

## Product datasheet for **MG209741**

### Gusb (NM\_010368) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gusb (NM_010368) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gusb
Synonyms:	AI747421; asd; g; Gur; Gus; Gus-r; Gus-s; Gus-t; Gus-u; Gut
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG209741 representing NM\_010368  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCCTTAAATGGAGTGCCTGTTGGGTCGCGCTGGGCCAGCTGCTGTGCAGCTGCGCGCTGGCTCTGA  
 AGGGCGGGATGCTGTTCCGAAGGAGAGCCCGTCGCGGGAGCTCAAGGCGCTGGACGGACTGTGGCACTT  
 CCGCGCCGACCTCTCGAACAACCGGCTGCAGGGTTTCGAGCAGCAATGGTACCGGAGCCGCTACGGGAG  
 TCGGGCCAGTCTTGACATGCCTGTCCCTTCTAGCTTCAATGACATCACCAAGAAGCAGCCCTTCGGG  
 ACTTTATTGGCTGGGTGTGGTATGAACGGGAAGCAATCCTGCCACGGCGATGGACCAAGATACCGACAT  
 GAGAGTGGTGTGAGGATCAACAGTGCCATTATTATGCAGTTGTGTGGTGAATGGGATTCATGTGGTG  
 GAACATGAGGGAGGTACCTCCCTTTGAGGCTGACATTAGCAAGCTGGTCCAGAGTGGGCCCTGACCA  
 CCTGCCGATCAGATTGCCATCAACAACACACTGACCCCTCATACCCTTCGCGCGGGGACCATCGTCTA  
 CAAGACTGACACCTCCATGTATCCCAAGGGTACTTTGTCCAGGACACAAGCTTTGACTTCTTCAACTAT  
 GCGGGACTGCATCGATCTGTGGTCTCTATACCACCCCTACCCTTACATCGATGATATCACTGTGATCA  
 CTAATGTGGAGCAAGACATCGGGCTGGTGACCTACTGGATTTCTGTGCAGGGCAGTGAACATTTCCAGCT  
 AGAAGTGCAACTTTTGGATGAGGGTGGCAAAGTCGTGGCCATGGGACAGGGAACCGGGTCAACTTCAG  
 GTTCCAGTGCCAACCTCTGGTGGCCTTACCTGATGCATGAGCATCCAGCCTACATGTACTCCTTGAGG  
 TGAAGGTGACAACAAGTCTGTGACTGACTACTACCCCTTCCTATCGGGATTCGAACAGTGCGTGT  
 CACAAAGAGCAAGTTCCTATAAACGGGAAGCCCTTCTATTTCCAAGGGTCAATAAGCACGAGGATTCA  
 GATATCCGAGGGAAGGCTTCGACTGGCCGCTGCTGGTAAAGGATTTCAACCTGCTCCGTGGCTCGGG  
 CAAATTCCTTTCTGACCAGCACTATCCCTACTCAGAGGAGTACTTCAGCTCTGTGACCGATACGGGAT  
 TGTGGTCATCGATGAGTGTCCCGGTGTGGGCATTGTGCTACCTCAGAGTTTGGCAACGAGTCACTTCGG  
 CACCACCTAGAGGTGATGGAGGAGCTGGTTCGCCGGGACAAAAATCACCTGCGGTTGTGATGTGGTCTG  
 TGGCAATGAGCCTTCTCTGCTCTGAAACCCGCCGCATATTACTTTAAGACGCTGATCACCCACACCAA  
 AGCCCTGGACCTCACCCGTCCCGTGACCTTTGTGAGCAACGCCAAATATGATGCAGACCTGGGGGCCCCG  
 TACGTGGATGTTATCTGTGTAACAGCTACTTTCTTGGTATCATGACTATGGGCATTTGGAGGTGATTC  
 AGCCACAGCTGAATAGCCAGTTTGAGAACTGGTATAAGACGCATCAGAAGCCGATTATCCAGAGCGAGTA  
 TGGAGCAGACGCAATCCAGGGATCCACGAGGACCCGCTCGCATGTTCACTGAGGAGTACCAGAAGGCT  
 GTTCTGGAGAATTACATTCAGTTCTGGATCAGAAACGTAAGAATACGTGGTCCGAGAGCTCATCTGGA  
 ATTTCCGCGACTTCATGACGAACAGTACCCGCTGAGAGTAATCGGAAACAAGAAGGGGATCTTCACTCG  
 CCAGAGACAGCCCAAACTTCGGCCTTTATTTTGCAGAGAGATACTGGAGGATTGCCAACGAAACCGGA  
 GGTACGGTTACAGGGCCGAGAACCAGTGTTCGGAAGCAGACCGTTACGTTT

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG209741 representing NM\_010368  
 Red=Cloning site Green=Tags(s)

MSLKWSACWVALQLLCSCALALKGMLFPKESPSRELKALDGLWHFRADLNNRLQGFEQQWYRQPLRE  
 SGPVLDMVPVSSFNITQEAALRDFIGWVYEREAILPRRWTDMDRVVLRINSAHYAVVWNGIHVV  
 EHEGGHLPFEADISKLVQSGPLTTCRITIAINNTLTPTLPPGTIVYKTDTSMPYKGYFVQDTSFDFNY  
 AGLHRSVVL YTPPTTYIDDITVITNVEQDIGLVYWISVQGSEHFQLEVQLLDEGGKVVAGHTGNQGQLQ  
 VPSANLWWPYLMHEHPAYMYSLEVKTSTTESVTDYTLPIGIRTVAVTKSKFLINGKPFYFQGVNKHEDS  
 DIRGKGFDPVLLVKDFNLLRWLGANSFRTSHYPYSEEVQLCDRYGIVVIDECPGVGIVLPQSFGNESLR  
 HHLEVMEELVRRDKNHPAVVMWSVANEPSSALKPAAYYFKTLITHKALDLTRPVTFVSNKYADLGLAP  
 YVDVICVNSYFSWYHDYGHLEVIQPLNSQFENWYKTHQPIIQSEYGADAIPGIHEDPPRMFSEEQKA  
 VLENYHSVLDQKRKEYVVGELIWNFADFMTNQSPRLVIGNKKGIFTRQRQPKTSFILRERYWRIANETG  
 GHGSGPRTQCFGSRPFTF

**TRTRPLE** – GFP Tag – V



Restriction Sites: SgfI-MluI

### Cloning Scheme:

Cloning sites used for ORF Shuttling:



Kozac  
Consensus

EcoRI      BamHI | KpnI      RBS      SgfI      Asc I

CTATAGGGCGGCGGGGAATTCTGC TACTGGATCCGGTACCGAGGAGATCTGCCGCCGCATCGCCGCGCGCCAGATCT

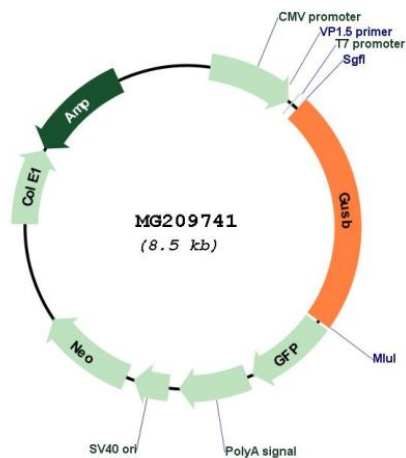
Hind III      Nhe I    Rsr II      Mlu I                  Not I       Xho I                          GFP Tag

CAAGCTTAAGTAGCTAGCGGACC G ACG CGT ACG CGG CCG CTC GAG ATG GAG ACG GAC --- --- ---  
   T R T R P L E M E S D - - -

Pme I      Fse I

--- --- GRA GAA AGA GTT TAA ACGGCGGCGCGGAGCT  
- - E E R V Stop

### Plasmid Map:



ACCN: NM\_010368

ORF Size: 1944 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_010368.2</a>
<b>RefSeq Size:</b>	2456 bp
<b>RefSeq ORF:</b>	1947 bp
<b>Locus ID:</b>	110006
<b>UniProt ID:</b>	<a href="#">P12265</a>
<b>Cytogenetics:</b>	5 68.32 cM
<b>Gene Summary:</b>	Plays an important role in the degradation of dermatan and keratan sulfates. [UniProtKB/Swiss-Prot Function]