

## Product datasheet for **RG233783**

### **B4GALNT1 (NM\_001276469) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** B4GALNT1 (NM\_001276469) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** B4GALNT1  
**Synonyms:** GALGT; GalNAc-T; GALNACT; SPG26  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG233783 representing NM\_001276469  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTGGCTGGGCCCGGGCCCTGTGCGCTCTGGTCTTCTGCTCGCCTGCGCCTCGCTGGGGCTCCTGT  
 ACGCGAGCACCCGGGACGCGCCCGCCTCCGGTACCTCTTGGCGCGTGGGCGCCCCGCAAGCCCCCG  
 CAGGCCGAGCTGCCAGATCTTGTCTCTGAGCCCCGCTACGCACACATCCCGGTCAAGGAGCAA  
 GTAGTGGGGCTGCTGGCTTGAACAACGCAGTTGTGAGTCCAGTGGGGGGGCCCTCCCCTCCCCTTCC  
 AGAAACAAGTCCGAGCTATTGACCTACCAAGGCCTTTGACCCTGCAGAGCTGAGGGCTGCCTCTGCCAC  
 AAGAGAGCAGGAGTTCAGGCCTTTCTGTGCGAGGAGCCAGTCCCCAGCTGACCAGCTGCTCATAGCCCT  
 GCCAACTCCCCGCTCCAGTACCCCTACAGGGTGTGGAAGTTCAGCCCCCTCAGGAGCATCTTGGTGCCAG  
 GGCTGAGCCTTACGGCAGCTTCTGGTACAGGAGGTATACCAGGTGAACCTGACTGCCTCCCTAGGCACCTG  
 GGACGTGGCAGGGGAAGTACTGGAGTACTCTCACTGGAGAGGGTACAGCAGCCGAAGCTACCAGACCAACA  
 CCAGGGCTGGACCAACTCAACAGGCAACTACAACCTGGTCACTTACAGCAGCCGAAGCTACCAGACCAACA  
 CAGCAGACACAGGTGCAAGGCCTGGGTGGAGAGACGGGACGGCTGGGCAACAGAGAAGAACCAGAAAGG  
 CTGGAGTGGGCAAATGGCAGAGGGCATGGGAGGCATCTGGGCTATGGCCAGAGCTGTCCAGCCACACAAT  
 GGGTGTCTCAACTGGACAGCAGGGCCAGAGGGAGAAAGGGGGCCTTTGTTTCATCTGGGGCTGGAGCAGG  
 CCAGAGGGAACCCGAGCCTTGGGTGTGTCTCCCCTTAGGCCAACTGTGGGGGGCCCCAGGAAGAGACT  
 TGTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG233783 representing NM\_001276469  
 Red=Cloning site Green=Tags(s)

MWLGRRALCALVLLACASLGLLYASTRDAPGLRLPLAPWAPPQSPRRPELPDLAPEPRYAHIPVRIKEQ  
 VVGLLAWNNCSCESSGGGLPLPFQKQVRAIDLTKAFDPAELRAASATREQEFQAFLSRSQSPADQLLIAP  
 ANSPLQYPLQGVVQPLRSILVPGLSLQAASGQEVYQVNL TASLGTWDVAGEVTGVTLTGEGQADLTLVS  
 PGLDQLNRQLQLVTYSSRSYQNTADTGARPGWRDQAGQTEKNQKGWSGQMAEGMGGIWAMARAVQPHN  
 GCFNWTSRARGRKGAFVHLGLEQARGKPEPWVCLPFRPTVGGPRKRLV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001276469

**ORF Size:** 984 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\\_001276469.1](#), [NP\\_001263398.1](#)

**RefSeq Size:** 2013 bp

**RefSeq ORF:** 987 bp

**Locus ID:** 2583

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

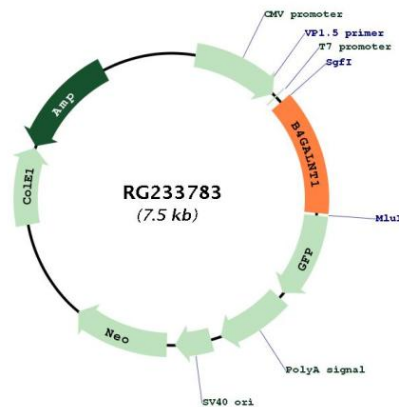
**Cytogenetics:** 12q13.3

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Glycosphingolipid biosynthesis - ganglio series, Metabolic pathways

**Gene Summary:** 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 RG233783