

Product datasheet for **RC214951**

GALNT12 (NM_024642) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALNT12 (NM_024642) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GALNT12
Synonyms:	CRCS1; GalNAc-T12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC214951 representing NM_024642
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGGGCGCACGGCGCGCGCGCTGCCCGGGAACTGCGGCGCGCCGGGAGGCGCTGTTGGTGC
 TCCTGGCGCTACTGGCGTTGGCCGGCTGGGCTCGGTGCTGCGGGCGCAGCGTGGGGCCGGGCGGGG
 TGCCGAGCCGGGACCCCGCGCACCCCGCGCCCGGGCGCGCGAGCCGGTCATGCCGCGCCGCCGGT
 CCGGCGAACGCGCTGGGCGCGGGGCGAGGCGGTGCGGCTGCAGCTGCAGGGCGAGGAGCTGCGGCTGC
 AGGAGGAGAGCGTGCAGCTGCACAGATTAACATCTACCTCAGCGACCGCATCTCACTGCACCGCCGCT
 GCCCGAGCGCTGGAACCCGCTGTGCAAAGAGAAGAAATATGATTATGATAATTTGCCCAGGACATCTGTT
 ATCATAGCATTTTATAATGAAGCCTGGTCAACTCTCCTTCGGACAGTTTACAGTGTCTTGGACATCCC
 CGGATATCCTGCTAGAAGAAGTGATCCTTGTAGATGACTACAGTATAGAGACACCTGAAGGAGCGCTT
 GGCAATGAGCTTTCGGGACTGCCAAGGTGCGCCTGATCCGCGCAACAAGAGAGAGGGCTGGTGGCA
 GCCCGGCTGCTGGGGCGCTGCGGGCGAGGGCGATGTTCTGACCTTCTGGACTGTCACTGTGAGTGCC
 ACGAAGGGTGGTGGAGCCGCTGCTGCAGAGGATCCATGAAGAGGAGTCCGACAGTGGTGTGCCCGGTGAT
 TGATGTGATCGACTGGAACACCTTGAATACCTGGGAACTCCGGGGAGCCCCAGATCGGCGGTTTCGAC
 TGGAGGCTGGTGTTCACGTGGCACACAGTTCCTGAGAGGGAGAGGATACGGATGCAATCCCCGTCGATG
 TCATCAGGTCTCCAACAATGGCTGGTGGGCTGTTTGTGTGAGTAAGAAATATTTTGAATATCTGGGGTC
 TTATGATACAGGAATGGAAGTTTGGGGAGGAGAAAACCTCGAATTTTCTTTAGGATCTGGCAGTGTGGT
 GGGTCTGGCAAACAGTGTTCGTGCAGCTGAAGTATGGATGGATGAATTTAAAGAGCTCTACTACCA
 ACAAGGCTGGCCAACAGTGTTCGTGCAGCTGAAGTATGGATGGATGAATTTAAAGAGCTCTACTACCA
 TCGCAACCCCGTGGCCGCTTGGAACTTTTGGGGATGTGACAGAGAGGAAGCAGCTCCGGGACAAGCTC
 CAGTGTAAAGACTTCAAGTGGTCTTGGAGACTGTGTATCCAGAAGTGCATGTGCCTGAGGACAGGCCTG
 GCTTCTCGGGATGCTCCAGAACAAGGACTAACAGACTACTGCTTTGACTATAACCCTCCCGATGAAAA
 CCAGATTTGGGACACCAGGTCATTCTGTACCTCTGTCATGGGATGGGCCAGAATCAGTTTTTTCGAGTAC
 ACGTCCCAGAAAGAAATACGCTATAACACCACCAGCCTGAGGGCTGCATTGCTGTGGAAGCAGGAATGG
 ATACCCTTATCATGCATCTCTGCAAGAAACTGCCCCAGAGAATCAGAAGTTCATCTTGCAGGAGGATGG
 ATCTTTATTTACGAACAGTCCAAGAAATGTGTCCAGGCTGCGAGGAAGGAGTTCGAGTGCAGTTTCGTT
 CCACTTTACGAGACTGCACCAACTCGGATCATCAGAAATGGTCTTCAAAGAGCGCATGTTA

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214951 representing NM_024642
 Red=Cloning site Green=Tags(s)

MWGRTRRRCPRELRRGREALLVLLALLALAGLGSVLRARQAGAGAAEPGPPRTPRPGRRPVMRPPV
 PANALGARGEAVRLQLQGEELRLQEESVRLHQINIYLSDRISLHRRRLPERWNPLCKEKKYDYNLPRTSV
 IIAFYNEAWSTLLRTPVYSVLETPDILLEEVILVDDYSDREHLKERLANELSGLPKVRIRANKREGLVR
 ARLLGASAARGDVLTFLDCHCEHEGWLEPLLQRIHEEESAVVCPVIDVIDWNTFEYLGNSGEPQIGGFD
 WRLVFTWHTVPERERIRMQSPVDVIRSPMAGGLFAVSKKYFEYLGSYDTGMEVWGGENLEFSFRIWQCG
 GVLETHPCSHVGHVFPKQAPYSRNKALANSVRAAEVWMDEFKELYYHRNPRARLEPFGDVTERKQLRDKL
 QCKDFKWFLETVYPELVHPEDRPGFFGMLQNKGLTDYCFDYNPPDENQIVGHQVILYLCHGMGQNQFFEY
 TSQKEIRYNTHQPEGCIAVEAGMDTLIMHLCEETAPENQKFIHQEDGSLFHEQSKKCVQAARKESDSSFV
 PLLRDCTNSDQKWFKERML

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8011_a02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_024642

ORF Size: 1743 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_024642.5](#)

RefSeq Size: 2770 bp

RefSeq ORF: 1746 bp

Locus ID: 79695

UniProt ID: [Q8IXK2](#)

Cytogenetics: 9q22.33

Domains: RICIN, Glycos_transf_2

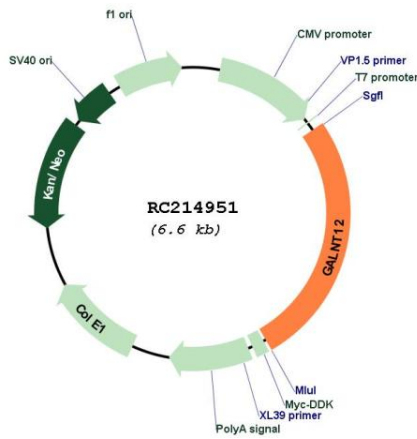
Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, O-Glycan biosynthesis

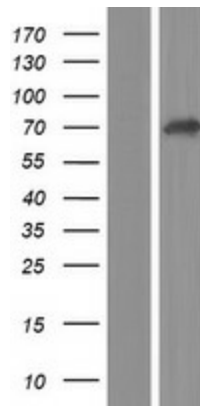
MW: 66.8 kDa

Gene Summary: This gene encodes a member of a family of UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferases, which catalyze the transfer of N-acetylgalactosamine (GalNAc) from UDP-GalNAc to a serine or threonine residue on a polypeptide acceptor in the initial step of O-linked protein glycosylation. Mutations in this gene are associated with an increased susceptibility to colorectal cancer.[provided by RefSeq, Mar 2011]

Product images:



Circular map for RC214951



Western blot validation of overexpression lysate (Cat# [LY411091]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214951 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).