

## Product datasheet for **SC117755**

### **GALNT4 (NM\_003774) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GALNT4 (NM_003774) Human Untagged Clone
Tag:	Tag Free
Symbol:	GALNT4
Synonyms:	GALNAC-T4; GALNACT4
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL6</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC117755 sequence for NM\_003774 edited (data generated by NextGen Sequencing)

```

ATGGCGGTGAGGTGGACTTGGGCAGGCAAGAGCTGCCTGCTGCTGGCGTTTTAACAGTG
GCCTATATCTTCGTGGAGCTCTTGGTCTCTACTTTTCATGCCTCCGCAGGAGCCGGCCGT
GCCAGGGAGCTGGGGTCAAGAAGGCTCTCAGACCTCCAGAAAAATACGGAGGATTGTCT
CGACCGCTTTATAAGAAGCCCCCTGCAGATTCCTGCACTTGGGGAGTGGGGAAAGCC
AGCAAACCTCCAGCTCAACGAGGATGAACTGAAGCAGCAAGAAGAACTCATTGAGAGATC
GCCATCAATATTTACCTCAGTGACAGGATTTCCCTGCATCGACACATAGAGGATAAAAGA
ATGTATGAGTGTAAAGTCCAGAAGTTCAACTATAGGACACTTCCTACCACCTCTGTTATC
ATTGCTTTCTATAACGAAGCCTGGTCGACTTTGCTCCGTACCATTACAGTGTTTTAGAA
ACTTCTCCTGCAGTTCTTTTAAAGAGATCATCTTGGTGGATGACTTGAGTGACAGAGTT
TATTTGAAGACACAACCTTAAACTTACATCAGCAATCTTGATAGAGTACGCTTGATTAGG
ACCAATAAGCGAGAGGGGCTGGTTAGGGCCCGTCTGATTGGGGCCACTTTCGCCACTGGG
GACGTCCTCACTTTCCTGGATTGCTACTGTGAGTGAATTCGGTTGGCTGGAACCGCTT
TTGGAAAGGATTGGGAGAGATGAAACAGCAGTTGTGTGCTCTGTATAGACACAATTGAT
TGGAACTCTTTGAATCTATATGCAGATAGGGGAGCCCATGATTGGTGGGTTTGACTGG
CGTTTAAACATTTCAAGTGGCATTCTGTCCCAAACAGGAAAGGGACAGGCGGATATCAAGA
ATTGACCCCATCAGATCACCTACCATGGCTGGAGGACTGTTTGCTGTCAGCAAGAAATAT
TTTCAGTACCTTGAACGTATGACACAGGAATGGAAGTGTGGGGAGTGAAAACCTTGAG
CTGTCTTTTAGGGTGTGGCAGTGTGGTGGCAAATTGGAGATCCACCCGTGTTCCACGTCG
GGCCATGTGTTCCCAAGCGGGCACCATATGCTCGCCCAATTTCTACAGAATACTGCT
CGGGCAGCAGAAGTTTGGATGGATGAATACAAAGAGCACTTCTACAATAGAAACCTCCA
GCAAGAAAAGAAGCTTATGGTGATATTTCTGAAAGAAAATTACTACGAGAGCGGTTGAGA
TGCAAGAGCTTTGACTGGTATTTGAAAAACGTTTTTCTAATTTACATGTTCCAGAGGAT
AGACCAGGCTGGCATGGGCTATTTCGCAGTAGAGGGATCTCGTCTGAATGTTTAGATTAT
AATTCTCCTGACAACAACCCACAGGTGCTAACCTTTCCTGTTTGGATGCCATGGTCAA
GGAGGCAATCAATCTTTGAATATACTTCAAACAAGAAATAAGGTTTAAATCTGTGACA
GAGTTATGTGCAGAGGTACCTGAGCAAAAAAATTATGTGGGAATGCAAAATGTCCCAAA
GATGGGTTCCCTGTACCAGCAAACATTATTTGGCATTTTAAAGAAGATGGAACATTTTTT
CACCCACACTCAGGACTGTGTCTTAGTGCTTATCGGACACCGGAGGGCCAACTGATGTA
CAATGAGAACTTGTGATGCTCTAGATAAAAATCAAATTTGGAGTTTTGAGAAATAG
    
```

Clone variation with respect to NM\_003774.4  
1670 g=>a

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003774 unedited

```

TATTTCCCCCGCCGTTGNCGCATTGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAA
GCAGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGGCCG
CGAATTCGGCACGAGGGGAGAGAGGAGTTGGGCTGTGCCGAGGCGGAGGACCGAGAGGG
CTCAGGTGACCCCTGAAAGCCTGGGTGGCTGAAAGGAGCCTAGCGCCTGCATGAAAGG
AAGAACCTGCTGGGAAGTACCTGAGCTCGAGCTGTGGGTTCCGCCGCCCTTCCCCTGCGT
GGTGGCTTGGTGGCCGCTGTCGCCTCAGCCCTGAGAATCCGGATGGCGGTGAGGTGGA
CTTGGGCAGGCAAGAGCTGCCTGCTGCTGGCGTTTTTAACAGTGGCCTATATCTTCGTGG
AGCTCTTGGTCTCTACTTTTCATGCCTCCGCAGGAGCCGGCCGTGCCAGGGAGCTGGGGT
CAAGAAGGCTCTCAGACCTCCAGAAAAATACGGAGGATTTGTCTCGACCGCTTTATAAGA
AGCCCCCTGCAGATTCCTGCACTTGGGGAGTGGGGAAAGCCAGCAAACCTCCAGCTCA
ACGAGGATGAACTGAAGCAGCAAGAAGAACTCATTGAGAGATACGCCATCAATATTTACC
TCAGTGACAGGATTTCCCTGCATCGACACATAGAGGATAAAAAGAAATGTATGAGTGAAGT
CCCAGAAGTTCAACTATAGGACACTTCCTACCACCTCTGTTATCATTGCTTTCTATAACG
AAGCCTGGTCGACTTTGCTTCGTACCATTACAGTGTTTTAGAAACTTCTCCTGCAGTTC
TTTTGAAAGAGACATCNTGGTGGATGACTTGAGTGACAGAGNTTATTTGTAGACCAACTT
GAAACTTACTCAGCATCTTGATAGAGACGCT
    
```

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_003774 unedited NCGGTTTCACTATGNNACCGCGCCGCATNCTANGATCGAGTTTTTTTTTTTTTTTTTTTT ATCAGGCACACTTTTTATTTTACATCTTAAACAACATTACAAATACAAAAGGAAAAAAGT CAGAAACAACATCACAGAGGAAAAAACATCATTGAGAAGAGATTAATCTGAACCTCA ACGTTCCTTTGTGCTCATTAAAAATTATAAAACAGGAATTCAAAAGGACAAGCAAATAA AAACCAAGTATTTATTAATTAATTAATGAGACCCTAAACCAACTAAGACTATACAACCTA AAAATAAGCTGTCTTCATCCTAGAAAAGTTTGATTGCCATCTTATAATGAATATGCAGG AACTTACTAATGGGTAAGTAAACAAATTTCTTTTACAAACAAGTTATTTTGAGTTATAG GGATCCTCCTGGTGAAGTATTTTTTAAATGACTAAAAATGCCTATTTAGATAGTCAAC CTATCCGTAAAGTTGGACACTAAATGACATAGTGAACATTTAAAGTTGAAACTCTTTGTC TACCAATATTTTCTAAAAGTGTTTTTAAGCCTATACATTAAGTTAAAGGTCACCTCT TAATTGTCTATAGCCAAAGAGAGCTTTGGTACCCATAAATCGAATTAAGGAATCGGTTT TTTTAGATGTAGAATTACAGAGTATTTTTGGAATTAATTTGGAACGTGCCTCAATATGAA AATGTGGAAGTCCACCTTTCTGGTATGTGCCCTATTATGGAGGGATGAACAGCCCTACC ATACTGGATTATTTGAATAAATAAAACACCCCGGTAAAACCTCCTCTCAAAAAATGCTG GGGGCCACTCGCCATTTTGGGGCGAAAAGTCCATAAAGGATTAAGGGGCTTTATTTT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_003774
<b>Insert Size:</b>	5500 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_003774.3</a></u> , <u><a href="#">NP_003765.2</a></u>
<b>RefSeq Size:</b>	5360 bp
<b>RefSeq ORF:</b>	1737 bp
<b>Locus ID:</b>	8693
<b>UniProt ID:</b>	<u><a href="#">Q8N4A0</a></u>
<b>Cytogenetics:</b>	12q21.33
<b>Domains:</b>	RICIN, Glycos_transf_2
<b>Protein Pathways:</b>	Metabolic pathways, O-Glycan biosynthesis

**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]