

Product datasheet for MR222661

B3gnt5 (NM_054052) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B3gnt5 (NM_054052) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B3gnt5
Synonyms:	beta3GnT5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222661 representing NM_054052 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGACTGTTTGTAGCAGAAGAGTCAAAGATGGAAAATTTTCACTTTTTGTCACTTGTTTTATAT
TAAGCTTCATGGTTTTTGGAGCCCAATCAATAATTACATCATGAGCCATATGAAGTCTACTCCTACAG
ATACCTCGTAAATAGCTATGGCTTTGTAACAATTCCCTGTCTCTCAAGCACAGCTCTGTGCAGCCTCAC
TACCCATACTTGATCAACCACAGAGAGAAGTGTCAAGGCTCAAGATGTCTCCTCTTACTGTTATAAAGA
CTGCCCTGAAAATATGGCCGACGTTCTGCAATCAGAAAACGTGGGGCAATGAGAATATGTTACAGTC
TCAACTCAATGCCAACATCAAAATCTGTTTGCATTAGGAACTCCTGGTCCACTGAAGGGAAAAGAACTG
CAAAAAAGACTAATCGGGGAAGATCAAGTGTACAAGGATAAATTCAGCAAGATTTTCATTGATCTTTCC
ACAATCTTACTTCTAAATTCCTTCTTCAAGTTCAGCTGGGCAATACCTTTTGTCCACATGCCAAATTCCT
GATGACTGCTGATGATGATATATTTATCCACATGCCAAATCTCATTGAATATCTTCAAGGGCTAGAGCAG
ATTGGAGTTCGAGACTTTTGGATTGGTCACGTTTCATCGAGGTGGCCCTCCTGTTAGGGATAAAAGCAGCA
AATACTATGTTCCCTATGAAATGTACAAGTGGCCAGCCTACCTGACTATACAGCTGGTGTGCCTATGT
TGCTCCAGAGATGTAGCTGCCAAAATCTATGAGGCATCGCAGACACTGAATTCAGTATGTACATAGAT
GATGATTCATGGGCCTCTGTGCCAATAAAGTGGGAATCTTGCCACAGGACCATGATTTTTCTCTGGGG
AAGGGAAAATTCCTTATCACCCCTGCATCTATGAAAAGATGATGACATCTCACGGACACTTACAAGATCT
GCAGGACCTCTGGATAGAGGCTACACATCCTAAAGTAAAGAACATTTCAAAGGGTTTTTGGTCAAATA
TACTGCAGGTTAATTAAGATAGTCTTCTCTGCAGACTGACTTACAGGAATTCATACCCTTGTGGGCTG
CATTTGCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR222661 representing NM_054052
Red=Cloning site Green=Tags(s)

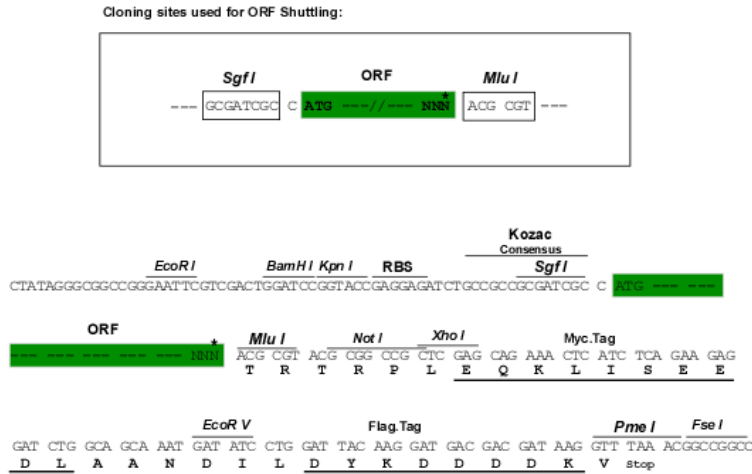
MRLFVSRVVKRWKIFHFFVTCFILSFMVFWSPINNYIMSHMKSYSYRYLVNSYGFVNNSLSLKHSSVQPH
 YPYLINHREKCQAQDVL LLLFIKTAPENYGRRSAIRKRWGNENYVQSQLNANIKILFALGTPGPKGKEL
 QKRLIGEDQVYKDI IQDFIDSFHNLTSKFL LQFSWANTFCPHAKFLMTADDIF IHMPNLIEYLQGLEQ
 IGVRDFWIGHVHRGPPVRDKSSKYYVPYEMWKWPAYPDYTAGAAYVVS RDVAAKIYEASQTLNSSMYID
 DVFMGLCANKVGILPQDHVFFSGEGKIPYHPCIYEKMMTSHGHLQDLQDLWIEATHPKVKNI SKGFFGQI
 YCRLIKIVLLCRLTYRNSYPCWAAFA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9029_h08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_054052

ORF Size: 1128 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_054052.3](#), [NP_473393.2](#)

RefSeq Size: 4548 bp

RefSeq ORF: 1131 bp

Locus ID: 108105

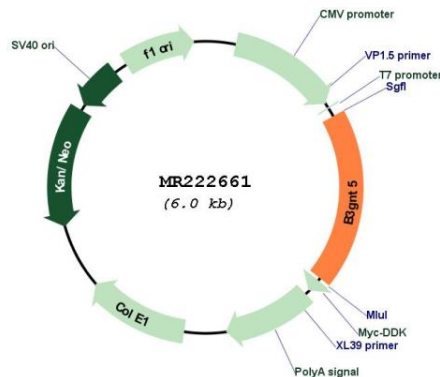
UniProt ID: [Q8BGY6](#)

Cytogenetics: 16 A3

MW: 44.4 kDa

Gene Summary: Beta-1,3-N-acetylglucosaminyltransferase that plays a key role in the synthesis of lacto- or neolacto-series carbohydrate chains on glycolipids, notably by participating in biosynthesis of HNK-1 and Lewis X carbohydrate structures. Has strong activity toward lactosylceramide (LacCer) and neolactotetraosylceramide (nLc(4)Cer; paragloboside), resulting in the synthesis of Lc(3)Cer and neolactopentaosylceramide (nLc(5)Cer), respectively. Plays a central role in regulating neolacto-series glycolipid synthesis during embryonic development. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222661