

## Product datasheet for **RG208100**

### **B3GNT1 (B3GNT2) (NM\_006577) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	B3GNT1 (B3GNT2) (NM_006577) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	B3GNT1
Synonyms:	3-Gn-T1; 3-Gn-T2; B3GN-T2; B3GNT; B3GNT-2; B3GNT1; beta-1; beta3Gn-T1; beta3Gn-T2; BETA3GNT; BGnT-2; BGNT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG208100 representing NM\_006577  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGTGTGGACGTGCAAGAATAAAGTTGTTGGGTATCCTGATGATGGCAAATGTCTTCATTTATTTTA  
 TTATGGAAGTCTCCAAAAGCAGTAGCCAAGAAAAAATGGAAAAGGGGAAGTAATAATACCCAAAGAGAA  
 GTTCTGGAAGATATCTACCCCTCCCGAGGCATACTGGAACCGAGAGCAAGAGAAGCTGAACCGGCAGTAC  
 AACCCCATCCTGAGCATGCTGACCAACCAGACGGGGGAGCGGGCAGGCTCTCCAATATAAGCCATCTGA  
 ACTACTGCGAACCTGACCTGAGGGTCACGTCGGTGTACGGGTTTTAACAACTGCCGGACAGATTTAA  
 AGACTTCTGCTGTATTTGAGATGCCGAATTATTCAGTCTTATAGATCAGCCGGATAAGTGTGCAAAAG  
 AAACCTTCTTGTGCTGGCGATTAAGTCCCTCACTCCACATTTGCCAGAAGGCAAGCAATCCGGGAAT  
 CCTGGGGCCAAGAAAGCAACGCAGGGAACCAACGGTGGTGCAGTCTTCTGCTGGGCCAGACACCCCC  
 AGAGGACAACCACCCGACCTTTTCAGATATGCTGAAATTTGAGAGTGAGAAGCACAAGACATTCTATG  
 TGGAACTACAGAGACACTTTCTCAACTGTCTCTGAAGGAAGTCTGTTTCTCAGGTGGGTAAGTACTT  
 CCTGCCAGACACTGAGTTTGTTCAGGGCGATGACGATGTTTTGTGAACACCCATCACATCCTGAA  
 TTACTTGAATAGTTTATCCAAGACCAAAGCAAGATCTTTCATAGGTGATGTGATCCACAATGCTGGA  
 CCTCATCGGGATAAGAAGCTGAAGTACTACATCCAGAAGTTGTTTACTCTGGCCTTACCCACCCTATG  
 CAGGGGGAGGGGGTTCCTCTACTCCGGCCACCTGGCCCTGAGGCTGTACCATATCACTGACCAGGTCCA  
 TCTTACCCATTGATGACGTTTATACTGGAATGTGCCTTCAGAACTCGGCCTCGTTCAGAGAAAACAC  
 AAAGGCTTCAGGACATTTGATATCGAGGAGAAAAACAAAAATAACATCTGCTCCTATGTAGATCTGATGT  
 TAGTACATAGTAGAAAACCTCAAGAGATGATTGATATTTGGTCTCAGTTGCAGAGTGCTCATTAAAAATG  
 C

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG208100 representing NM\_006577  
 Red=Cloning site Green=Tags(s)

MSVGRRIKLLGILMMANVFIYIMEVSKSSSQEKNGKGEVVIIPKEKFWKISTPPEAYWNREQEKLNRQY  
 NPILSMLTNQTGEAGRLSNISHLNYCEPDLRVTSVVTGFNNLPDRFKDFLLYLRCRNYSLIDQPKCAK  
 KPFLLLAIKSLTPHFARRQAIRESWGQESNAGNQTVVRVFLGQTPPEDNHPDLSMMLKFESEKHQDILM  
 WNYRDTFFNLSLKEVFLRWVSTSCPDEFVFKGDDVFNTHHILNLYNSLSKTKAKDLFIGDVIHNAG  
 PHRDKCLKYYIPEVVYSGLYPPYAGGGFLYSGHLALRLYHITDQVHLYPIDDVYGMCLQKGLVPEKH  
 KGFRTFDIEEKNKNINCSYVDLMLVHSRKPQEMIDIWSQLQSAHLKC

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_006577

**ORF Size:** 1191 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\\_006577.6](#)

**RefSeq Size:** 2788 bp

**RefSeq ORF:** 1194 bp

**Locus ID:** 10678

**UniProt ID:** [Q9NY97](#)

**Cytogenetics:** 2p15

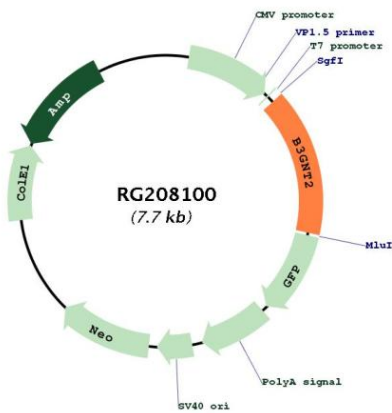
**Domains:** Galactosyl\_T

**Protein Families:** Transmembrane

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

**Gene Summary:** This gene encodes a member of the beta-1,3-N-acetylglucosaminyltransferase family. This enzyme is a type II transmembrane protein. It prefers the substrate of lacto-N-neotetraose, and is involved in the biosynthesis of poly-N-acetylglucosamine chains. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jan 2016]

**Product images:**



Circular map for RG208100