

## Product datasheet for **MG225689**

### **B4galt5 (NM\_019835) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	B4galt5 (NM_019835) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	B4galt5
Synonyms:	9430078I07Rik; AW049941; AW539721
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225689 representing NM_019835 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGCGCCCGCGGGGCTGCTGCGGCTGCCGCGCCGCTCGCTGCTCGCCGCGCTCTTCTTCTTCTCGC  
TGTCGTCCTCGCTGCTCTACTTCGTCATGTGGCGCCCGCATAGTGAACACCTACCTCTTCATGGTGCA  
GGCTCAGGGCATCTACTGCGGGACAATGTGAGGACCATCGGTGCCAGGTGTACGAGCAGGTGGTCCGC  
AGCGCCTATGCCAAGAGAACAGCAGCCTGAATGACTCAGATTATCCTCTGGACTGAACCACAGTGAAG  
CCTTTCCCAACCACGACCTTTCTTCTGAAGATTTACCTACTTTGCCAACCCCTTGCCAGAGAG  
GCTCCCTTCCATGAAGGGCCGATAGATATAAACATGAGTGAGATCGCAATGGACGATATTCATGAGCTG  
TTCTCCAGAGACCCGGCCATTAAGCTCGGAGGGCACTGGAAGCCTGCAGACTGTGTGCCTCGGTGGAAGG  
TGGCTATCCTCATCCCCTTCGGAACCGCCATGAGCACCTCCCGGTCTCCTGAGACACCTGCTCCCAT  
GCTTCAGCGCCAGCGCCTGCAGTTCGCCTTCTATGTGATCGAGCAAGTTGGCACCCAGCCCTTAACCGA  
GCCATGCTTTCAATGTTGGTTTCAAGAAGCCATGAAGGACTTGGATTGGGATTGTCTGATCTTCCATG  
ACGTCGATCACATACCTGAGAGTGACCGAACTACTATGGCTGCGGGCAGATGCCAGGCACTTTGCAAC  
CAAGCTGGACAAGTACATGTACCTGCTGCCCTACACTGAGTTTTTTGGTGGCGTGAGCGGCTGACTGTA  
GAACAGTTTCGAAAATCAATGGCTTTCTAATGCCTTCTGGGCTGGGGCGGAGAGATGACGACTTGT  
GGAACAGGGTACAAAATGCAGGCTATTCTGTGAGCCGGCCAGAAGGGGACACAGGAAAATACAAGTCCAT  
TCCTCACCCATCGAGGAGAGTCCAGTTTCTTGGCAGGTACGCTCTGCTGAGGAAGTCAAGGAGCGG  
CAAGGACTGGATGGCTCAACAACCTGAACTACTCTGCGAATGTCACGTACGACGCTTGTATAAAAAACA  
TAACTGTCAACTTGACACCCGAGCTGGCTCAGGTGACTGAGTAC

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG225689 representing NM\_019835  
 Red=Cloning site Green=Tags(s)

MRARRGLLRRLPRRSLAALFFFSLSSSLLYFVYVAPGIVNTYLFMVQAQGILLRDNVRTIGAQVVEQVVR  
 SAYAKRNSSLNDSYPLDLNHSEAFPPTTTFLEDFTYFANHPCPERLPSMKGPIDINMSEIAMDDIHEL  
 FSRDPAIKLGGHWKPADCVPRWKVAAILIPFRNRHEHLPVLLRHLLPMLQRQLQAFYVIEQVGTQPFNR  
 AMLFNVGFQEAMKDLWDCLIFHDVDHIPESDRNYYGCGQMPRHFAKLDKYMILLPYTEFFGGVSLTV  
 EQFRKINGFPNAFWGEGEDDDLWNRVQNAAGYSVSRPEGDTGKYKSIPIHHRGEVQFLGRYALLRKS  
 QGLDGLNNLNYSANVTYDALYKNITVNLTPELAQVTEY

TRTRPLE - GFP Tag - V

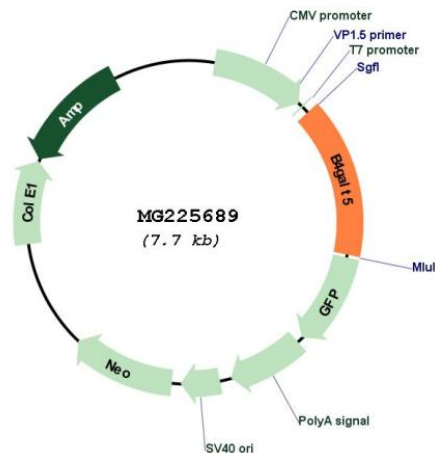
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_019835

<b>ORF Size:</b>	1164 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_019835.2</a> , <a href="#">NP_062809.2</a>
<b>RefSeq Size:</b>	4205 bp
<b>RefSeq ORF:</b>	1167 bp
<b>Locus ID:</b>	56336
<b>UniProt ID:</b>	<a href="#">Q9JMK0</a>
<b>Cytogenetics:</b>	2 H3
<b>Gene Summary:</b>	Catalyzes the synthesis of lactosylceramide (LacCer) via the transfer of galactose from UDP-galactose to glucosylceramide (GlcCer) (PubMed:21057870, PubMed:23882130, PubMed:30114188). LacCer is the starting point in the biosynthesis of all gangliosides (membrane-bound glycosphingolipids) which play pivotal roles in the CNS including neuronal maturation and axonal and myelin formation (PubMed:30114188). Plays a role in the glycosylation of BMPR1A and regulation of its protein stability (PubMed:29415997). Essential for extraembryonic development during early embryogenesis (PubMed:20574042, PubMed:21057870).[UniProtKB/Swiss-Prot Function]