

## Product datasheet for RC215538

### GCNT2 (NM\_145655) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GCNT2 (NM_145655) 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:	>RC215538 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAC**TTTTGGAGG**TA**CTGCTTTTTT**GCTT**CTCACTCTGCTCAGCGTGGTCATTTTT**GTGAGATTTTACA  
GTAGCCAAT**TGAGCCCGCCAAAA**AGTTATGAGAAGCTGAACAGT**TCCAGT**GAAAGG**TATTTAGGAAAAC**  
TGCCTGTAATCACGCCTTAGAGAAA**TGCCAGTCTTTTT**GTGGGAAAATATATTACCATCAC**TTTGCGA**  
AGTGTCCCTTGAAGGATTAC**TGACCCAGAATCACTACATCACAAGTCCCTGT**CGGAAGAAGAGGCTG  
CATTCCCTTTGGCCTATGTCATGGT**CATCCATAAGGACTTTGACACCTTTGAAAGGCTCTTTAGGGCTAT**  
CTATATGCCCCAAAATGTCTACTGTGTT**CACGTGGATGAGAAAGCCCAGCTGAGTATAAGGAATCTGTG**  
AGGCAGT**TA**CTGAGTTGCTTCCAAAATGCTTTCATTGCTTCAAAGACAGAGTCTGTGGTTTATGCAGGCA  
TTTCCAGACTCCAGGCTGACCTGAACTGTCTGAAAGACCTTGTGCGCTCTGAGGTTCCCTGGAAGTACGT  
CATCAACACCTGTGGACAAGACTTCCCCCTGAAAACCAACCGGGAGATAGTTCAGCATCTGAAAGGATTT  
AAAGGGAAAAATACACCCAGGGGTGCTGCCTCCTGACCATGCAATTAAAGCGAACTAAATATGTCCACC  
AAGAGCATACAGATAAAGGTGGCTTTTTTGTGAAAATACTAATATTTGAAA**ACTT**CACCTCCACATCA  
GCTGACCATCTACTTTGGCACTGCCTATGTGGCGCTTACCAGAGAGTTTGTGCGACTTTGTCTGCGTGAC  
CAAAGGGCCATTGATCTACTACAATGGTCAAAGATACCTATAGTCTGATGAGCATTCTGGGTGACAC  
TTAATAGGGTTTCAGGTGTTCTGGCTCTATGCCAAATGCATCCTGGACTGGAAACCTCAGAGCTATAAA  
GTGGAGTGACATGGAAGACAGACACGGAGGCTGCCACGGCCACTATGTACATGGTATTTGTATCTATGGA  
AACGGAGACTTAAAGTGCTGGTTAATTCACCAAGCCTGTTTGCTAA**CAAGTTT**GAGCTTAACTACCTACC  
CCCTTACTGTGGAATGCCTAGAACTGAGGCATCGCGAAAGAACCTCAATCAGAGTGAACTGCGATACA  
ACCCAGCTGGTATTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAA**ACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT**  
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC215538 protein sequence  
Red=Cloning site Green=Tags(s)

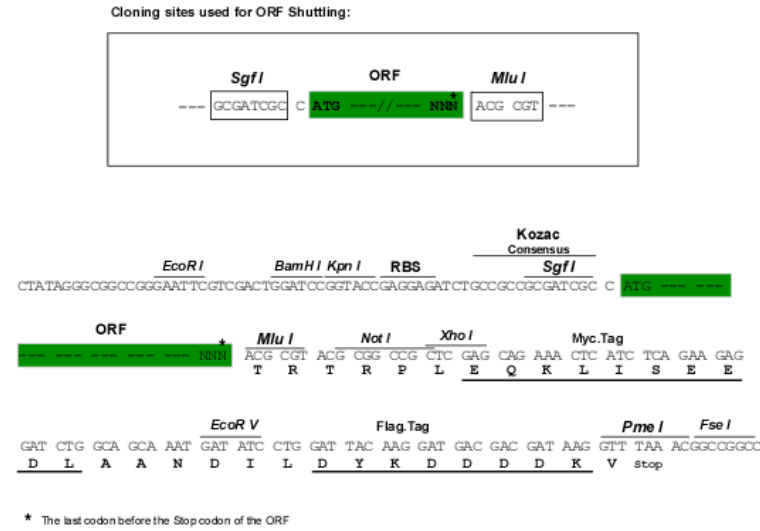
```
MNFWRVRCFFAFTLLSVVIFVRFYSSQLSPPKSYEKLNSSSERYFRKTACNHALEKMPVFLWENILPSPLR
SVPCKDYLTQNHYITSPLEEEAAFLAYVMVIHKDFDTERLFRAIYMPQNVYCVHVEKAPA EYKESV
RQLLSCFQNAFIASKTESVYVYAGISRLQADLNCLKDLVASEVPWKYVINTCGQDFPLKTNREIVQHLKGF
KGNITPGVLPDHAIAIKRKYVHQEHTDKGGFFVKNTNIIKTSPPHQLTIYFGTAYVALTREFVDFVLRD
QRAIDLLQWSKDTYSPDEHFVWTLNRVSGVPGSMPNASWTGNLRAIKWSDMEDRHGGCHGHYVHGICIIYG
NGDLKWLVNPSPLFANKFELNTYPLTVECLELRHRERTLNQSETAIQPSWYF
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6606\\_d07.zip](https://cdn.origene.com/chromatograms/mk6606_d07.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_145655

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\\_145655.4](#)

**RefSeq Size:** 4219 bp

**RefSeq ORF:** 1209 bp

**Locus ID:** 2651

**UniProt ID:** [Q06430](#)

**Cytogenetics:** 6p24.3-p24.2

**Domains:** Branch

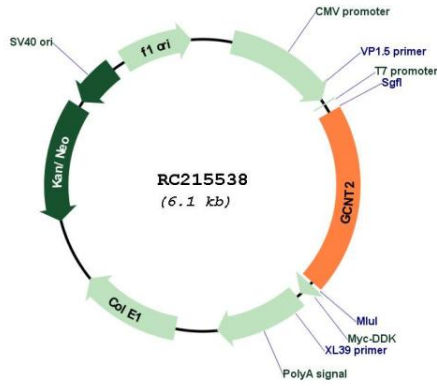
**Protein Families:** Druggable Genome, Transmembrane

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

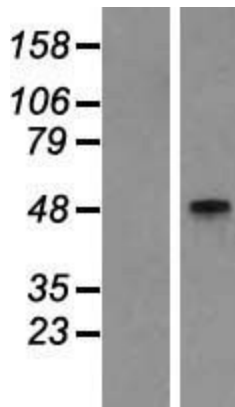
**MW:** 46.5 kDa

**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 RC215538



Western blot validation of overexpression lysate (Cat# [LY407911]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215538 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).