

Product datasheet for **RC208670**

MGAT4B (NM_014275) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MGAT4B (NM_014275) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MGAT4B
Synonyms:	GNT-IV; GNT-IVB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208670 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGGCTCCGCAATGGCACCTTCTGACGCTGCTGCTTCTGCCTGTGCGCCTTCTCTCGTGTCTCT
 GGTACGCGGCACTCAGCGCCAGAAAGGCGACGTTGTGGACGTTTACCAGCGGGAGTTCTGGCGCTGCG
 CGATCGGTTGCACGCAGCTGAGCAGGAGAGCCTGAAGCGCTCCAAGGAGCTCAACCTGGTCTGGACGAG
 ATCAAGAGGGCCGTGTCAGAAAGGCAGGCGCTGCGAGACGGAGACGGCAATCGCACCTGGGGCCGCTAA
 CAGAGGACCCCGATTGAAGCCGTGGAACGGCTCACACCGGCACGTGCTGCACCTGCCACCGTCTTCCA
 TCACCTGCCACACCTGCTGGCCAAGGAGAGCAGTCTGCAGCCCGCGGTGCGCGTGGGCCAGGGCCGACCC
 GGAGTGTGGTGGTATGGGCATCCCGAGCGTGGCGCGAGGTGCACTCGTACCTGACTGACACTCTGC
 ACTCGCTCATCTCCGAGCTGAGCCCGCAGGAGAAGGAGGACTCGGTTCATCGTGGTCTGATCGCCGAGAC
 TGACTCACAGTACACTTCGGCAGTGACAGAGAACATCAAGGCCTTGTTCACCGAGATCCATTCTGGG
 CTCTGGAGGTATCTCACCCCTCCCCCACTTCTACCCTGACTTCTCCCGCTCCGAGAGTCTTTGGGG
 ACCCAAGGAGAGAGTCAGGTGGAGGACAAACAGAACCTCGATTACTGTTCTCATGATGTACCGCGCA
 GTCCAAAGGCATCTACTACGTGCAGCTGGAGGATGACATCGTGGCCAAGCCCACTACCTGAGCACCATG
 AAGAACTTTGCACTGCAGCAGCCTTCCAGAGGACTGGATGATCCTGGAGTTCTCCAGCTGGGCTTATTG
 GTAAGATGTTCAAGTTCGCTGGACCTGAGCCTGATTGTAGAGTTTATTCTCATGTTCTACCGGACAAGCC
 CATCGACTGGCTCCTGGACCATATTCTGTGGGTGAAAGTCTGCAACCCGAGAAGGATGCGAAGCACTGT
 GACCCGAGAAAGCCAACTGCGGATCCGCTTCAAACCGTCCCTTCCAGCAGTGGGCACTACTCTCT
 CGCTGGCTGGCAAGATCCAGAACTGAAGGACAAAGACTTTGAAAGCAGGCGCTGCGGAAGGAGCATGT
 GAACCCGCGCAGCAGAGGTGAGCAGCAGCCTGAAGACATACCAGCACTTACCCTGGAGAAAGCCTACCTG
 CGCGAGGACTTCTTCTGGCCTTCAACCCCTGCCGCGGGGACTTTCATCCGCTTCCGCTTCTTCAAACCTC
 TAAGACTGGAGCGTTCTTCTCCGAGTGGGAACATCGAGCACCCGGAGGACAAGCTCTTCAACACGTC
 TGTGGAGGTGCTGCCCTTCGACAACCTCAGTCAGACAAGGAGGCCCTGCAGGAGGGCCGACCCGCCACC
 TTCCGGTACCCTCGAGCCCCGACGGCTACCTCCAGATCGGCTCCTTCTACAAGGAGTGGCAGAGGGAG
 AGGTGGACCCAGCCTTCGGCCCTCTGGAAGCACTGCGCCTCTCGATCCAGACGGACTCCCTGTGTGGGT
 GATTCTGAGCGAGATCTTCTGAAAAAGCCGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208670 protein sequence
 Red=Cloning site Green=Tags(s)

MRLRNGTFLTLFLCLCAFLSLSWYAALSGQKGDVVDVYQREFLALRDRLHAAEQESLKRKSELNLVLE
 IKRAVSRQALRDGDGNRTWGRLTEDPRLKPWNGSHRHVHLHPTVFHHLPHLLAKESSLQPAVRVQGRT
 GVSVMGIPSVRREVHLSYLDLTLHSLISELSPQEKEDSVIVVLI AETDSQYTSAVTENIKALFPTEIHS
 LLEVISPSPHFYPDFSRLRESFGDPKERVWRWKQNLDYCFLLMYAQSKGIYYVQLEDDIVAKPNYLSM
 KNFALQQPSEDWMILEFSQLGFIGKMFSLDL SLIVEFILMFYRDKPIDWLLDHILWVKCNPEKDAKHC
 DRQKANLRIRFKPSLFQHVGHSSLAGIQKLDKDFGKQALRKEHVNPPEAVSTSLKTYQHFTLEKAYL
 REDFFWAFTPAAGDFIRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLPFDNPQSDKEALQEGRTAT
 FRYPRSPDGYLQIGSFYKVAEGEVDPAFGPLEALRLSIQTDSPVVWVILSEIFLKKAD

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6362_e12.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_014275

ORF Size: 1644 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_014275.5](#)
RefSeq Size: 2482 bp

RefSeq ORF: 1647 bp

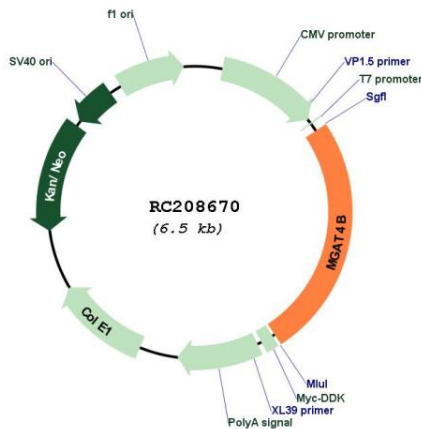
Locus ID: 11282

UniProt ID: [Q9UQ53](#)

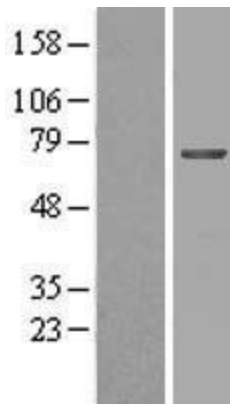
Cytogenetics: 5q35.3
Domains: Glyco_transf_55
Protein Families: Transmembrane
Protein Pathways: Metabolic pathways, N-Glycan biosynthesis
MW: 63.2 kDa

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 RC208670



Western blot validation of overexpression lysate (Cat# [LY415400]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208670 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).