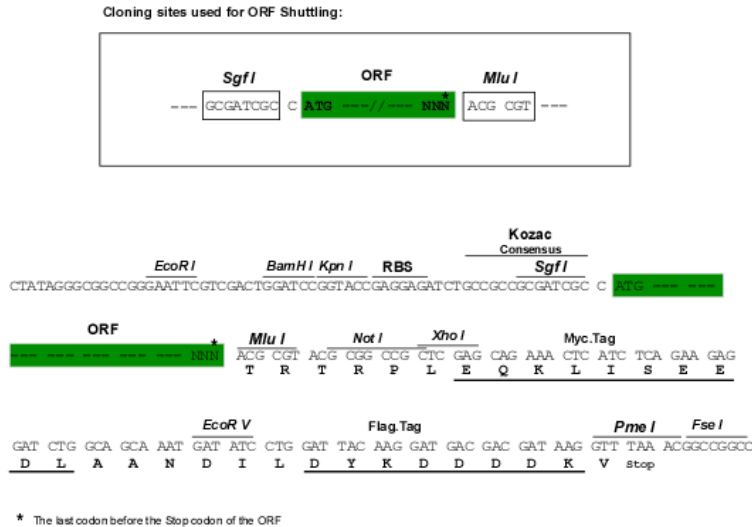
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6106_c06.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001097636

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_001097636.1](#), [NP_001091105.1](#)

RefSeq Size: 5617 bp

RefSeq ORF: 1287 bp

Locus ID: 2650

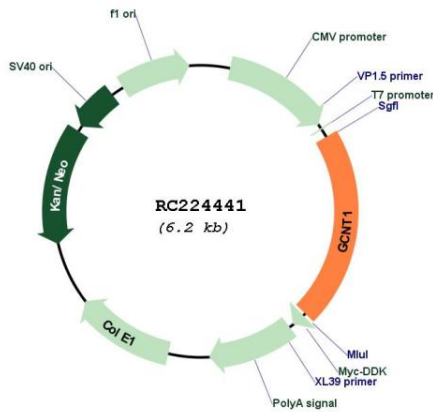
UniProt ID: [Q02742](#)

Cytogenetics: 9q21.13

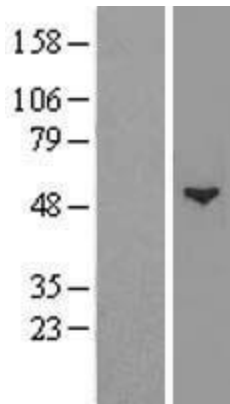
Protein Families: Transmembrane
Protein Pathways: Metabolic pathways, O-Glycan biosynthesis
MW: 49.6 kDa

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 RC224441



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]).