

Product datasheet for **RG215597**

GCNT2 (NM_001491) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCNT2 (NM_001491) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GCNT2
Synonyms:	bA360O19.2; bA421M1.1; CCAT; CTRCT13; GCNT2C; GCNT5; IGNT; II; NACGT1; NAGCT1; ULG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215597 representing NM_001491 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCC^{TT}TATCAATGCGTTACCTCTTCATAATTTCTGTCTCTAGTGTAATTATTTTTATCGTCTTCTCTG
TGTTCAATTTTGGGGGAGATCCAAGCTTCCAAAGGCTAAATATCTCAGACCCTTTGAGGCTGACTCAAGT
TTGCACATCTTTTATCAATGGAAAAACAGTTCCTGTGGAAAAACAACTAATGATCCATGAGAAGTCT
TCTTGAAGGAATACTTGACCCAGAGCCACTACATCACAGCCCTTTATCTAAGGAAGAAGCTGACTTTC
CCTTGGCATATATAATGGTCATCCATCCTACTTTGACACCTTTGCAAGGCTCTTCAGGGCTATTTACAT
GCCCAAATATCTACTGTTCATGTGGATGAAAAAGCAACAACCTGAATTTAAAGATGCGGTAGAGCAA
CTATTAAGCTGCTTCCAAACGCTTTTCTGGCTTCCAAGATGGAACCCGTTGTCTATGGAGGGATCTCCA
GGCTCCAGGCTGACCTGAACTGCATCAGAGATCTTTCTGCCTTCGAGGTCTCATGGAAGTACGTTATCAA
CACCTGTGGGCAAGACTTCCCCGTGAAAACCAACAAGGAAATAGTTTCAGTATCTGAAAGGATTTAAAGGT
AAAAATATCACCCAGGGGTGCTGCCCCAGCTCATGCAATTGGACGGACTAAATATGTCCACCAAGAGC
ACCTGGGCAAAGAGCTTTCCTATGTGATAAGAACAACAGCGTTGAAACCGCTCCCCCATAATCTCAC
AATTTACTTTGGCTCTGCCTATGTGGCTCTATCAAGAGAGTTTGCCAACCTTTGTCTGCATGACCCAGG
GCTGTTGATTTGCTCCAGTGGTCCAAGGACACTTTCAGTCTGATGAGCATTCTGGGTGACACTCAATA
GGATTCAGGTGTTCTGGCTCTATGCCAAATGCATCCTGGACTGAAACCTCAGAGCTATAAAGTGGAG
TGACATGGAAGACAGACCGGAGGCTGCCACGGCCACTATGTACATGGTATTTGTATCTATGAAACCGGA
GACTTAAAGTGGCTGGTTAATTCACCAAGCCTGTTTGCTAACAAGTTTGAGCTTAATACCTACCCCTTA
CTGTGGAATGCCTAGAAGTGAAGCATCGCGAAAGAACCCTCAATCAGAGTGAACTGCGATACAACCCAG
CTGGTATTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG215597 representing NM_001491
 Red=Cloning site Green=Tags(s)

MPLSMRYLFIISVSSVIIFIVFSVFNFGDPSFQRLNISDPLRLTQVCTSFINGKTRFLWKNKLMIEKS
 SCKEYLTQSHYITAPLSKEEADFPPLAYIMVIHHFDTFARLFRAIYMPQNIYCVHVDEKATTEFKDAVEQ
 LLSCFPNAFLASKMEPVVYGGISRLQADLNCIRDLSAFEVSWKYVINTCGQDFPLKTNKEIVQYLKGFKG
 KNITPGVLPAAHAIGRTKYVHQEHLGKELSYVIRTALKPPPPHNLTIYFGSAYVALSREFANFVLHDPR
 AVDLLQWSKDTFSPDEHFVWTLNRIIPGVPGSMPNASWTGNLRAIKWSDMEDRHGGCHGHYVHGICITYGNG
 DLKWLVNPSPLFANKFELNTYPLTVECLELRHRERTLNQSETAIQPSWYF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001491

ORF Size: 1200 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_001491.3](#)

RefSeq Size: 4691 bp

RefSeq ORF: 1203 bp

Locus ID: 2651

UniProt ID: [Q06430](#)

Cytogenetics: 6p24.3-p24.2

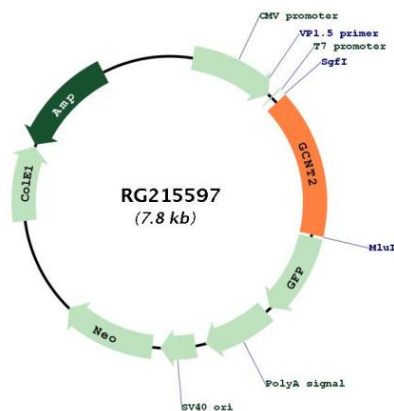
Domains: Branch

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Glycosphingolipid biosynthesis - lacto and neolacto series, Metabolic pathways

Gene Summary: This gene encodes the enzyme responsible for formation of the blood group I antigen. The i and I antigens are distinguished by linear and branched poly-N-acetyllactosaminoglycans, respectively. The encoded protein is the I-branching enzyme, a beta-1,6-N-acetylglucosaminyltransferase responsible for the conversion of fetal i antigen to adult I antigen in erythrocytes during embryonic development. Mutations in this gene have been associated with adult i blood group phenotype. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG215597