

Product datasheet for **RG225732**

MGAT1 (NM_001114617) Human Tagged ORF Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | MGAT1 (NM_001114617) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | MGAT1 |
| Synonyms: | GLCNAC-TI; GLCT1; GLYT1; GNT-1; GNT-I; GnTI; MGAT |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RG225732 representing NM_001114617
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGAAGAAGCAGTCTGCAGGGCTTGTGCTGTGGGGCGCTATCCTCTTTGTGGCTGGAATGCCCTGC
 TGCTCCTCTTCTTGGACGCGCCAGCACCTGGCAGGCCACCCTCAGTCAGCGCTCTCGATGGCGACCC
 CGCCAGCCTCACCCGGGAAGTGATTGCGCTGGCCCAAGACGCGGAGGTGGAGCTGGAGCGCAGCGTGGG
 CTGCTGCAGCAGATCGGGGATGCCCTGTCGAGCCAGCGGGGGAGGGTGCCACCAGCGGCCCTCCCGCC
 AGCCGCGTGTGCTGTGACCCCGCGCCGGCGGTATTCCCATCCTGGTCATCGCTGTGACCGCAGCAC
 TGTTCCGGCGTGCCTGGACAAGCTGCTGCATTATCGGCCCTCGGCTGAGCTCTTCCCATCATCGTTAGC
 CAGGACTGCGGGCAGGAGACGGCCAGGCCATCGCTCTACGGCAGCGGGTACGCACATCCGGC
 AGCCGACCTGAGCAGCATTGCGGTGCCCGGACCACCAGTTCAGGGCTACTACAAGATCGCGCG
 CACTACCGCTGGGCGCTGGGCCAGGTCTCCGGCAGTTTCGCTTCCCGCGGCCGTGGTGGGAGGAT
 GACCTGGAGGTGGCCCCGACTTCTTCGAGTACTTTCCGGCCACCTATCCGCTGCTGAAGGCCGACCCCT
 CCCTGTGGTGCCTCTCGGCTGGAATGACAACGGCAAGGAGCAGATGGTGGACGCCAGCAGGCCCTGAGCT
 GCTTACCGCACCGACTTTTTCCCTGGCCTGGGCTGGCTGCTGTTGGCCGAGCTCTGGGCTGAGCTGGAG
 CCCAAGTGGCCAAAGGCCTTCTGGGACGACTGGATGCGGCGGCCGGAGCAGCGGCAGGGGCGGCCCTGCA
 TACGCCCTGAGATCTCAAGAACGATGACCTTGGCCGCAAGGGTGTGAGCCACGGGCAGTTCTTTGACCA
 GCACCTCAAGTTTATCAAGCTGAACCAGCAGTTTGTGCACTTACCCAGCTGGACCTGTCTTACCTGCAG
 CGGGAGGCCTATGACCGAGATTTCTCGCCCGCTACGGTGTCCCGAGCTGCAGGTGGAGAAAGTGA
 GGACCAATGACCGGAAGGAGCTGGGGAGGTGCGGGTGCAGTATACGGGCAGGGACAGCTTCAAGGCTTT
 CGCCAAGGCTCTGGGTGTCATGGATGACCTTAAGTCGGGGTTCGAGAGCTGGCTACCGGGGTATTGTC
 ACCTTCCAGTTCCGGGGCCCGCTGTCCACCTGGCGCCCCACTGACGTGGGAGGCTATGATCCTAGCT
 GAAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG225732 representing NM_001114617
 Red=Cloning site Green=Tags(s)

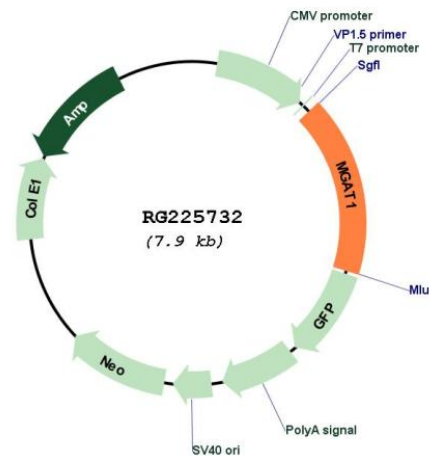
MLKKQSAGLVWGAIFVAWNALLLFFWTRPAPGRPPSVSALDGDPA SLTREVIRLAQDAEVELERQRG
 LLQQIGDALSSQRGRVPTAAPPAQPRVPVTPAPAVIPIILVIACDRSTVRRCLDKLLHYRPSAELFPIIVS
 QDCGHEETAQAIASYGS AVTHIRQPDLSIAVPPDHRKFQGYK IARHYRWALGQVFRFRFPAAVVVED
 DLEVAPDFFEYFRATYPLLKADPSLWCVSAWNDNGKEQMVDASRPELLYRTDFPGLGWLLLAELWAELE
 PKWPKAFWDDWMRRPEQRQGRACIRPEISRMTFGRKGVSHGQFFDQHLKFIKLNQFVHFTQLDLSYLQ
 REAYDRDFLARVYGAPQLQVEKVRTNDRKELGEVRVQYTG RDSFKAFKALGVMDDLKSGVPRAGYRGIV
 TFQFRGRRVHLAPPLTWEYDPSWN

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001114617

ORF Size: 1335 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.

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| 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: | <ol style="list-style-type: none">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_001114617.1</u> , <u>NP_001108089.1</u> |
| RefSeq Size: | 3095 bp |
| RefSeq ORF: | 1338 bp |
| Locus ID: | 4245 |
| UniProt ID: | <u>P26572</u> |
| Cytogenetics: | 5q35.3 |
| Protein Families: | Druggable Genome, Transmembrane |
| Protein Pathways: | Metabolic pathways, N-Glycan biosynthesis |
| Gene Summary: | There are believed to be over 100 different glycosyltransferases involved in the synthesis of protein-bound and lipid-bound oligosaccharides. UDP-N-acetylglucosamine:alpha-3-D-mannoside beta-1,2-N-acetylglucosaminyltransferase I is a medial-Golgi enzyme essential for the synthesis of hybrid and complex N-glycans. The protein, encoded by a single exon, shows typical features of a type II transmembrane protein. The protein is believed to be essential for normal embryogenesis. Several variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008] |