

Product datasheet for MC226275

Galt (NM_001302511) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Galt (NM_001302511) Mouse Untagged Clone

Tag: Tag Free Symbol: Galt

Synonyms: AW553376

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC226275 representing NM_001302511

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGATGGCTGTTCTAACCCCCATCCCCACTGCCAGGTTTGGGCTAGCAGCTTCCTGCCAGATATCGCCC
AGCGTGAAGAGCGATCCCAGCAGACCTATCACAGCCAGCATGGAAAACCTTTGTTATTGGAATATGGTCA
CCAAGAGCTCCTCAGGAAGGAACGTCTGGTCCTAACCAGTGAGCACTGGATAGTTCTGGTCCCCTTCTGG
GCAGTGTGGCCTTTCCAGACACTTCTGCTGCCCCGGCGGCACCTGCGGCGGCTACCTGAGCTGAACCCCG
CTGAGCGTGATGATCTCGCCTCCATCATGAAGAAGCTCTTGACCAAGTACGACAATCTATTTGAGACATC
CTTTCCCTACTCCATGGGCTGGCATGGGGCTCCCACGGGATTAAAGACTGGAGCCACCTGTGACCACTGG
CAGCTCCACGCCCACTACTACCCCCCACTTCTGCGATCCGCAACTGTCCGGAAGTTCATGGTTGGCTATG
AAATGCTTGCCCAGGCCCAGCGTGACCTCACTCCCGAACAGGCCGCAGAAAGATTAAGGGCCGCTTCCCGA
GGTACACTATTGCCTGGCGCAGAAAGACAAGGAAACGGCAGCCATTGCTTGA

 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001302511

Insert Size: 612 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



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Galt (NM_001302511) Mouse Untagged Clone - MC226275

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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: <u>NM 001302511.1</u>, <u>NP 001289440.1</u>

RefSeq Size: 1544 bp
RefSeq ORF: 612 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]

Transcript Variant: This variant (2) uses an alternate exon structure at the 5' end and utilizes a downstream start codon compared to variant 1. The resulting isoform (2) has a shorter N-terminus compared to isoform 1. Variants 2, 7, 8, and 9 all encode the same isoform (2). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic

coordinates used for the transcript record were based on alignments.