

Product datasheet for RC212741L4

OriGene Technologies, Inc.

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B4GALT3 (B4GALT2) (NM_003780) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: B4GALT3 (B4GALT2) (NM_003780) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: B4GALT3

Synonyms: B4Gal-T2; B4Gal-T3; beta4Gal-T2

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Sgfl-Mlul

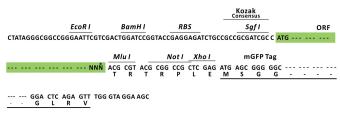
E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC212741).

Sequence:

Restriction Sites: Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_003780

ORF Size: 1116 bp





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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: <u>NM 003780.3</u>

RefSeq Size:2209 bpRefSeq ORF:1119 bpLocus ID:8704

 UniProt ID:
 060909

 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

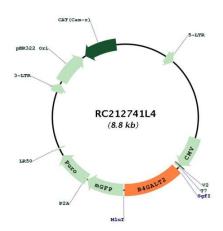
MW: 42 kDa



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 RC212741L4