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

Product datasheet for RC207430

B3GALT4 (NM_003782) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B3GALT4 (NM_003782) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B3GALT4
Synonyms:	BETA3GALT4; GALT2; GALT4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC207430 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGCTCAGGCTCTTCCGGCGCCTCCTTCTCGCCGCTTTGCTGCTGGTGATCGTCTGGACCCTCTTCG
GGCCTTCGGGGTTGGGGGAGGAGCTGCTGAGCCTCTCACTAGCCTCCCTGCTCCCAGCCCCCGCCTCACC
GGGGCCGCCCCTGGCCCTGCCCCGCCTCTTGATCCCCAACCAGGAAGCTTGCAGTGGTCCCGGGGCCCCT
CCCTTCCTGCTCATCCTGGTGTGCACGGCTCCGGAGAACCTGAACCAGAGAAACGCCATTCGGGCTTCGT
GGGGCGGGCTGCGCGAGGCCCGGGGGCTCAGGGTACAGACGCTATTCTTGCTGGGAGAGCCGAACGCACA
GCACCCCGTGTGGGGTTCCCAGGGGAGTGACCTGGCCTCGGAGTCAGCAGCCCAGGGGGATATCTTGCAG
GCCGCCTTCCAGGACTCCTACCGCAACCTCACCCTAAAGACCCTCAGCGGGCTGAACTGGGCTGAGAAAC
ACTGCCCCATGGCCCGATACGTCCTCAAGACGGACGATGATGTGTATGTCAACGTCCCTGAACTGGTATC
AGAGCTGGTCTTGCGAGGGGGCCGTTGGGGGCAATGGGAGAGAAGCACGGAACCCCAGAGAGAGGCTGAG
CAGGAAGGAGGCCAGGTTTTGCACAGCGAGGAAGTGCCTCTTCTGTACTTGGGCCGGGTGCACTGGCGCG
TGAACCCCTCTCGGACACCGGGGGGCAGGCACCGCGTATCAGAGGAGCAGTGGCCTCACACCTGGGGCCC
CTTTCCACCCTATGCCTCAGGCACGGGGTATGTGCTGTCAGCGTCTGCTGTGCAGCTCATTCTCAAGGTG
GCCAGCCGGGCACCCCTTCTCCCATTAGAGGATGTCTTTGTGGGGGTAAGTGCCCGACGAGGAGGCCTCG
CCCCAACACAGTGTGTCAAGCTGGCTGGTGCCACCCACTACCCGCTAGACCGGTGCTGCTATGGGAAATT
CCTGCTGACGTCCCACAGGCTGGACCCCTGGAAGATGCAGGAAGCCTGGAAGCTGGTGGGTGGCTCTGAC
GGGGAAAGGACTGCGCCCTTTTGCTCCTGGTTCCAGGGAGTCCTGGGCATCCTGCGGTGTCGAGCAATAG
CCTGGCTTCAGAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC207430 protein sequence
Red=Cloning site Green=Tags(s)

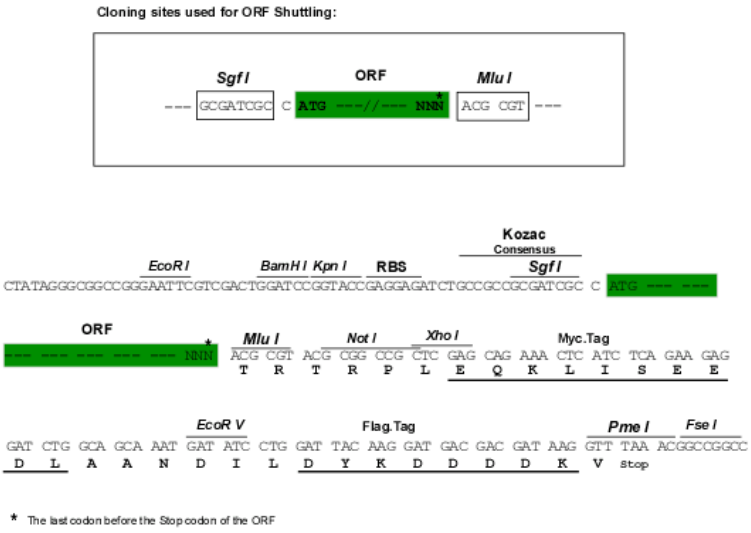
MQLRLFRRLLLAALLLVIVWTLFGPSGLGEELLSLSLASLLPAPASPGPPLALPRLLIPNQEACSGPGAP
PFLLILVCTAPENLNQRNAIRASWGGLREARGLRVQTLFLLGEPNAQHPVWGSQGSDLASESAAQGDILQ
AAFQDSYRNLTLKTLSGLNWAEKHCPMARYVLKTDDDVYVNVPELVSELVLRGGRWGQWERSTEPQREAE
QEGGQVLHSEEVPLLYLGRVHWRVNPSRTPGGRHRVSEEQWPHTWGPFPPYASGTGYVLSASAVQLILKV
ASRAPLLPLEDVFVGVSARRGGLAPTQCVKLAGATHYPLDRCCYGKFLLTSHRLDPWKMQEAWKLVGGSD
GERTAPFCSWFQGVLGILRCRAIAWLQS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6517_c07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003782

ORF Size: 1134 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:
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_003782.4

RefSeq Size: 1704 bp

RefSeq ORF: 1137 bp

Locus ID: 8705

UniProt ID: O96024

Cytogenetics: 6p21.32

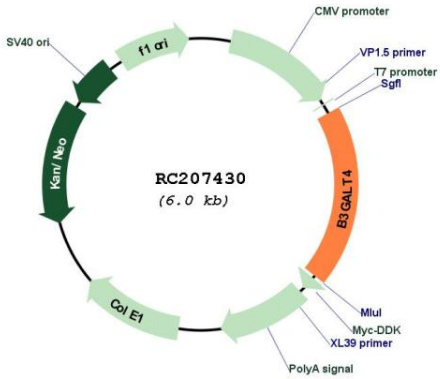
Protein Families: Transmembrane

Protein Pathways: Glycosphingolipid biosynthesis - ganglio series, Metabolic pathways

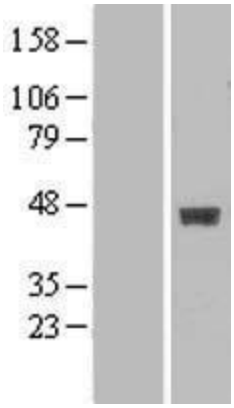
MW: 41.5 kDa

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 oriented telomere to centromere in close proximity to the ribosomal protein S18 gene. The functionality of the encoded protein is limited to ganglioseries glycolipid biosynthesis. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC207430



Western blot validation of overexpression lysate (Cat# [LY418438]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207430 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).