

Product datasheet for **RG222496**

MGAT3 (NM_001098270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MGAT3 (NM_001098270) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MGAT3
Synonyms:	GNT-III; GNT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG222496 representing NM_001098270
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGATGAGACGCTACAAGCTCTTTCTCATGTTCTGTATGGCCGGCCTGTGCCTCATCTCCTTCTCTGC
 ACTTCTTCAAGACCCTGTCTATGTACCTTCCCCGAGAAGTGGCTCCCTCAGCCCTAACCTGGTGTG
 CAGCTTTTTCTGGAACAATGCCCGGTACGCCCCAGGCCAGCCCCGAGCCAGGAGGCCCTGACCTGCTG
 CGTACCCCACTACTCCCACTCGCCCCTGCTGCAGCCGCTGCCGCCAGCAAGCGGCCGAGGAGCTCC
 ACCGGGTGGACTTGGTGTGCCCGAGGACACCACCGAGTATTTCTGCGCACCAAGGCCGGCGGCTCTG
 CTTCAAACCCGGACCAAGATGCTGGAGAGGCCGCCCGGGACGGCCGGAGGAGAAGCCTGAGGGGGCC
 AACGGCTCCTCGGCCCGGCCACCCCGGTACCTCCTGAGCGCCGGGAGCGCACGGGGGGCCGAGGCC
 CCCGGCGCAAGTGGTGGAGTGCCTGTGCTGCCCGGTGGCACGGACCCAGCTGCGGCGTGCCCACTGT
 GGTGCAGTACTCAACCTGCCACCAAGGAGCGGCTGGTCCAGGAGGTGCCGCGCCGCTCATCAAC
 GCCATCAACGTCAACCACGAGTTCGACCTGCTGGACGTGCGCTTCCACGAGCTGGGCGACGTGGTGGACG
 CCTTTGTGGTGTGCGAGTCCAACCTCACGGCTTATGGGGAGCCGCGGCCGCTCAAGTTCCGGGAGATGCT
 GACCAATGGCACCTTCGAGTACATCCGCCACAAGGTGCTCTATGTCTTCTGGACCACTTCCCGCCCGGC
 GGCCGGCAGGACGGTGGATCGCCGACGACTACCTGCGCACCTTCTCACCCAGGACGGCGTCTCGCGGC
 TGCACAACCTGCGGCCGACGACGTCTTATCATTGACGATGCGGACGAGATCCCGGCCGCTGACGGCGT
 CCTTTCTCAAGCTCTACGATGGCTGGACCGAGCCCTTCGCTTCCACATGCGCAAGTCGCTCTACGGC
 TTCTTCTGGAAGCAGCCGGGCACCCTGGAGTGGTGTGAGGCTGCACGGTGGACATGCTGCAGGCAGTGT
 ATGGGCTGGACGGCATCCGCTGCGCCGCCAGTACTACACCATGCCAACTCAGACATGAGAA
 CCGCACCGGCCACATCCTGGTGCAGTGGTCTGGGAGCCCTGCACCTTCGCGGCTGGCACTGCTCC
 TGGTGCTTACGCCCGAGGGCATCTACTTCAAGCTCGTGTCCGCCAGAATGGGACTTCCACGCTGGG
 GTGACTACGAGGACAAGCGGGACCTGAACTACATCCGCGGCTGATCCGCACCGGGGCTGGTTCGACGG
 CACGCAGCAGGAGTACCCGCTGCAGACCCAGCGAGCATGTATGCGCCCAAGTACCTGCTGAAGAAC
 TACGACCGGTTCCACTACCTGCTGGACAACCCCTACCAGGAGCCAGGAGCACGGCGGGGGCGGGTGGC
 GCCACAGGGTCCCGAGGGAAGGCCGCCCGCCCGGGGCAAACCTGGACGAGGCGGAAGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG222496 representing NM_001098270
 Red=Cloning site Green=Tags(s)

MKMRRYKFLMFCMAGLCLISFLHFFKLSYVTFPRELASLSPNLVSSFFWNNAPVTPQASPEPGPDLL
 RTPLYSHSPLLQPLPPSKAAEELHRVDLVLPEDTTEYFVRTKAGGVCFKPGTKMLERPPPPGRPEEKPEGA
 NGSSARRPPRYLLSARERTGGRGARRKWVECVCLPGWHGPSCGVPTVVQYSNLPTKERLVPREVPRRVIN
 AINVNHEFDLLDVRFHGELGVDVDAFVVCESNFTAYGEPRLKFRREMLTNGTFEYIRHKVLYVFLDHFPPG
 GRQDGIADDYLRFTLTQDGVSRRLRNLRPDDVFIIDDAEIPARDGVLFLKLYDGTWTEPFAFHMRSLYG
 FFWKQPGTLEVVSCTVDMQLQAVYGLDGIRLRRRQYYTMPNFRQYENRTGHILVQWSLGSPLHFAGWHCS
 WCFTPEGIYFKLVSAQNGDFPRWGDYEDKRDLYIRGLIRTGGWFDGTQQEYPPADPSEHMYAPKYLLKN
 YDRFHLLDNPYQEPSTAAAGWRHRGPEGRPPARGKLDEAEV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001098270

ORF Size: 1599 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

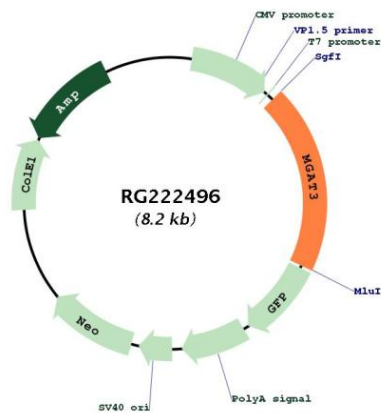
Reconstitution Method:

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: [NM_001098270.1](#), [NP_001091740.1](#)

RefSeq Size:	4987 bp
RefSeq ORF:	1602 bp
Locus ID:	4248
UniProt ID:	<u>Q09327</u>
Cytogenetics:	22q13.1
Protein Families:	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. The enzyme encoded by this gene transfers a GlcNAc residue to the beta-linked mannose of the trimannosyl core of N-linked oligosaccharides and produces a bisecting GlcNAc. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG222496