

Product datasheet for RC212741

B4GALT3 (B4GALT2) (NM_003780) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B4GALT3 (B4GALT2) (NM_003780) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B4GALT3
Synonyms:	B4Gal-T2; B4Gal-T3; beta4Gal-T2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212741 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCAGACTGCTGGGGGGACGCTGGAGCGCTCTGCAAGGCTGTGCTCCTTCTCTGCCTGCTGCACT
TCCTCGTGGCCGTCATCCTCTACTTTGACGTCTACGCCACGACCTGGCCTTCTCAGCCGCTTCAGTGC
CCGAGGCCCTGCCATGCCCTCCACCCAGCTGCTAGCAGCAGCAGCAGCAGCAGCAACTGCTCCCGGCC
AACGCCACCGCCTCTAGCTCCGGCTCCCTGAGGTCCCCAGTCCCCTGCCCGTCCCACGGCTCCCACGC
TGCCACCCTGTCTGACTCGCCACCTGGTCTTGTGGGCAGACTGCTGATCGAGTTCACCTACCCATGCC
CCTGGAGCGGGTGACAGGGAGAACCAGGCGTGTCTATGGGCGCCGATACACACCGCCCGACTGCACC
CCAGCCCAGACGGTGGCGGTATCATCCCCTTTAGACACCGGGAACACCCTGCCTACTGGCTCCACT
ATCTACACCCCATCTTGAGGCGGCAGCGCTGCGCTACGGCGTCTATGTCATCAACCAGCATGGTGAGGA
CACCTTCAACCGGGCAAGCTGCTTAACGTGGGCTTCTAGAGGCGCTGAAGGAGGATGCCGCTATGAC
TGCTTCATCTTCAGCGATGTGGACCTGGTCCCCATGGATGACCGCAACCTATACCCTGCCGCGACCAAC
CCCGCCACTTTGCCATTGCCATGGACAAGTTTGGCTTCCGCTTCCCTATGCTGGCTACTTTGGAGGTGT
GTCAGGCTGAGTAAGGCTCAGTTTCTGAGAATCAATGGCTTCCCAATGAGTACTGGGGCTGGGGTGGC
GAGGATGATGACATCTTCAACCGGATCTCCCTGACTGGGATGAAGATCTACGCCAGACATCCGAATTG
GCCGCTACCGCATGATCAAGCAGCACCAGCAAGCATAACGAACCTAACCCCTCAGAGGTTTACCAAGAT
TCAAAACACGAAGCTGACCATGAAGCGGACGGCATTGGGTGAGTCCGCTACCAGGCTTGGAGGTGTCT
CGGCAACCACTCTTACCAATATCACAGTGGACATTGGGCGCCCTCCGTCGTGGCCCCCTCGGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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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_003780.4](#)

RefSeq Size: 2209 bp

RefSeq ORF: 1119 bp

Locus ID: 8704

UniProt ID: [O60909](#)

Cytogenetics: 1p34.1

Domains: Galactosyl_T_2

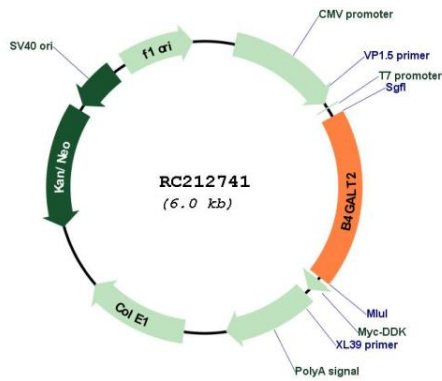
Protein Families: Transmembrane

Protein Pathways: Galactose metabolism, Glycosphingolipid biosynthesis - lacto and neolacto series, Keratan sulfate biosynthesis, Metabolic pathways, N-Glycan biosynthesis

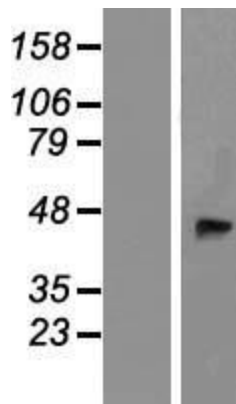
MW: 42 kDa

Gene Summary: This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes. They encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose; all transfer galactose in a beta1,4 linkage to similar acceptor sugars: GlcNAc, Glc, and Xyl. Each beta4GalT has a distinct function in the biosynthesis of different glycoconjugates and saccharide structures. As type II membrane proteins, they have an N-terminal hydrophobic signal sequence that directs the protein to the Golgi apparatus and which then remains uncleaved to function as a transmembrane anchor. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. The enzyme encoded by this gene synthesizes N-acetyllactosamine in glycolipids and glycoproteins. Its substrate specificity is affected by alpha-lactalbumin but it is not expressed in lactating mammary tissue. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2011]

Product images:



Circular map for RC212741



Western blot validation of overexpression lysate (Cat# [LY418436]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212741 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).