

Product datasheet for SC119201

GCNT2 (NM_001491) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCNT2 (NM_001491) Human Untagged Clone
Tag:	Tag Free
Symbol:	GCNT2
Synonyms:	bA360O19.2; bA421M1.1; CCAT; CTRCT13; GCNT2C; GCNT5; IGNT; II; NACGT1; NAGCT1; ULG3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119201 sequence for NM_001491 edited (data generated by NextGen Sequencing)

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ATGCCTTTATCAATGCGTTACCTCTTCATAATTTCTGTCTCTAGTGAATATTTTTATC
GTCTTCTCTGTGTTCAATTTTGGGGGAGATCCAAGCTTCAAAGGCTAAATATCTCAGAC
CCTTTGAGGCTGACTCAAGTTTGACATCTTTTATCAATGGAAAAACACGTTTCTGTGG
AAAAACAACTAATGATCCATGAGAAGTCTTCTGCAAGGAATACTTGACCCAGAGCCAC
TACATCACAGCCCTTTATCTAAGGAAGAAGCTGACTTCCCTTGGCATATATAATGGTC
ATCCATCATCACTTTGACACCTTTGCAAGGCTCTTCAGGGCTATTTACATGCCCCAAAT
ATCTACTGTGTTGATGTGGATGAAAAAGCAACAAGTGAATTTAAAGATGCGGTAGAGCAA
CTATTAAGCTGCTTCCCAAACGCTTTTCTGGCTTCCAAGATGGAACCCGTTGTCTATGGA
GGGATCTCCAGGCTCCAGGCTGACCTGAACTGCATCAGAGATCTTCTGCCTTCGAGGTC
TCATGGAAGTACGTTATCAACACCTGTGGCAAGACTTCCCCCTGAAAACCAACAAGGAA
ATAGTTTCAGTATCTGAAAGGATTTAAAGGTAAAAATATCACCCCAGGGGTGCTGCCCCA
GCTCATGCAATTGGACGGACTAAATATGTCCACCAAGAGCACCTGGGCAAAGAGCTTTCC
TATGTGATAAGAACAACAGCGTTGAAACCGCTCCCCCATAATCTCACAATTTACTTT
GGCTCTGCCTATGTGGCTCTATCAAGAGAGTTTGCCAACCTTTGTTCTGCATGACCCACGG
GCTGTTGATTTGCTCCAGTGGTCCAAGGACACTTTCAGTCTGATGAGCATTTCTGGGTG
ACACTCAATAGGATTCAGGTGTTCTGGCTCTATGCCAATGCATCCTGGACTGGAAC
CTCAGAGCTATAAAGTGGAGTGACATGGAAGACAGACACGGAGGCTGCCACGGCCACTAT
GTACATGGTATTTGTATCTATGGAACGGAGACTTAAAGTGGCTGGTTAATTCACCAAGC
CTGTTTGTAACAAGTTTGAGCTTAATACCTACCCCTTACTGTGGAATGCCTAGAAGTGA
AGGCATCGCGAAAGAACCCTCAATCAGAGTGAACTGCGATACAACCCAGCTGGTATTTT
TGA

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Clone variation with respect to NM_001491.2



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001491 unedited</p> <pre> NGTTCAAATATTTGTATACGACTCACTATAGGGCGGCCGCGACATTTCGCACGAGTCGGGA TGAAACGGGAATCGATTCCCAGCGTCTCCAACAGGCAGGAGTGAGTGGAGTATGTTGCAAA ATAAGAACTCAGAGAAACGAGTGAGTTTTGNGAAAAAGACTTACAGATTTTGACGGTCTC TTGACATTTACCCCTTCTTTGAGGCATGCCTTTATCAATGCGTTACCTCTTCATAATTTCT TGCTCTAGTGTAAATATTTTTATCGTCTTCTGTGTCAATTTTGGGGAGATCCAAG CTTCCAAAGGCTAAATATCTCAGACCCCTTTGAGGCTGACTCAAGTTTGACATCTTTTAT CAATGGAAAAACACGTTTTCTGTGGAAAAACAACTAATGATCCATGAGAAGTCTTCTTG CAAGGAATACTTGACCCAGAGCCACTACATCACAGCCCTTTATCTAAGGAAGAAGCTGA CTTTCCCTTGGCATATATAATGGTCATCCATCATCACTTTGACACCTTTGCAAGGCTCTT CAGGGCTATTTACATGCCCAAAATATCTACTGTGTTTATGTGGATGAAAAAGCAACAAC TGAATTTAAAGATGCGGTAGAGCAACTATTAAGCTGCTTCCCAAACGCTTTTCTGGCTTC CAAGATGGAACCCGTTGTCTATGGNANGGATCTCCAGGCTCCAGGCTGACCTGAAGTGA TCAGAGATCTTTCTGCCTTCAAGTCTCATGGAAGTACGTTATCAACACCTGTGGGCAA GACTTNNCCCTGAAACCACAAGNAATAGTTCATATCTGAAAGATTTAAAGTAAAAATACC CCAGGGGTGCTGCCCACTCAGCAATGGACGACTAAAATGTNCACAAGACACCTGGCAAGA GCTTNTAGTGATAGACAACACGTGAAAACGCTCCCCATATCTAA </pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001491 unedited</p> <pre> NNTTTGGTAAATCTAAGNAACCGCGCCGCAATCTAGNGATCGATTTTTTTTTTTTTTTTT TTTTGGAAACAATATATTAATTTATCCCAAAAAAAAAAACATGGAACCTCATCGAAAA CAAACATCAGATACAGTAGTTTCAGGGCATTCCCATGGGCTGTCAGAAACCCACTAGCCC AAACACTATGCTCTTCCAACATTAAGTATTTAAGACACAGGAGAGATGACCAACAACAG ACATGTAACATCAATCCAGAAAGATTTCTTGTCTACATGAGAAACATCCAGTGTAAA ACGGTTCCTCTTCTCAGGTGCTGTCATTTAAATAAGTTGAAAAGAGACAATTTTTAAACT CCACTGCTGACCTGAGTGCATTCGCTATCCCCTCACCTATTTTGTTTGGGACAAAAGTC TCGCTCTGTCAACCAGGCTGGAGTGCAGTGGGGCACTCTCAGCTCACTGTAACCTCCACC TCCTGGGTTCAAGCGATTCTCATGCCTCAGCCTGCCAAATAGCTGGGATTACAGGCACAT GCCACAAAGCCCAGGCTAATTTTTATATTTTTAGTAAAGATGGGGTTTACCATGTCCGC CAGCCTGGTCTGGAACCTCTGGCATCAAGTGATCTACCTGCCTTGGCCTCCCAAAGTGT GGGATTACAGGTGTGAGCCACCACGCCCGCCCAAGCCAGAGGTCTTGTGAGGGGGACT AACCCATCCTGAGGGTCTACCCTCGTGACCTCATCTAACTTCCCTTACCAAAAAGCCCC CTCTTCAAACCAATCACATTGGAGGGTTAAGGCCCCGACCCTTGAATTTGGGGGGGA CCACAGCCCTCTATAAGCCAGGGGCGTTTGTGCTTTGGAGCCCATCA </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_001491
Insert Size:	4700 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_001491.2](#), [NP_001482.1](#)

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]
Transcript Variant: This variant (2) represents the longest transcript and encodes isoform B.
Sequence Note: This RefSeq record represents the GCNT2*001.1.1 allele.