

Product datasheet for RC210937L4

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

B3GALT1 (NM_020981) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: B3GALT1 (NM_020981) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: B3GALT1

Synonyms: beta3Gal-T1

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(RC210937).

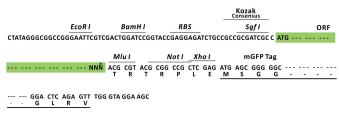
Sequence:

Restriction Sites:

.

Cloning Scheme:





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

ACCN: NM_020981

ORF Size: 978 bp





B3GALT1 (NM_020981) Human Tagged Lenti ORF Clone - RC210937L4

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 020981.2</u>

 RefSeq Size:
 2168 bp

 RefSeq ORF:
 981 bp

 Locus ID:
 8708

UniProt ID: Q9Y5Z6

Cytogenetics: 2q24.3

Protein Families: Transmembrane

Protein Pathways: Glycosphingolipid biosynthesis - lacto and neolacto series, Metabolic pathways

MW: 38 kDa

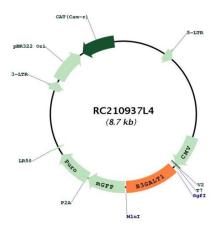
Gene Summary: This gene is a member of the beta-1,3-galactosyltransferase (beta3GalT) gene family. This

family encodes type II membrane-bound glycoproteins with diverse enzymatic functions using different donor substrates (UDP-galactose and UDP-N-acetylglucosamine) and different acceptor sugars (N-acetylglucosamine, galactose, N-acetylgalactosamine). The beta3GalT genes are distantly related to the Drosophila Brainiac gene and have the protein coding sequence contained in a single exon. The beta3GalT proteins also contain conserved sequences not found in the beta4GalT or alpha3GalT proteins. The carbohydrate chains synthesized by these enzymes are designated as type 1, whereas beta4GalT enzymes synthesize type 2 carbohydrate chains. The ratio of type 1:type 2 chains changes during embryogenesis. By sequence similarity, the beta3GalT genes fall into at least two groups: beta3GalT4 and 4 other beta3GalT genes (beta3GalT1-3, beta3GalT5). This gene is expressed exclusively in the brain. The encoded protein shows strict donor substrate specificity for UDP-

galactose. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC210937L4