

Product datasheet for **RC215479**

GCNT2 (NM_145649) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCNT2 (NM_145649) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GCNT2
Synonyms:	bA360O19.2; bA421M1.1; CCAT; CTRCT13; GCNT2C; GCNT5; IGNT; II; NACGT1; NAGCT1; ULG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215479 representing NM_145649 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGGGCTCTTGAAGCACTGTCTTTTTAGCGCGTCTCTTATCTCTGCCCTGATTTTTGTATTTGTTT
ACAATACTGAGTTATGGGAGAATAAACGTTTTCTGAGGGCAGCTCTGTCCAATGCTTCACGTGTAGCAGA
AGCCTGTCATCAGATTTTGGGGGAAAGTTTTTACCCAACAGAAAATGCATTGAAAACCTACCCTTGAT
GAAGCTACCTGCTATGAGTACATGGTTCGAAGCCACTATGTAACAGAAACTCTCTGAAGAAGAGGCTG
GGTTCCCTTAGCTTACACAGTGACCATCCACAAAGACTTCGGCACTTTGAGAGGCTCTCAGGGCGAT
TTATATGCCCCAAAATGTCTACTGTGTGCACCTGGATCAGAAGGCGACGGATGCCTTTAAAGGTGCAGTG
AAACAGTTACTCAGCTGCTCCCAAATGCTTTTCTGGCTTCCAAGAAGGAGTCGGTTGTCTATGGGGGA
TCTCCAGGCTCCAGGCTGACCTGAACTGCCTGGAAGACCTTGTGGCTCTGAAGTTCCCTGGAAGTATGT
CATCAACACCTGCGGGCAAGACTTTCCCTGAAAACCAACAGGGAAATAGTTTCAGTATCTGAAGGGATT
AAAGGGAAAAATACACCCCGGAGTGTGCCTCCTGACCACGCTGTTGGACGGACTAAATACGTCCACC
AAGAACTGTTAAACCACAAAAATTCCTACGTGATTAACAACAAAAATAAAACTCCTCCTCCTCATGA
CATGGTGATTTACTTTGGCACGGCCTACGTGGCTCTACAAGGGACTTTGCTAACTTCGTCCTCCAAGAC
CAGCTCGCACTTGACTTACTCTCCTGGTCCAAGGACACCTACAGCCCGACGAACATTTCTGGTGACAC
TCAACAGGATCCCGGTGTTCTGGCTCTATGCCAAATGCATCCTGGACTGGAAAACCTCAGAGCTATAAA
GTGGAGTGACATGGAAGACAGACACGGAGGCTGCCACGGCCACTATGTACATGGTATTTGTATCTATGGA
AACGGAGACTTAAAGTGCTGGTTAATTCACCAAGCCTGTTTGCTAACAAAGTTTGAGCTTAATACCTACC
CCCTTACTGTGGAATGCCTAGAAGTACGAGGATCGCGAAAGAACCCTCAATCAGAGTGAACTGCGATACA
ACCCAGCTGGTATTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC215479 representing NM_145649
Red=Cloning site Green=Tags(s)

MMGSWKHCLFSASLISALIFVYVYNTLWENKRFLRAALSNASLLAEACHQIFEGKVFYPTENALKTTLD
 EATCYEYMRSHYVTETLSEEEAGFPLAYTVTIHKDFGTFERLFRAIYMPQNVYCVHLDQKATDAFKGAV
 KQLLSFCFPAFLASKKESVYGGISRLQADLNCLEDLVASEVPWKYVINTCGQDFPLKTNREIVQYLKGF
 KGKNITPGVLPDPHAVGRTKYVHQELLNHKNSYVIKTTKLTTPPHDMVIYFGTAYVALTRDFANFVLQD
 QLALDLLSWSKDTYSPDEHFVTLNRIPGVPGSMPNASWTGNLRAIKWSMEDRHHGGCHGHYVHGICIYQ
 NGDLKWLVNPSPLFANKFELNTYPLTVECLELRHRERTLNQSETAIQPSWYF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_145649

ORF Size: 1206 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_145649.5](#)

RefSeq Size: 4540 bp

RefSeq ORF: 1209 bp

Locus ID: 2651

UniProt ID: [Q06430](#)

Cytogenetics: 6p24.3-p24.2

Domains: Branch

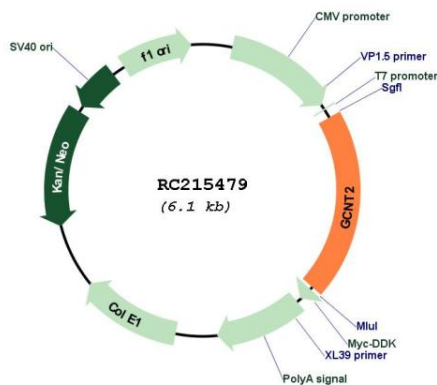
Protein Families: Druggable Genome, Transmembrane

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

MW: 46.3 kDa

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 RC215479