

Product datasheet for **RC209493**

B4GALT4 (NM_003778) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B4GALT4 (NM_003778) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B4GALT4
Synonyms:	B4Gal-T4; beta4Gal-T4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209493 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCTTCAACCTGACTTTCCACCTTTCTACAAATCCGATTACTGTTGCTGTTGACTTTGTGCCTGA
CAGTGGTTGGGTGGGCCACCACTAACTACTTCGTGGGTGCCATTCAAGAGATTCCCAAAGCAAAGGAGTT
CATGGCTAATTTCCATAAGACCCTCATTTTGGGAAGGGAAAACTCTGACTAATGAAGCATCCACGAAG
AAGGTAGAAGTGGCAACTGCCCTTCTGTCTCCTTACCTCAGAGGCCAGAGCAAGCTCATTTTCAAAC
CAGATCTCACTTTGGAAGAGGTACAGGCAGAAAATCCCAAAGTGTCCAGAGGCCGGTATCGCCCTGAGGA
ATGTAAAGCTTTACAGAGGGTCGCCATCCTCGTTCCCAACCGGAACAGAGAGAAACACCTGATGTACCTG
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AAGGTAAGAAAGTTAATCGAGCCAACTCTTGAATGTGGGCTATCTAGAAGCCCTCAAGGAAGAAAATTG
GGACTGCTTTAATTCCACGATGTGGACCTGGTACCCGAGAATGACTTTAACCTTTACAAGTGTGAGGAG
CATCCAAGCATCTGGTGGTTGGCAGGAACAGCACTGGGTACAGGTTACGTTACAGTGGATATTTGGGG
GTGTTACTGCCCTAAGCAGAGAGCAGTTTTTCAAGGTGAATGGATTCTCTAACAACACTACTGGGATGGGG
AGGCGAAGACGATGACCTCAGACTCAGGTTGAGCTCAAAGAATGAAAATTTCCCGCCCTGCCTGAA
GTGGTAAATATAAATGGTCTTCCACACTAGAGACAAAGCAATGAGGTGAACGCAGACGGATGAAGC
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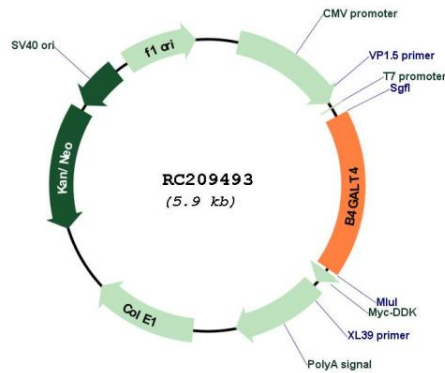
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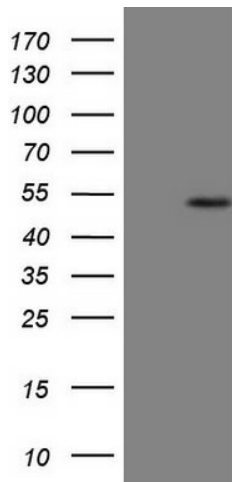
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Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex 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_003778.4
RefSeq Size:	2283 bp
RefSeq ORF:	1035 bp
Locus ID:	8702
UniProt ID:	O60513
Cytogenetics:	3q13.32
Domains:	Galactosyl_T_2
Protein Families:	Transmembrane
Protein Pathways:	Glycosphingolipid biosynthesis - lacto and neolacto series, Keratan sulfate biosynthesis, Metabolic pathways
MW:	40 kDa
Gene Summary:	<p>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 appears to mainly play a role in glycolipid biosynthesis. Two alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2008]</p>

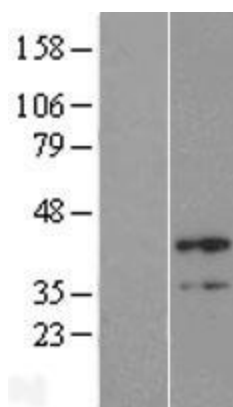
Product images:



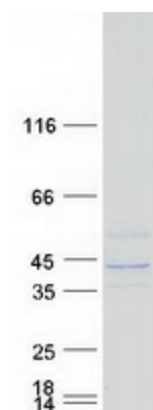
Circular map for RC209493



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY B4GALT4 (Cat# RC209493, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-B4GALT4 (Cat# [TA807809])(1:500). Positive lysates [LY418441] (100ug) and [LC418441] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403893]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC221047] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified B4GALT4 protein (Cat# [TP309493]). The protein was produced from HEK293T cells transfected with B4GALT4 cDNA clone (Cat# RC209493) using MegaTran 2.0 (Cat# [TT210002]).