

## Product datasheet for **MG222661**

### **B3gnt5 (NM\_054052) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	B3gnt5 (NM_054052) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	B3gnt5
Synonyms:	beta3GnT5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222661 representing NM_054052 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGACTGTTTGTAGCAGAAGAGTCAAAGATGGAAAATTTTCACTTTTTGTCACTTGTGTTTATAT  
TAAGCTTCATGGTTTTTGGAGCCCAATCAATAATTACATCATGAGCCATATGAAGTCTACTCCTACAG  
ATACCTCGTAAATAGCTATGGCTTTGTAACAATTCCCTGTCTCTCAAGCACAGCTCTGTGCAGCCTCAC  
TACCCATACTTGATCAACCACAGAGAGAAGTGTCAAGGCTCAAGATGTCTCCTCTTACTGTTATAAAGA  
CTGCCCTGAAAACATATGGCCGACGTTCTGCAATCAGAAAACGTGGGGCAATGAGAAGTATGTTCAAGTC  
TCAACTCAATGCCAACATCAAAATCTGTTTGCATTAGGAACTCCTGGTCCACTGAAGGGAAAAGAACTG  
CAAAAAAGACTAATCGGGGAAGATCAAGTGTACAAGGATAATAATTCAGCAAGATTTTCATTGATTCTTTCC  
ACAATCTTACTTCTAAATTCCTTCTTCAAGTTCAGCTGGGCAATACCTTTTGTCCACATGCCAAATTCCT  
GATGACTGCTGATGATGATATATTTATCCACATGCCAAATCTCATTGAATATCTTCAAGGGCTAGAGCAG  
ATTGGAGTTCGAGACTTTTGGATTGGTTCAGGTTTCATCGAGGTGGCCCTCCTGTTAGGGATAAAAGCAGCA  
AATACTATGTTCCCTATGAAATGTACAAGTGGCCAGCCTACCTGACTATACAGCTGGTGCCTATGT  
TGCTCCAGAGATGTAGCTGCCAAATCTATGAGGCATCGCAGACACTGAATTCAGTATGTACATAGAT  
GATGATTCATGGGCCTCTGTGCCAATAAAGTGGGAATCTTGCCACAGGACCATGATTTTTCTCTGGGG  
AAGGGAAAATTCCTTATCACCCCTGCATCTATGAAAAGATGATGACATCTCACGGACACTTACAAGATCT  
GCAGGACCTCTGGATAGAGGCTACACATCCTAAAGTAAAGAACATTTCAAAGGGTTTTTGGTCAAATA  
TACTGCAGGTTAATTAAGATAGTCTTCTCTGCAGACTGACTTACAGGAATTCATACCCTTGTGGGCTG  
CATTTGCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG222661 representing NM\_054052  
 Red=Cloning site Green=Tags(s)

MRLFVSRVRKWKIFHFFVTCFILSFMVFWSPINNYIMSHMKSYSYRYLVNSYGFVNNSLSLKHSSVQPH  
 YPYLINHREKCQAQDVL LLLFIKTAPENYGRRSAIRKTWGNENYVQSQLNANIKILFALGTPGPKGKEL  
 QKRLIGEDQVYKDIIQQDFIDSFHNLTSKFL LQFSWANTFCPHAKFLMTADDDIFIHMPNLEIYLQGLEQ  
 IGVRDFWIGHVHRGPPVRDKSSKYYVPYEMKWPAYPDYTAGAAYVSRDVAAKIYEASQTLNSSMYID  
 DVFMGLCANKVGILPQDHVFFSGEGKIPYHPCIYEKMMTSHGHLQDLQDLWIEATHPKVKKNISKGFFGQI  
 YCRLIKIVLLCRLTYRNSYPCWAAFA

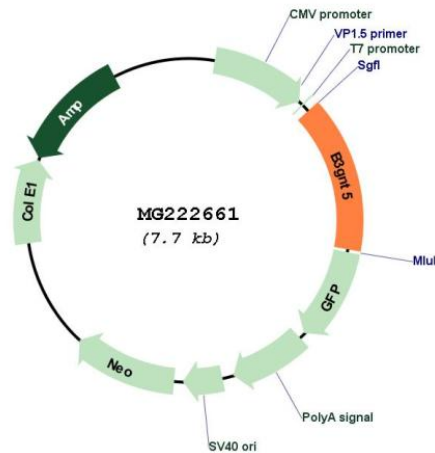
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_054052

<b>ORF Size:</b>	1128 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_054052.3</a> , <a href="#">NP_473393.2</a>
<b>RefSeq Size:</b>	4548 bp
<b>RefSeq ORF:</b>	1131 bp
<b>Locus ID:</b>	108105
<b>UniProt ID:</b>	<a href="#">Q8BGY6</a>
<b>Cytogenetics:</b>	16 A3
<b>Gene Summary:</b>	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]