

## Product datasheet for **MG205914**

### Galt (BC010985) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Galt (BC010985) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Galt
Synonyms:	AW553376
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205914 representing BC010985 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGCATAGCGGAGCGGATCCTGAGCAGCGCCAGCAGGCTTCAGAGGCGGACGCCATGGCAGCGACCT  
TCCGGGCGAGCGAACACCAGCATATTCGCTACAACCCGCTCCAGGACGAGTGGGTGTTAGTGTGGCTCA  
TCGCATGAAGCGGCCCTGGCAAGGACAAGTGGAGCCCCAGCTTCTAAAGACAGTGCCCCGCCAGACCCA  
CTCAACCCTCTGTGTCCCGGGCCACACGAGCTAATGGGAGGTGAATCCCCACTATGATGGCACCTTTC  
TGTTTGACAATGACTTCCCGGCTCTGCAGCCCGATGCTCCGGATCCAGGAACCAGTGACCACCCTCTCTT  
CCGAGCAGAGGCCGCCAGAGGAGTTTGAAGGTCATGTGCTTCCACCCTGGTCCGATGTGACGCTGCCA  
CTCATGTCTGTCCCTGAGATCCGAGCTGTTCATCGATGCATGGCCCTCAGTAACAGAGGAGCTGGGTGCC  
AGTACCCTTGGGTGCAGATCTTTGAAAATAAAGGAGCCATGATGGGCTGTTCTAACCCCCATCCCCACTG  
CCAGGTTTGGGCTAGCAGCTTCTGCCAGATATCGCCAGCGTGAAGAGCGATCCAGCAGACCTATCAC  
AGCCAGCATGGAAAACCTTTGTTATTGGAATATGGTCACCAAGAGCTCCTCAGGAAGAACGTCTGGTCC  
TAACCAGTGAGCACTGGATAGTTCTGGTCCCCTTCTGGGCAGTGTGGCCTTCCAGACACTTCTGCTGCC  
CCGGCGGCACGTGCGGCGGCTACCTGAGCTGAACCCCGCTGAGCGTGATGATCTCGCCTCCATCATGAAG  
AAGCTCTTGACCAAGTACGACAATCTATTTGAGACATCCTTTCCCTACTCCATGGGCTGGCATGGGGCTC  
CCACGGGATTAAGACTGGAGCCACCTGTGACCACTGGCAGCTCCACGCCACTACTACCCCACTTCT  
GGGATCCGCAACTGTCCGGAAGTTCATGGTTGGCTATGAAATGCTTGCCAGGCCAGCGTGACCTCACT  
CCCGAACAGGCCGAGAAAGATTAAGGGCACTTCCCGAGGTACACTATTGCCTGGCGCAGAAAGACAAGG  
AAACGGCAGCCATTGCT

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >MG205914 representing BC010985  
Red=Cloning site Green=Tags(s)

MSHSGADPEQRQQASEADAMAATFRASEHQHIRYNPLQDEWLVSAHRMKRPWQQQVEPQLLKTVPRHDP  
 LNPLCPGATRANGEVNPHYDGTFLFDNDFPALQPDAPDPGTS DHPLFRAEAARGVCKVMCFHPWSDVTLPL  
 LMSVPEIRAVIDAWASVTEELGAQYPWVQIFENKGAMMGCSNPHPHCQVWASSFLPDIAQREERSQQTYYH  
 SQHGKPLLEIGHQELLRKERLVL TSEHWIVLV PFWAVWPFQTL LLLPRRHVRRLELNPAERDDLASIMK  
 KLLTKYDNLFETSFYSGMWHGAPTGLKTGATCDHWQLHAHYYP LLSATVVRKFMVGYEMLAQAQRDLT  
 PEQAAERLRALPEVHYCLAQKDKETAAIA

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** BC010985

**ORF Size:** 1139 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:** [BC010985](#), [AAH10985](#)

**RefSeq Size:** 1300 bp

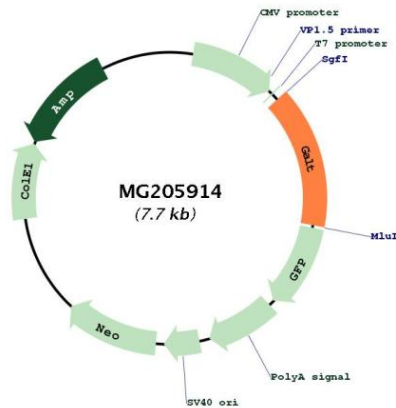
**RefSeq ORF:** 1139 bp

**Locus ID:** 14430

**Cytogenetics:** 4 22.07 cM

**Gene Summary:** The protein encoded by this gene is the second enzyme in the Leloir pathway, the metabolic pathway for D-galactose catabolism. It catalyzes the conversion of galactose-1-phosphate and uridine diphosphate-glucose to glucose-1-phosphate and uridine diphosphate galactose. Deficiency of this enzyme causes the genetic metabolic disorder galactosemia. Mice lacking this protein accumulate high levels of galactose and galactose-1 phosphate but are viable and fertile. This protein is negatively regulated through signaling by the polypeptide hormone prolactin, specifically via the short isoform of the prolactin receptor and the transcription factor Forkhead box O3. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]

**Product images:**



Circular map for MG205914