

## Product datasheet for **RC212605**

### **B4GALNT1 (NM\_001478) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	B4GALNT1 (NM_001478) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B4GALNT1
Synonyms:	GALGT; GalNAc-T; GALNACT; SPG26
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC212605 representing NM\_001478  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTGGCTGGGCCCGGCCCTGTGCGCTCTGGTCTTCTGCTCGCCTGCGCCTCGCTGGGGCTCTGT  
 ACGCGAGCACCCGGGACGCGCCCGCCTCCGGCTACCTCTTGCCTGGGCGCCCCGCAAAGCCCCG  
 CAGGCCGAGCTGCCAGATCTTGCTCTGAGCCCCGCTACGCACACATCCCGGTACAGATCAAGGAGCAA  
 GTAGTGGGGTGTGGCTTGAACAACAGTTCAGTCCAGTGGGGGGGCTCCCCCTCCCCTTCC  
 AGAAACAAGTCCGAGCTATTGACCTACCAAGGCCTTTGACCCTGCAGAGCTGAGGGTGCCTCTGCCAC  
 AAGAGAGCAGGAGTCCAGGCCTTCTGTGAGGAGCCAGTCCCCAGCTGACCAGCTGCTCATAGCCCT  
 GCCAACTCCCCGCTCCAGTACCCCTACAGGGTGTGAAGTTCAGCCCCCTCAGGAGCATCTTGGTCCAG  
 GGCTGAGCCTTACGGCAGCTTCTGGTCAAGGATACACAGGTGAACCTGACTGCCTCCCTAGGCACCTG  
 GGAGCTGGCAGGGGAAGTACTGACTGGAGTACTCTACTGGAGAGGGTCAGGCAGATCTCACCTTGTGAGC  
 CAGGGCTGGACCAACTAACAGGCAACTACAACCTGGTCACTTACAGCAGCCGAAGCTACAGACCAACA  
 CAGCAGACACAGTCCGGTCTCCACCGAGGGACATGAGGCTGCTTCACTATCCGCATAAGACACCCGCC  
 CAACCCTCGGCTGTACCCACCTGGTCTCTACCCAGGGAGCCAGTACAACATCAGCGCTCTAGTCACG  
 ATTGCCACCAAGACCTTCTCCGTTATGATCGGCTACGGGCTCTCATCACCAGTATCCGCGCTTCTACC  
 CAACGGTACCGTGGTATCGCTGACGACAGCGACAAGCCAGAGCGCGTTAGTGGCCCCTACGTGGAACA  
 CTATCTCATGCCCTTCCGCAAGGGCTGGTTCGACGGCCGAACCTGGCCGTGTCTCAAGTAAACCAAG  
 TACGTGCTGTGGTGGACGACGACTTCGCTTTCAGGGCGGACGCGGCTGGAGAGGCTTGTGGACGTGC  
 TGGAGCGGACGCCGCTGGACCTGGTGGGGGCGCGGTGCGGAGATCTCCGGCTTTGCCACCACTTATCG  
 GCAGCTGCTGAGCGTGGAGCCCGCGCCCAAGGCTCGGGAACCTCCGGCAAAGGCGCGGCTTCCAC  
 CACGAGCTCGTCGGTCTCCAGGCTGCGTGGTACCGACGGCGTGGTAACTTCTTCTGCGCGGACTG  
 ACAAGGTGCGCGAGGTCGGTTCGACCCCGCCTCAGCCGCTGGCTCATCTGGAATTCTTCTGGATGG  
 GCTTGGTTCCTTCCGGTGGCTCTGCTCCGACGTCGTGGTGGATCATGCATCCAACTGAAGTGCCT  
 TGGACATCAAGGATGCCGAGCAGAGACTTACGCCCGTACCGTACCCAGGATCACTGGACGAGAGCC  
 AGATGGCCAAACACCGGCTGCTCTTCTCAAACACCGGCTGCAGTGCATGACCTCCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC212605 representing NM\_001478  
 Red=Cloning site Green=Tags(s)

MWLGRRALCALVLLACASLGLLYASTRDAPGLRPLAPWAPPQSPRRPELPDLAPEPRYAHIPVRIKEQ  
 VVGLLAWNNCSCESSGGGLPLPFQKQVRAIDLTKAFDPAELRAASATREQEFQAFLSRSQSPADQLLIAP  
 ANSPLQYPLQGVVQPLRSILVPLSLQAASGQEVYQVNLTAASLGTWDVAGEVTGVTLTGEGQADLTLVS  
 PGLDQLNRQLQLVTYSSRSYQNTADTVRFSTEGHEAAFIRIRHPPNPRLYPPGSLPQGAQYNISALVT  
 IATKTFRLYDRLRALITSIRRFYPTVTVVIADSDKPERVSGPYVEHYLMPFGKGFAGRNLAHSVQVTK  
 YVLWVDDDFVFTARTLERLVDLERTPLDLVGGAVREISGFATTYRQLLSVEPGAPGLGNCLRQRGFH  
 HELVGFPGCVVTDGVVNFFLARTDKVREVGFDPRLSRVAHLEFFLDGLGSLRVGSCSDVVVDHASKLKL  
 WTSRDAGAETYARYRYPGSLDESQMAKHRLFFKHRLQCMTSQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4168\\_h01.zip](https://cdn.origene.com/chromatograms/mg4168_h01.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001478

**ORF Size:** 1599 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\\_001478.5](#)

**RefSeq Size:** 2885 bp

**RefSeq ORF:** 1602 bp

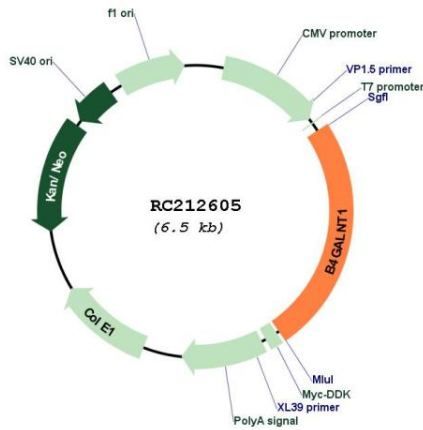
**Locus ID:** 2583

**UniProt ID:** [Q00973](#)

**Cytogenetics:** 12q13.3

<b>Domains:</b>	Glycos_transf_2
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Glycosphingolipid biosynthesis - ganglio series, Metabolic pathways
<b>MW:</b>	58.7 kDa
<b>Gene Summary:</b>	GM2 and GD2 gangliosides are sialic acid-containing glycosphingolipids. GalNAc-T is the enzyme involved in the biosynthesis of G(M2) and G(D2) glycosphingolipids. GalNAc-T catalyzes the transfer of GalNAc into G(M3) and G(D3) by a beta-1,4 linkage, resulting in the synthesis of G(M2) and G(D2), respectively. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2013]

**Product images:**



Circular map for RC212605