

Product datasheet for **RC218566**

GALNT9 (NM_021808) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALNT9 (NM_021808) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GALNT9
Synonyms:	GALNAC-T9; GALNACT9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218566 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGAGGTGCTGCCCTGCTCCCGCTGGCCACATCGAGCGCACCAGGAAGCCCTACAACAACGACATTGACTACTACGCCAAGCGCAACGCCCTGCGCGCCGCCGAGGTGTGGATGGATGACTTCAAGTCCCACGTGATCATGGCCTGGAACATCCCATGTCAACCCAGGGGTGGACTTCGGGGACGTGTCTGAGAGGCTGGCCCTGCGTCAGAGGCTGAAGTGTGCGAGCTTCAAGTGGTACCTGGAGAACGTGTACCCGGAGATGAGGGTCTACAACAACACCCTCACGTACGGAGAGGTGAGAAACAGCAAAGCCAGTGCCTACTGTCTGGACCAGGGAGCGGAGGACGGCGACCGGGCGATCCTCTACCCCTGCCACGGGATGTCCTCCAGCTGGTGCGGTACAGCGCTGACGGCCTGCTGCAGCTGGGGCCTCTGGGCTCCACAGCCTTCTTGCCTGACTCCAAGTGTCTGGTGGATGACGGCACGGGCCGCATGCCACCCTGAAGAAGTGTGAGGATGTGGCGCGCCAACACAGCGGCTGTGGGACTTCACCCAGAGTGGCCCATTTGTGAGCCGGGCCACGGGCCGCTGCCTGGAGGTGGAGATGTCCAAGATGCCAACTTTGGGCTCCGGCTGGTGGTACAGAGGTGCTCGGGCAGAAGTGGATGATCAGAACTGGATCAAACACGCACGGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC218566 protein sequence
Red=Cloning site Green=Tags(s)

MEVLPCSRVAHIERTRKPYNNDIDYYAKRNALRAAEVWMDDFKSHVYMAWNI PMSNPGVDFGDV SERLAL
 RQRLKCRSFKWYLENVYEMRVYNNLT TYGEVRNSKASAYCLDQGAEDGDRAIL YPCHGMSSQLV RYSAD
 GLLQLGPLGSTAFLPDSKCLVDDGTGRMPTLKKCEDVARPTQRLWDF TQSGPIVSRATGRCL E VEMSKDA
 NFGLRLVVQRCSGQKWMIRNWI KHARH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6460_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_021808

ORF Size: 711 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_021808.3](#)

RefSeq Size: 1744 bp

RefSeq ORF: 714 bp

Locus ID: 50614

UniProt ID: [Q9HCQ5](#)

Cytogenetics: 12q24.33

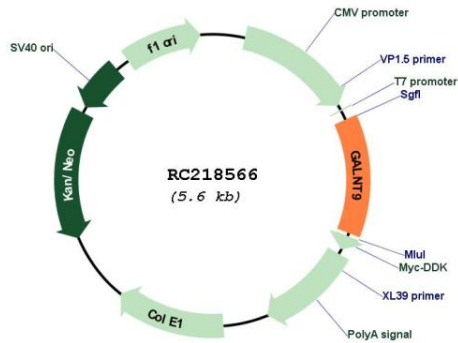
Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, O-Glycan biosynthesis

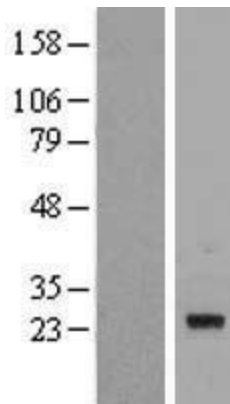
MW: 27.2 kDa

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. This gene is expressed specifically in the brain, with highest expression in the cerebellum. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC218566



Western blot validation of overexpression lysate (Cat# [LY411915]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218566 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).