

Product datasheet for **RG217589**

MGAT4B (NM_054013) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MGAT4B (NM_054013) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MGAT4B
Synonyms:	GNT-IV; GNT-IVB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG217589 representing NM_054013
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCACGTGTGGCAGGCACAAGAACAGATGTCAATGAGCTATTGCAGAGGTGGACACCCAGATGTGTGC
 GCTGGCACACTGGAGGGGCCGTAGGGTGGCTCTAGACCGCCCTCGTGACGGCTTGCCTACCACCTGC
 AGGCGACGTTGTGGACGTTTACCAGCGGGAGTTCTGGCGCTGCGCGATCGGTTGCACGCAGCTGAGCAG
 GAGAGCCTCAAGCGCTCCAAGGAGCTCAACCTGGTGTGGACGAGATCAAGAGGGCCGTGTGAGAAAGGC
 AGGCGCTGCGAGACGGAGACGGCAATCGCACCTGGGGCCGCTAACAGAGGACCCCGATTGAAGCCGTG
 GAACGGCTCACACCGGCACGTGCTGCACCTGCCACCGTCTTCCATCACCTGCCACACCTGCTGGCCAAG
 GAGAGCAGTCTGCAGCCCGGTGCGCGTGGGCCAGGGCCGACCGGAGTGTGGTGGTATGGGCATCC
 CGAGCGTGGCGCGAGGTGCACTCGTACCTGACTGACACTCTGCACTCGCTCATCTCCGAGCTGAGCCC
 GCAGGAGAAGGAGACTCGGTATCGTGGTGTGATCGCCGAGACTGACTCACAGTACACTTCGGCAGTG
 ACAGAGAACATCAAGGCCTTGTCCCCACGGAGATCCATTCTGGGCTCCTGGAGGTCATCTACCCTCCC
 CCCACTTCTACCCTGACTTCTCCCGCTCCGAGAGTCTTTGGGACCCCAAGGAGAGAGTCAGGTGGAG
 GACCAACAGAACCTCGATTACTGCTTCTCATGATGTACGCGCAGTCCAAGGCATCTACTACGTGCAG
 CTGGAGGATGACATCGTGGCCAAGCCAACTACCTGAGCACCAAGAAGAACTTTCGACTGCAGCAGCCTT
 CAGAGGACTGGATGATCTGGAGTTCTCCAGCTGGGCTTCAATGGTAAGATGTTCAAGTCGCTGGACCT
 GAGCCTGATTGTAGAGTTCATTCTATGTTCTACCGGACAAGCCATCGACTGGCTCCTGGACCATATT
 CTGTGGGTGAAAGTCTGCAACCCCGAGAAGGATGCGAAGCACTGTGACCGCAGAAAGCCAACTGCGGA
 TCCGCTCAAACCGTCCCTCTTCCAGCAGTGGCACTACTCCTCGCTGGCTGGCAAGATCCAGAAACT
 GAAGGACAAAGACTTTGGAAAGCAGGCGCTGCGGAAGGAGCATGTGAACCCGCCAGAGAGGTGAGCACG
 AGCCTGAAGACATACCAGCACTTACCCTGGAGAAAGCCTACCTGCGCGAGGACTTCTTCTGGGCTTCA
 CCCCTGCCGCGGGGACTTATCCGCTTCCGCTTCTTCCAACCTTAAGACTGGAGCGGTTCTTCTCCG
 CAGTGGGAACATCGAGCACCCGGAGGACAAGCTTCAACACGTCTGTGGAGGTGCTGCCCTTCGACAAC
 CCTCAGTCAGACAAGGAGGCCCTGCAGGAGGGCCGACCGCCACCCTCCGGTACCCTCGGAGCCCCGACG
 GCTACCTCAGATCGGCTCCTTCTACAAGGAGTGGCAGAGGGAGAGGTGGACCCAGCCTTCGGCCCTCT
 GGAAGCACTGCGCTCTCGATCCAGACGGACTCCCTGTGTGGGTGATTCTGAGCGAGATCTTCTGAAA
 AAGGCCGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG217589 representing NM_054013
 Red=Cloning site Green=Tags(s)

MSRVAGTRTDVNELLQRWTPRCVRWHTGGARRVALDRPLVTAQLPPAGDVVDVYQREFLALRDRLHAAEQ
 ESLKRSKELNLVLDEIKRAVSEQRALRDGDNRTWGRLEDPRLKPWNGSHRHVHLPTVFHHLPHLLAK
 ESSLQPAVRVGGRTGVSVMGIPSVRREVHVSYLDTLHSLISELSPQEKEDSVIVVIAETDSQYTSAV
 TENIKALFPTEIHSGLLEVISPSPHFYPDFSRLRESFGDPKERVWRWKQNLDYCFLLMMAQSKGIYVQ
 LEDDIVAKPNYLSTMKNFALQQPSEDWMILEFSQLGFIGKMFSLDL SLIVEFILMFYRDKPIDWLLDHI
 LWVKVCNPEKDAKHCDRQKANLRIRFKPSLFQHVGTSSLAGKIQKLDKDFGKQALRKEHVNPPAEVST
 SLKTYQHFTLEKAYLREDFWAF TPAAGDFIRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLPFDN
 PQSDKEALQEGRTATLRYPRSPDGYLQIGSFYKVAEGEVDPAFGPLEALRLSIQTDSPVWVILSEIFLK
 KAD

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_054013

ORF Size: 1689 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_054013.3](#)

RefSeq Size: 2891 bp

RefSeq ORF: 1692 bp

Locus ID: 11282

UniProt ID: [Q9UQ53](#)

Cytogenetics: 5q35.3

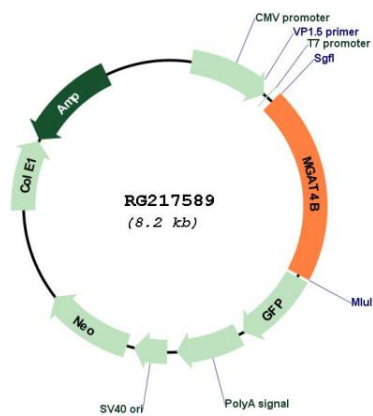
Domains: Glyco_transf_55

Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, N-Glycan biosynthesis

Gene Summary: This gene encodes a key glycosyltransferase that regulates the formation of tri- and multiantennary branching structures in the Golgi apparatus. The encoded protein, in addition to the related isoenzyme A, catalyzes the transfer of N-acetylglucosamine (GlcNAc) from UDP-GlcNAc in a beta-1,4 linkage to the Man-alpha-1,3-Man-beta-1,4-GlcNAc arm of R-Man-alpha-1,6(GlcNAc-beta-1,2-Man-alpha-1,3)Man-beta-1,4-GlcNAc-beta-1,4-GlcNAc-beta-1-Asn. The encoded protein may play a role in regulating the availability of serum glycoproteins, oncogenesis, and differentiation. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG217589