

Product datasheet for **RC208100**

B3GNT1 (B3GNT2) (NM_006577) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B3GNT1 (B3GNT2) (NM_006577) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B3GNT2
Synonyms:	3-Gn-T1; 3-Gn-T2; B3GN-T2; B3GNT; B3GNT-2; B3GNT1; beta-1; beta3Gn-T1; beta3Gn-T2; BETA3GNT; BGnT-2; BGNT2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC208100 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGTGGACGTCGAAGAATAAAGTTGTTGGGTATCCTGATGATGGCAAATGTCTTCATTTATTTTA
TTATGGAAGTCTCCAAAAGCAGTAGCCAAGAAAAAATGGAAAAGGGGAAGTAATAATACCCAAAGAGAA
GTTCTGGAAGATATCTACCCCTCCCGAGGCATACTGGAACCGAGAGCAAGAGAAGCTGAACCGCAGTAC
AACCCCATCTGAGCATGCTGACCAACCAGACGGGGGAGGCGGGCAGGCTCTCCAATATAAGCCATCTGA
ACTACTGCGAACCTGACCTGAGGGTCACGTCGGTGGTTACGGGTTTTAACAACTGCCGGACAGATTTAA
AGACTTCTGCTGATTTGAGATGCCGCAATTATCACTGCTTATAGATCAGCCGATAAGTGTGCAAAG
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CCTGGGGCCAAGAAAGCAACGCAGGGAACCAACGGTGGTGCAGTCTTCTGCTGGGCCAGACACCCCC
AGAGGACAACCACCCGACCTTTCAGATATGCTGAAATTTGAGAGTGAGAAGCACCAAGACATCTTATG
TGGAACTACAGAGACACTTCTTCAACTGTCTCTGAAGGAAGTCTGTTTCTCAGGTGGGTAAGTACTT
CCTGCCAGACACTGAGTTTGTCTTCAAGGGCGATGACGATGTTTTGTGAACACCCATCACATCTGAA
TTACTTGAATAGTTTATCCAAGACCAAGCCAAAGATCTCTTATAGGTGATGTGATCCACAATGCTGGA
CCTCATCGGATAAGAAGCTGAAGTACTACATCCAGAAGTTGTTTACTCTGGCCTTACCCACCTATG
CAGGGGGAGGGGGTTCCTCTACTCCGGCCACCTGGCCCTGAGGCTGTACCATATCACTGACCAGGTCCA
TCTCTACCCATTGATGACGTTTATACTGGAATGTGCCTTCAGAACTCGGCCTCGTCCAGAGAAACAC
AAAGGCTTCAGGACATTTGATATCGAGGAGAAAAACAAAATAACATCTGCTCCTATGTAGATCTGATGT
TAGTACATAGTAGAAAACCTCAAGAGATGATTGATATTTGGTCTCAGTTGCAGAGTGCTCATTAAATG
C

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208100 protein sequence
 Red=Cloning site Green=Tags(s)

MSVGRRRIKLLGILMMANVFIYFIMEVSKSSSQEKNGKGEVIIPKEKFWKISTPPEAYWNREQELNRQY
 NPILSMLTNQTGEAGRLSNISHLNYCEPDLRVTSVVTGFNNLPDRFKDFLLYLRCRNYSLIDQPKCAK
 KPFLLLAIKSLTPHFARRQAIRESWQESNAGNQTVVRVFLGQTPPEDNHPDLSDMLKFESEKHQDILM
 WNYRDTFFNLSLKEVFLRWVSTSCPDTFVFKGDDDDVFVNTHHILNLYNSLSKTKAKDLFIGDVIHNAG
 PHRDKKLYIPEVVYSLYPPYAGGGFLYSGHLALRLYHITDQVHLYPIDDDVYTMCLQKLGIVPEKH
 KGFRTFDIEEKNKNNICSYVDLMLVHSRKPQEMIDIWSQLQSAHLKC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

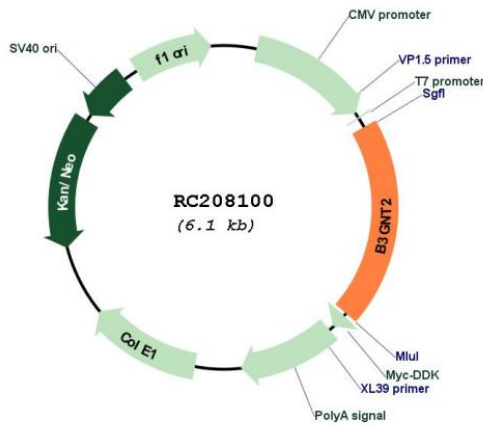
Chromatograms: https://cdn.origene.com/chromatograms/mk6348_d11.zip

Restriction Sites: SgfI-MluI

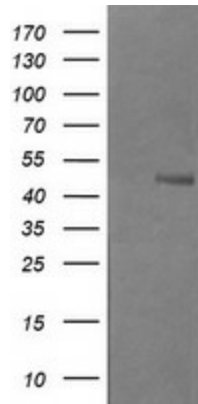
Cloning Scheme:



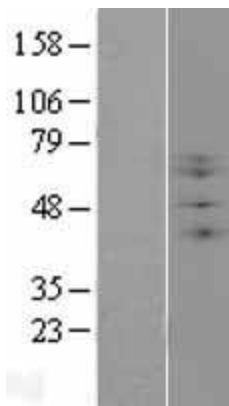
Plasmid Map:



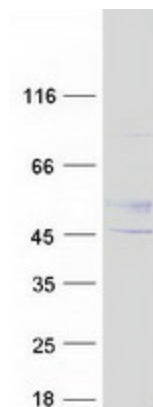
ACCN:	NM_006577
ORF Size:	1191 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	<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:	NM_006577.6
RefSeq Size:	2788 bp
RefSeq ORF:	1194 bp
Locus ID:	10678
UniProt ID:	Q9NY97
Cytogenetics:	2p15
Domains:	Galactosyl_T
Protein Families:	Transmembrane
Protein Pathways:	Glycosphingolipid biosynthesis - lacto and neolacto series, Keratan sulfate biosynthesis, Metabolic pathways
MW:	46 kDa
Gene Summary:	This gene encodes a member of the beta-1,3-N-acetylglucosaminyltransferase family. This enzyme is a type II transmembrane protein. It prefers the substrate of lacto-N-neotetraose, and is involved in the biosynthesis of poly-N-acetyllactosamine chains. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jan 2016]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY B3GNT2 (Cat# RC208100, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-B3GNT2(Cat# [TA505283]). Positive lysates [LY416552] (100ug) and [LC416552] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416552]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208100 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified B3GNT2 protein (Cat# [TP308100]). The protein was produced from HEK293T cells transfected with B3GNT2 cDNA clone (Cat# RC208100) using MegaTran 2.0 (Cat# [TT210002]).