

Product datasheet for **RC221047**

B4GALT4 (NM_212543) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | B4GALT4 (NM_212543) 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: | >RC221047 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGCTTCAACCTGACTTTCCACCTTTCTACAAATCCGATTACTGTTGCTGTTGACTTTGTGCCTGA
CAGTGGTTGGGTGGGCCACCACTAACTACTTCGTGGGTGCCATTCAAGAGATTCCCAAAGCAAAGGAGTT
CATGGCTAATTTCCATAAGACCCTCATTTTGGGAAGGGAAAACTCTGACTAATGAAGCATCCACGAAG
AAGGTAGAAGTGGCAACTGCCCTTCTGTGTCTCCTTACCTCAGAGGCCAGAGCAAGCTCATTTTCAAAC
CAGATCTCACTTTGGAAGAGGTACAGGCAGAAAATCCCAAAGTGTCCAGAGGCCGGTATCGCCCTGAGGA
ATGTAAAGCTTTACAGAGGGTCGCCATCCTCGTTCCCAACCGGAACAGAGAGAAACACCTGATGTACCTG
CTGGAACATCTGCATCCCTTCTGCAGAGGCAGCAGCTGGATTATGGCATCTACGTCATCCACCAGGCTG
AAGGTAAGAAAGTTAATCGAGCCAACTCTTGAATGTGGGCTATCTAGAAGCCCTCAAGGAAGAAAATTG
GGACTGCTTTAATTCCACGATGTGGACCTGGTACCCGAGAATGACTTTAACCTTTACAAGTGTGAGGAG
CATCCAAGCATCTGGTGGTTGGCAGGAACAGCACTGGGTACAGGTTACGTTACAGTGGATTTTGGGG
GTGTTACTGCCCTAAGCAGAGAGCAGTTTTTCAAGGTGAATGGATTCTCTAACAACACTACTGGGATGGGG
AGGCGAAGACGATGACCTCAGACTCAGGTTGAGCTCAAAGAATGAAAATTTCCCGCCCTGCCTGAA
GTGGTAAATATAAATGGTCTTCCACACTAGAGACAAAGCAATGAGGTGAACGCAACGATGAAGC
TCTTACACCAAGTGTACGAGTCTGGAGAACAGATGGGTTGAGTAGTTGTTCTTATAAATTAGTATCTGT
GGAACACAATCCTTTATATCAACATCACAGTGGATTTCTGGTTTGGTGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221047 protein sequence
Red=Cloning site Green=Tags(s)

MGFNLT FHL SYKFRLLLLL TLCLTVVGWATS NYFVGAIQEIPKAKEFMANFHKTLILGKGKLT LNEASTK
 KVELDNCPSVSPYL RQGSKLIFKPDLT LEEVQAENPKVSRGRYRPEECKALQRVAILVPHRNREKHLMYL
 LEHLHPFLQRQQLDYGIYVIHQAE GKKFNRAKLLNVGYLEALKEENWDCFI FHDVDLVPENDFNL YKCEE
 HPKHLVGRNSTGYRLRYSGYFGGVTAL SREQF KVNQF SNNYWG WGGEDDDLRLRVELQRMKISRPLPE
 VGKYTMVFHTRDKGNEVNAERMKLLHQVSRVWRDGLSSCSYKLVSEHNPLYINITVDFWFGA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6354_f04.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_212543

ORF Size: 1032 bp

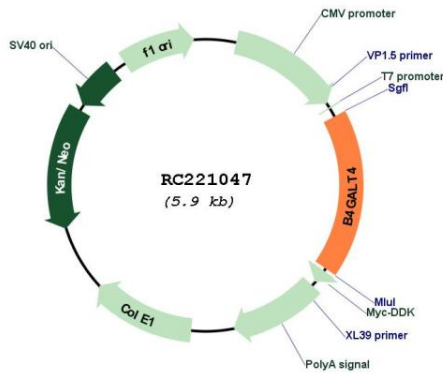
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

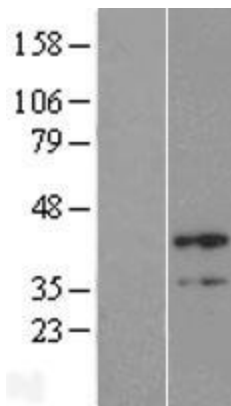
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

| | |
|-------------------------------|---|
| Reconstitution Method: | <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. |
| RefSeq: | NM_212543.1 , NP_997708.1 |
| RefSeq Size: | 2366 bp |
| RefSeq ORF: | 1035 bp |
| Locus ID: | 8702 |
| UniProt ID: | O60513 |
| Cytogenetics: | 3q13.32 |
| 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 RC221047



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]).