

Product datasheet for **SC333296**

B4GALT3 (B4GALT2) (NM_030587) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: B4GALT3 (B4GALT2) (NM_030587) Human Untagged Clone
Tag: Tag Free
Symbol: B4GALT3
Synonyms: B4Gal-T2; B4Gal-T3; beta4Gal-T2
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC333296 representing NM_030587.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGGCTGTGGAAGTCCAGGAGCAGTGGCCTTGTGGCCAGCAGCCGGATGCCCGGGCCACTGGGCGGG
CCAGTGGCCGCTGCGGGATGAGCAGACTGCTGGGGGGGACGCTGGAGCGCGTCTGCAAGGCTGTGCTC
TTCTCTGCCTGCTGCACCTTCTCGTGGCCGTATCCTCTACTTTGACGCTACGCCCAGCACCTGGCC
TTCTTCAGCCGTTTCAGTGCCCGAGGCCCTGCCATGCCCTCCACCCAGCTGCTAGCAGCAGCAGCAGC
AGCAGCAACTGCTCCCGGCCAACGCCACCGCCTTAGCTCCGGGCTCCCTGAGGTCCCCAGTGCCTG
CCCGGTCCACGGCTCCACGCTGCCACCTGTCTGACTCGCCACCTGGTCTTGTGGGCGACTGCTG
ATCGAGTTCACCTCACCCATGCCCTGGAGCGGGTGCAGAGGGAGAACCAGGCGTGCTCATGGGCGGC
CGATACACACCCGCCGACTGCACCCAGCCAGACGGTGGCGGTATATCCCTTTAGACACCGGGAA
CACCACCTGCGCTACTGGCTCCACTATCTACACCCATCTTGAGGCGGCAGCGGGTGCCTACGGCGTC
TATGTCATCAACCAGCATGGTGAGGACACCTTCAACCGGGCAAGCTGCTTAACGTGGGCTTCTAGAG
GCGCTGAAGGAGGATGCCGCTATGACTGCTTCATCTTCAGCGATGTGGACCTGGTCCCCATGGATGAC
CGCAACCTATACCGCTGCGGGCACCACCCGCCACTTTGCCATTGCCATGGACAAGTTTGGCTCCGG
CTTCCCTATGCTGGCTACTTTGGAGGTGTGTCAGGCCTGAGTAAGGCTCAGTTTCTGAGAATCAATGGC
TTCCCAATGAGTACTGGGCTGGGGTGGCGAGGATGATGACATCTTCAACCGGATCTCCCTGACTGGG
ATGAAGATCTCACGCCAGACATCCGAATCGGCCGCTACCGCATGATCAAGCACGACCGGACAAGCAT
AACGAACCTAACCTCAGAGTTTACCAAGATTCAAACACGAAGCTGACCATGAAGCGGGACGGCATT
GGGTGAGTGCCTACCAGGTCTTGGAGGTGTCTCGGCAACCACTTTCACCAATATCACAGTGGACATT
GGGCGGCCTCCGTGTCGGCCCCCTCGGGCTGA
  
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Restriction Sites: SgfI-MluI
ACCN: NM_030587
Insert Size: 1206 bp
OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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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:	<u>NM_030587.2</u>
RefSeq Size:	2010 bp
RefSeq ORF:	1206 bp
Locus ID:	8704
UniProt ID:	<u>O60909</u>
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:	44.8 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 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]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (a).</p>