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Product datasheet for RG210213

Beta 1,4 galactosyltransferase 6 (B4GALT6) (NM_004775) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Beta 1,4 galactosyltransferase 6 (B4GALT6) (NM_004775) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Beta 1,4 galactosyltransferase 6
Synonyms:	B4Gal-T6; beta4Gal-T6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG210213 representing NM_004775
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTGTGCTCAGGCGGATGATGCGGGTTTCCAATCGCTCTCTCCTCGCCTTCATCTTCTTCTTCTCCC
TCTCTTCGTCCTGTCTGTACTTCATCTATGTGGCCCCAGGCATCGCCAACACATATCTCTTTATGGTACA
AGCTCGAGGTATAATGTTGAGAGAAAATGTGAAAACAATAGGTCATATGATCAGGCTGTACACAAATAAA
AACAGTACGCTCAACGGTACAGATTATCCCGAAGGCAATAATTCAAGTGATTATCTTGTTCAAACAACAA
CGTATCTCCCGGAAAACTTCACATACTCACCATACCTCCCCTGTCCAGAAAAGCTGCCTTATATGCGAGG
ATTCCTCAATGTCAATGTAAGCGAAGTCAGTTTTGATGAAATTCATCAACTCTTCTCCAAGGATTTAGAT
ATTGAGCCAGGGGGTCATTGGAGGCCAAAAGACTGTAAACCCAGATGGAAGGTGGCAGTTCTCATTCCTT
TCCGTAATCGCCATGAACATCTTCCAATTTTTTTCTTACATCTGATTCCAATGCTCCAGAAGCAGCGGCT
GGAATTTGCGTTTTATGTCATTGAACAGACTGGCACACAACCTTTTAACCGTGCGATGCTTTTCAATGTG
GGCTTCAAAGAGGCCATGAAAGACAGTGTCTGGGACTGTGTAATCTTCCACGATGTGGATCATCTACCTG
AAAATGACCGGAACTATTACGGATGTGGAGAAATGCCACGTCATTTTGCTGCAAAGCTGGATAAATACAT
GTATATTCTTCCATATAAAGAATTTTTTGGTGGTGTAAGTGGGCTGACAGTGGAACAATTTAGAAAGATC
AATGGTTTTCCTAATGCCTTCTGGGGATGGGGAGGAGAAGATGATGACCTTTGGAACAGAGTTCACTATG
CTGGATATAATGTAACCAGACCAGAGGGAGACTTAGGAAAATACAAGTCAATTCCTCATCACCATAGAGG
TGAAGTCCAGTTTTTAGGACGGTATAAATTACTAAGGTATTCCAAGGAGCGTCAGTACATCGATGGACTG
AACAATTTAATATATAGGCCAAAAATACTGGTTGATAGGTTGTATACAAACATATCTGTAAACCTCATGC
CAGAGTTAGCTCCAATCGAAGACTAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

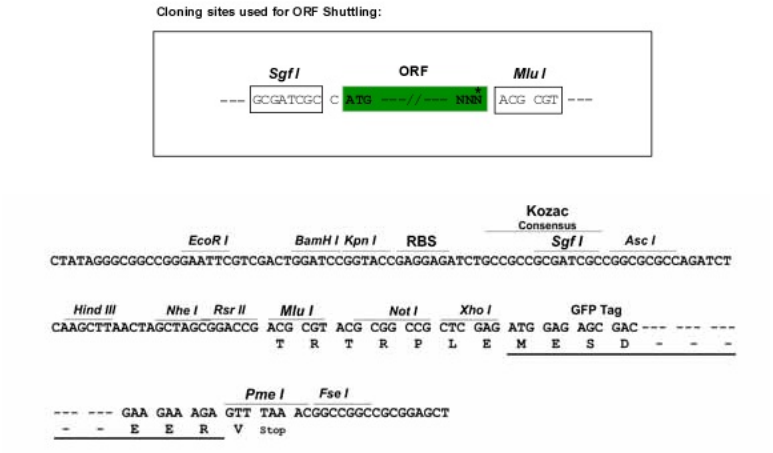
>RG210213 representing NM_004775
Red=Cloning site Green=Tags(s)

MSVLRRMMRVSNRSLLAFIFFFSLSSSCLYFIYVAPGIANTYLFMVQARGIMLRENVKTIGHMIRLYTNK
NSTLNGTDYPEGNNSSDYLVQTTTYLPENFTYSPYLPCPEKLPYMRGFLNVNVSEVSFDEIHQLFSKDLD
IEPGGHWRPKDCKPRWKVAVLIPFRNRHEHLPIFFLHLIPMLQKQRLEFAFYVIEQTGTQPFNRAMLFNV
GFKEAMKDSVWDCVIFHDVDHLPENDRNYYGCGEMPRHFAAKLDKYMYILPYKEFFGGVSGLTVEQFRKI
NGFPNAFWGWGGEDDDLWNRVHYAGYNVTRPEGDLGKYKSIPHHHRGEVQFLGRYKLLRYSKERQYIDGL
NNLIYRPKILVDRLYTNISVNLMPELAPIEDY

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004775

ORF Size: 1146 bp

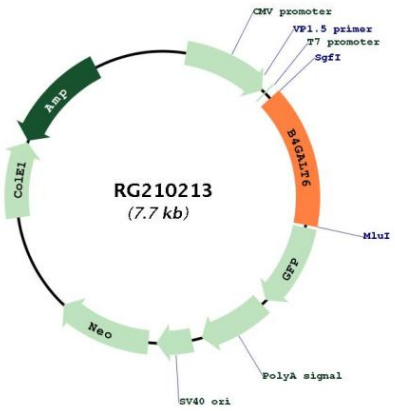
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_004775.5
RefSeq Size:	4814 bp
RefSeq ORF:	1149 bp
Locus ID:	9331
UniProt ID:	Q9UBX8
Cytogenetics:	18q12.1
Domains:	Galactosyl_T_2
Protein Families:	Transmembrane
Protein Pathways:	Metabolic pathways, Sphingolipid metabolism
Gene Summary:	This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes in human. 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. This gene produces multiple protein isoforms - some of which are predicted to lack the N-terminal hydrophobic signal sequence and transmembrane domain. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. The canonical enzyme encoded by this gene is a lactosylceramide synthase important for glycolipid biosynthesis. [provided by RefSeq, Jan 2020]

Product images:



Circular map for RG210213