

Product datasheet for **RC207176**

GALNT4 (NM_003774) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALNT4 (NM_003774) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GALNT4
Synonyms:	GALNAC-T4; GALNACT4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC207176 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGTGAGGTGGACTTGGGCAGCAAGAGCTGCCTGCTGCTGGCCTTTTAAACAGTGGCCTATATCT
 TGGTGGAGCTCTTGGTCTCTACTTTTCATGCCTCCGCAGGAGCCGGCCGTGCCAGGGAGCTGGGGTCAAG
 AAGGCTCTCAGGCCTCCAGAAAAATACGGAGGATTTGTCTCGACCGCTTTATAAGAGCCCCCTGCAGAT
 TCCCGTGCACCTGGGGAGTGGGGAAAGCCAGCAAACCTCCAGCTCAACGAGGATGAACTGAAGCAGCAAG
 AAGAACTCATTGAGAGATACGCCATCAATATTTACCTCAGTGACAGGATTTCCCTGCATCGACACATAGA
 GGATAAAAAGATGTATGAGTGTAAAGTCCAGAAGTTCAACTATAGGACACTTCTACCACCTCTGTTATC
 ATTGCTTTCTATAACGAAGCCTGGTCGACTTTGCTCCGTACCATTACAGTGTTTAGAACTTCTCCTG
 CAGTTCTTTTAAAGAGATCATCTTGGTGGATGACTTGAGTGACAGAGTTTATTTGAAGACACAACCTTGA
 AACTTACATCAGCAATCTTGATAGAGTACGCTTGATTAGGACCAATAAGCGAGAGGGGCTGGTTAGGGCC
 CGTCTGATTGGGGCCACTTTCGCCACTGGGGACGCTCCTCACTTTCTGGATTGCTACTGTGAGTGTAAAT
 CCGGTTGGCTGGAACCGCTTTTGGAAAGGATTGGGAGAGATGAAACAGCAGTTGTGTGTCCTGTTATAGA
 CACAATTGATTGGAATACTTTTGAATTCTATATGCAGATAGGGGAGCCCATGATTGGTGGGTTTACTGG
 CGTTTAAACATTTAGTGGCATTCTGTCCCAAACAGGAAAGGGACAGGCGGATATCAAGAATTGACCCCA
 TCAGATCACCTACCATGGCTGGAGGACTGTTGCTGTGACGCAAGAAATATTTTCACTACCTTGAACGTA
 TGACACAGGAATGGAAGTGTGGGGAGGTGAAAACCTTGAGCTGTCTTTTAGGGTGTGGCAGTGTGGTGGC
 AAATTGGAGATCCACCCGTGTTCCACGTGGGCCATGTGTTCCCAAAGCGGGCACCATATGCTCGCCCA
 ATTTCTACAGAATACTGCTCGGCAGCAGAAGTTGGATGGATGAATACAAAGAGCAGCTTACAATAG
 AAACCCTCCAGCAAGAAAAGAAGCTTATGGTGATATTTCTGAAAAGAAAATTAAGAGAGCGGTTGAGA
 TGCAAGAGCTTTGACTGTTATTTGAAAACGTTTTTCTAATTTACATGTTCCAGAGGATAGACCAGGCT
 GGCATGGGGCTATTTCGAGTAGAGGGATCTCGTCTGAATGTTTAGATTATAAATCTCCTGACAACAACCC
 CACAGGTGCTAACCTTTCACTGTTGGATGCCATGGTCAAGGAGGCAATCAATCTTTGAATATACTTCA
 AACAAAGAAATAAGGTTTAAATCTGTGACAGAGTTATGTGACAGGTTACCTGAGCAAAAAAATATGTGG
 GAATGCAAAATGTCCCAAAGATGGGTTCCCTGTACCAGCAAACATTATTTGGCATTTTAAAGAAGATGG
 AACTATTTTTACCCACACTCAGGACTGTGCTTAGTGCTTATCGGACACCGGAGGGCCGACCTGATGTA
 CAATGAGAACTGTGATGCTCTAGATAAAAATCAAATTTGGAGTTTTGAGAAA

**ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence:

>RC207176 protein sequence
 Red=Cloning site Green=Tags(s)

MAVRWTWAGKSCLLLAFLLTVAYIFVELLVSTFHASAGAGRARELGSRRLSGLQKNTEDLSRPLYKKPPAD
 SRALGEWGKASKLQLNEDELKQEEELIERYAINIYLSDRISLHRHIEDKRMYECKSQKFNYRTLPTTSVI
 IAFYNEAWSTLLRTIHSVLETS PAVLLKEIILVDDLSDRVYKLTQLETYISNLDVRVLRIRTNKREGLVRA
 RLIGATFATGDVLTFLDCHCECNSGWLEPLLERIGRDETAVVCPVIDTIDWNTFEFYMQIGEPMIGGFDW
 RLTFQWHSVPKQERDRRISRIDPIRSPTMAGGLFAVSKKYFYQLGTYDTGMEVWGGENLELSFRVWQCGG
 KLEIHPCHSHVGHVFPKRAPYARPNFLQNTARAAEVWMDYKEHFYNRNPPARKEAYGDISERKLLRERLR
 CKSFDWYLNKVPNLHVPEDRPGWHGAIRSRGISSECLDYNSPDNNPTGANLSLFGCHGQGGNQFFEYTS
 NKEIRFNSVTELCAEVPEQKNYVGMQNCPKDGFVVPANIIWHFKEDGTIFHPHSGLCLSAYRTPGPRPDV
 QMRTCDALDKNQIWSFEK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6321_g12.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003774

ORF Size: 1734 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_003774.5](#)

RefSeq Size: 5408 bp

RefSeq ORF: 1737 bp

Locus ID: 8693

UniProt ID: [Q8N4A0](#)

Cytogenetics: 12q21.33

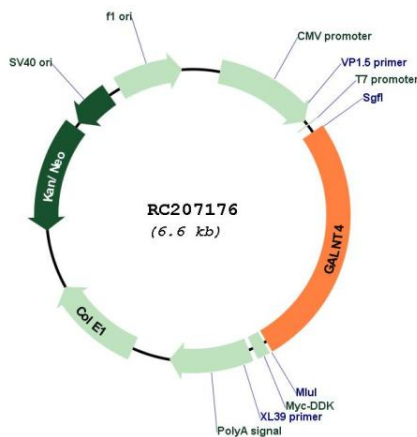
Domains: RICIN, Glycos_transf_2

Protein Pathways: Metabolic pathways, O-Glycan biosynthesis

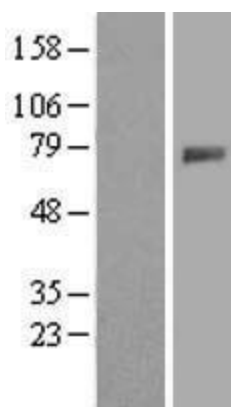
MW: 66.6 kDa

Gene Summary: This gene encodes a member of the UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase (GalNAc-T) family of enzymes. GalNAc-Ts initiate mucin-type O-linked glycosylation in the Golgi apparatus by catalyzing the transfer of GalNAc to serine and threonine residues on target proteins. They are characterized by an N-terminal transmembrane domain, a stem region, a luminal catalytic domain containing a GT1 motif and Gal/GalNAc transferase motif, and a C-terminal ricin/lectin-like domain. GalNAc-Ts have different, but overlapping, substrate specificities and patterns of expression. In vitro, the encoded protein can complement other GalNAc-Ts in the complete O-glycosylation of the mucin-1 tandem repeat and can O-glycosylate the P-selectin glycoprotein ligand-1 molecule. The coding region of this gene is contained within a single exon. Fusion transcripts, which combine part of this gene with the 5' exons of the neighboring POC1B (POC1 centriolar protein homolog B) gene, also exist. [provided by RefSeq, Dec 2010]

Product images:



Circular map for RC207176



Western blot validation of overexpression lysate (Cat# [LY418442]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207176 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).