

## Product datasheet for **RC207893**

### **GALNT2 (NM\_004481) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GALNT2 (NM_004481) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GALNT2
Synonyms:	CDG2T; GalNAc-T2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC207893 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCGCGCGGCTCGCGGATGCTGCTCTGCTTCGCTTCTGTGGGTGCTGGGCATCGCCTACTACATGT  
 ACTCGGGGGCGGCTCTGCGCTGGCCGGGGCGCGGGCGCGGCCCGCAGGAAGGAGGACTGGAATGA  
 AATTGACCCCATTA AAAAGAAAGACCTTCATCACAGCAATGGAGAAGAGAAAGCACAAGCATGGAGACC  
 CTCCTCCAGGAAAGTACGGTGGCAGACTTTAACCAGGAAGCTTATGTTGGAGGGACGATGGTCCGCT  
 CCGGGCAGGACCCTTACGCCCGCAACAAGTTCAACCAGGTGGAGAGTGATAAGCTTCGAATGGACAGAGC  
 CATCCCTGACACCCGGCATGACCAGTGTGACGGGAAGCAGTGGCGGGTGGATCTGCCGGCCACCAGCGTG  
 GTGATCACGTTTCACAATGAAGCCAGTTCGGCCCTACTCAGGACCGTGGTCAAGCTTAAAGAAAGCC  
 CGCCCCATCTCAAAAAGAAATCATCTTGGTGGATGACTACAGCAATGATCCTGAGGACGGGGCTCTCTT  
 GGGGAAAATTGAGAAAGTGCAGTTCCTAGAAAATGATCGACGAGAAGGCCTCATGCGCTCACGGGTTCCGG  
 GGGGCCGATGCTGCCAAGCCAAGTCTGACCTTCTGGACAGTCACTCGAGTGTAAATGAGCACTGGC  
 TGGAGCCCTCTGAAAAGGGTGGCGGAGGACAGGACTCGGGTGTGTCACCCATCATCGATGTCATTAA  
 TATGGACAACCTTTCAGTATGTGGGGCATCTGCTGACTTGAAGGGCGGTTTTGATTGGAACCTTGGTATTC  
 AAGTGGGATTACATGACGCCTGAGCAGAGAAGTCCCAGGAGGGAACCCAGTCGCCCCTATAAAAACCC  
 CCATGATTGCTGGTGGGCTGTTTGTGATGGATAAGTCTATTTTGAAGAACTGGGGAAGTACGACATGAT  
 GATGGATGTGTGGGAGGAGAGAACCTAGAGATCTCGTCCGCGTGTGGCAGTGTGGTGGCAGCCTGGAG  
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 GCACTGCTTTGCCCGAAACACCCCGGCGAGCAGAGTCTGGATGGATGAATACAAAAATTTCTATTA  
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 CTCAGCTGCAAGCCTTCAAATGGTACCTTGA AAAATGTCTATCCAGAGTTAAGGGTTCAGACCATCAGG  
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 GGTTGGAGTTTATGAATGTCACAATGCTGGGGAAACCAGGAATGGGCCTTGACGAAGGAGAAGTCAAGT  
 AAGCACATGGATTTGTCCTTACTGTGGTGGACCGGGCACCGGGCTCTTATAAAGCTGCAGGGCTGCC  
 GAGAAAATGACAGCAGACAGAAATGGGAACAGATCGAGGGCAACTCCAAGCTGAGGCACGTGGGCAGCAA  
 CCTGTGCCTGGACAGTCGACGGCCAAGAGCGGGGGCCTAAGCGTGGAGGTGTGTGGCCCGCCCTTTCG  
 CAGCAGTGAAGTTCACGCTCAACCTGCAGCAG

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC207893 protein sequence  
 Red=Cloning site Green=Tags(s)

MRRRSRMLLCFAFLWVLGIAYMYSGGGSALAGGAGGGAGRKEDWNEIDPIKKKDLHHSNGEKAQSMET  
 LPPGKVRWPDFNQEAYVGGTMVRSQDPYARNKFNQVESDKLRMDRAIPDTRHDQCQRKQWRVDLPATSV  
 VITFHNEARSALLRTVVSVLKKSPPHLIKEIILVDDYSNDPEDGALLGKIEKVRVLRNDRREGLMRSRVR  
 GADAAQAKVLTFLDSHCECNEHWLEPLLERVAEDRTRVVSPIIDVINMDNFQYVGASADLKGGFDWNLVF  
 KWDYMTPEQRRSRQGNPVAPIKTPMIAGGLFVMDKIFYEELGKYDMMMDVWGGENLEISFRVWQCGGSLE  
 IIPCSRVGHVFRKQHPYTFPGSGTVFARNTRAAEVWMDYKFNFYAAVPSARNVPYQNIQSRLELRKK  
 LSCKPFKWYLENVYPELRVDPHQDIAFGALQQGTNCLDTLGHFADGVVGVVECHNAGGNQEWALTKEKSV  
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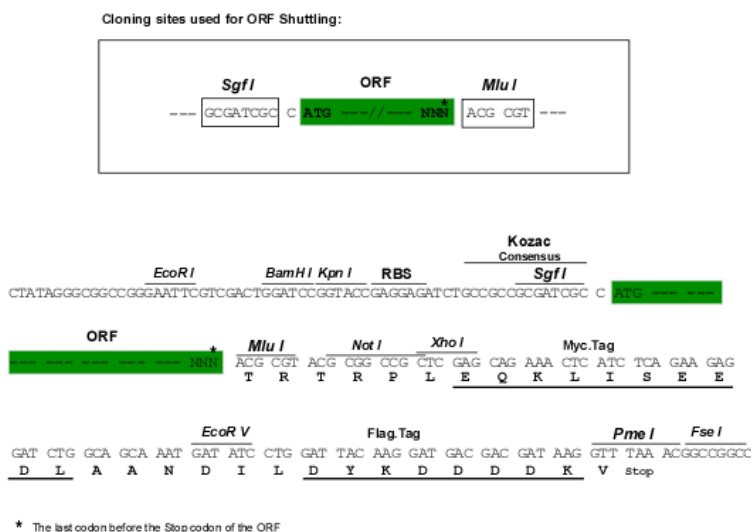
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6343\\_a06.zip](https://cdn.origene.com/chromatograms/mk6343_a06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_004481

**ORF Size:** 1713 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\\_004481.5](#)

**RefSeq Size:** 4484 bp

**RefSeq ORF:** 1716 bp

**Locus ID:** 2590

**UniProt ID:** [Q10471](#)

**Cytogenetics:** 1q42.13

**Domains:** RICIN, Glycos\_transf\_2

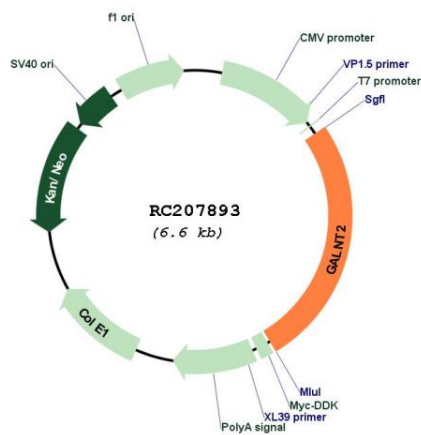
**Protein Families:** Secreted Protein, Transmembrane

**Protein Pathways:** Metabolic pathways, O-Glycan biosynthesis

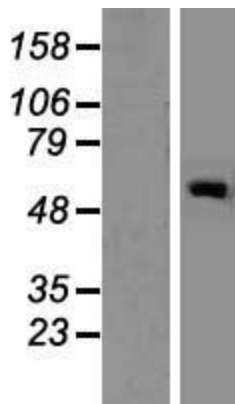
**MW:** 64.7 kDa

**Gene Summary:** This gene encodes a member of the glycosyltransferase 2 protein family. Members of this family initiate mucin-type O-glycosylation of peptides in the Golgi apparatus. The encoded protein may be involved in O-linked glycosylation of the immunoglobulin A1 hinge region. This gene may influence triglyceride levels, and may be involved Type 2 diabetes, as well as several types of cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

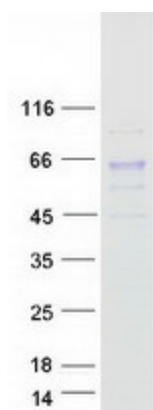
**Product images:**



Circular map for RC207893



Western blot validation of overexpression lysate (Cat# [LY417959]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207893 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GALNT2 protein (Cat# [TP307893]). The protein was produced from HEK293T cells transfected with GALNT2 cDNA clone (Cat# RC207893) using MegaTran 2.0 (Cat# [TT210002]).