OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC213186

MGAT3 (NM_002409) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MGAT3 (NM_002409) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MGAT3
Synonyms:	GNT-III; GNT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213186 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGATGAGACGCTACAAGCTCTTTCTCATGTTCTGTATGGCCGGCCTGTGCCTCATCTCCTTCCTGC
ACTTCTTCAAGACCCTGTCCTATGTCACCTTCCCCCGAGAACTGGCCTCCCTCAGCCCTAACCTGGTGTC
CAGCTTTTTCTGGAACAATGCCCCGGTCACGCCCCAGGCCAGCCCCGAGCCAGGAGGCCCTGACCTGCTG
CGTACCCCACTCTACTCCCACTCGCCCCTGCTGCAGCCGCTGCCGCCCAGCAAGGCGGCCGAGGAGCTCC
ACCGGGTGGACTTGGTGCTGCCCGAGGACACCACCGAGTATTTCGTGCGCACCAAGGCCGGCGGCGTCTG
CTTCAAACCCGGCACCAAGATGCTGGAGAGGCCGCCCCCGGGACGGCCGGAGGAGAAGCCTGAGGGGGCC
AACGGCTCCTCGGCCCGGCGGCCACCCCGGTACCTCCTGAGCGCCCGGGAGCGCACGGGGGGCCGAGGCG
CCCGGCGCAAGTGGGTGGAGTGCGTGTGCCTGCCCGGCTGGCACGGACCCAGCTGCGGCGTGCCCACTGT
GGTGCAGTACTCCAACCTGCCCACCAAGGAGCGGCTGGTGCCCAGGGAGGTGCCGCGCCGCGTCATCAAC
GCCATCAACGTCAACCACGAGTTCGACCTGCTGGACGTGCGCTTCCACGAGCTGGGCGACGTGGTGGACG
CCTTTGTGGTGTGCGAGTCCAACTTCACGGCTTATGGGGAGCCGCGGCCGCTCAAGTTCCGGGAGATGCT
GACCAATGGCACCTTCGAGTACATCCGCCACAAGGTGCTCTATGTCTTCCTGGACCACTTCCCGCCCGGC
GGCCGGCAGGACGGCTGGATCGCCGACGACTACCTGCGCACCTTCCTCACCCAGGACGGCGTCTCGCGGC
TGCGCAACCTGCGGCCCGACGACGTCTTCATCATTGACGATGCGGACGAGATCCCGGCCCGTGACGGCGT
CCTTTTCCTCAAGCTCTACGATGGCTGGACCGAGCCCTTCGCCTTCCACATGCGCAAGTCGCTCTACGGC
TTCTTCTGGAAGCAGCCGGGCACCCTGGAGGTGGTGTCAGGCTGCACGGTGGACATGCTGCAGGCAGTGT
ATGGGCTGGACGGCATCCGCCTGCGCCGCCGCCAGTACTACACCATGCCCAACTTCAGACAGTATGAGAA
CCGCACCGGCCACATCCTGGTGCAGTGGTCGCTGGGCAGCCCCCTGCACTTCGCCGGCTGGCACTGCTCC
TGGTGCTTCACGCCCGAGGGCATCTACTTCAAGCTCGTGTCCGCCCAGAATGGCGACTTCCCACGCTGGG
GTGACTACGAGGACAAGCGGGACCTGAACTACATCCGCGGCCTGATCCGCACCGGGGGCTGGTTCGACGG
CACGCAGCAGGAGTACCCGCCTGCAGACCCCAGCGAGCACATGTATGCGCCCAAGTACCTGCTGAAGAAC
TACGACCGGTTCCACTACCTGCTGGACAACCCCTACCAGGAGCCCAGGAGCACGGCGGCGGGCGGGTGGC
GCCACAGGGGTCCCGAGGGAAGGCCGCCCGCCCGGGGCAAACTGGACGAGGCGGAAGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213186 protein sequence
Red=Cloning site Green=Tags(s)

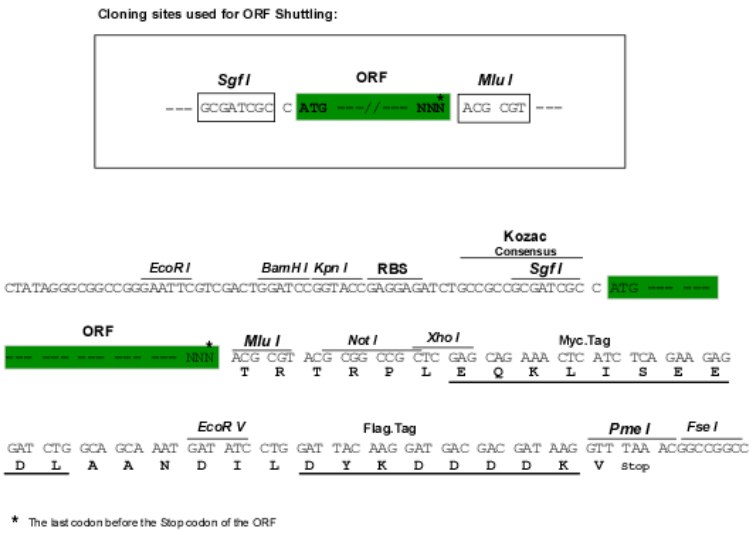
MKMRRYKLFLMFCMAGLCLISFLHFFKTLSYVTFPRELASLSPNLVSSFFWNNAPVTPQASPEPGGPDLL
RTPLYSHSPLLQPLPPSKAAEELHRVDLVLPEDTTEYFVRTKAGGVCFKPGTKMLERPPPGRPEEKPEGA
NGSSARRPPRYLLSARERTGGRGARRKWVECVCLPGWHGPSCGVPTVVQYSNLPTKERLVPREVPRRVIN
AINVNHEFDLLDVRFHELGDVVDAFVVCESNFTAYGEPRPLKFREMLTNGTFEYIRHKVLYVFLDHFPPG
GRQDGWIADDYLRTFLTQDGVSRLRNLRPDDVFIIDDADEIPARDGVLFLKLYDGWTEPFAFHMRKSLYG
FFWKQPGTLEVVSGCTVDMLQAVYGLDGIRLRRRQYYTMPNFRQYENRTGHILVQWSLGSPLHFAGWHCS
WCFTPEGIYFKLVSAQNGDFPRWGDYEDKRDLNYIRGLIRTGGWFDGTQQEYPPADPSEHMYAPKYLLKN
YDRFHYLLDNPYQEPRSTAAGGWRHRGPEGRPPARGKLDEAEV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6462_e09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002409

ORF Size: 1599 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: NM_002409.5

RefSeq Size: 5102 bp

RefSeq ORF: 1602 bp

Locus ID: 4248

UniProt ID: Q09327

Cytogenetics: 22q13.1

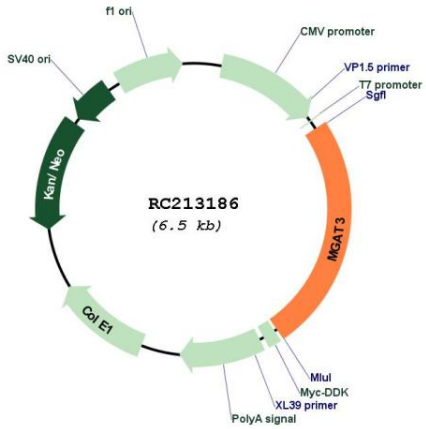
Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, N-Glycan biosynthesis

MW: 61.3 kDa

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 RC213186