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# Product datasheet for MR219367

## Mgat4b (NM_145926) Mouse Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Mgat4b (NM_145926) Mouse Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | Mgat4b |
| **Synonyms:** | AA407995; GnTIVb |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

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**ORF Nucleotide Sequence:**

>MR219367 representing NM_145926
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGCTCCGCAATGGCACCTTCCTGACGCTGCTGCTCTTCTGCTTGTGCGCCTTCCTCTCGCTCTCCT
GGTACGCAGCGCTCAGCGGCCAGAAAGGTGACGTGGTGGACATTTACCAGCGCGAGTTCCTGGCTCTGCG
AGACCGTTTGCACGCGGCTGAGCAAGAGAGCCTGAAGCGCTCCAAGGAGCTAAACCTGGTGCTGGAAGAA
ATCAAGAGGGCAGTATCCGAGAGGCAAGCGCTGCGGGACGGAGAAGGCAATCGCACTTGGGGCCGCCTAA
CAGAGGATCCGCGACTGAAGCCGTGGAACGTCTCGCACAGGCACGTACTTCATCTGCCCACCGTCTTCCA
CCATCTGCCGCACCTGCTGGCTAAGGAGAGCAGTCTGCAGCCCGCAGTGCGAGTGGGCCAGGGCCGCACC
GGAGTATCCGTGGTGATGGGCATTCCGAGCGTACGGCGCGAGGTGCACTCGTACTTGACTGACACATTGC
ACTCGCTCATCTCGGAGCTGAGCCCGCAGGAGAAGGAAGACTCAGTCATCGTGGTGCTGATCGCCGAGAC
TGACCCACAGTACACTTCGGCAGTGACAGAGAACATCAAGGCCTTGTTCCCCACAGAGATCCATTCTGGG
CTCCTGGAAGTCATCTCCCCTTCCCCTCACTTCTACCCTGACTTCTCCCGCCTTCGAGAGTCCTTTGGGG
ACCCCAAGGAGAGAGTCAGGTGGAGGACCAAACAGAACCTCGATTACTGCTTCCTCATGATGTATGCACA
GTCCAAAGGCATCTACTATGTGCAGCTGGAGGATGACATTGTAGCCAAGCCCAACTACTTGAGCACTATG
AAGAACTTTGCCCTCCAGCAGCCCTCCGAGGACTGGATGATCCTGGAGTTCTCGCAGTTGGGCTTCATTG
GGAAGATGTTCAAGTCACTGGATCTGAGCCTGATTGTGGAGTTCATCCTCATGTTCTACCGGGACAAGCC
CATAGACTGGCTCCTGGACCACATCCTGTGGGTGAAAGTCTGCAACCCTGAGAAGGATGCGAAACATTGT
GATCGGCAGAAGGCCAACCTTCGGATCCGCTTCAAGCCGTCCCTTTTCCAGCATGTGGGCACTCACTCAT
CACTGGCGGGCAAAATCCAGAAACTGAAGGATAAAGACTTTGGAAAGCATGCTCTCCGGAAGGAGCACGT
GAACCCACCGGCAGAGGTGAGCACAAGCCTCAAGACGTACCAGCATTTCACCCTGGAGAAGGCCTACTTG
CGGGAGGATTTCTTCTGGGCCTTCACACCTGCCGCAGGAGACTTTATCCGGTTCCGCTTCTTCCAGCCAC
TGCGCCTTGAGCGGTTCTTCTTCCGAAGCGGGAACATCGAGCACCCGGAAGATAAGCTCTTCAACACTTC
TGTGGAGGTGCTGCCCTTTGATAACCCCCAGTCAGAGAAGGAGGCCCTTCAGGAAGGCCGCTCAGCCACT
CTCCGGTACCCTAGGAGCCCAGATGGATACCTCCAGATTGGCTCCTTCTACAAGGGTGTAGCTGAAGGAG
AAGTGGATCCTGCCTTTGGCCCCCTGGAAGCACTACGTCTCTCCATTCAGACTGACTCCCCGGTGTGGGT
CATTTTGAGTGAGATCTTTCTGAAAAAGGCCGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR219367 representing NM_145926
Red=Cloning site Green=Tags(s)

MRLRNGTFLTLLLFCLCAFLSLSWYAALSGQKGDVVDIYQREFLALRDRLHAAEQESLKRSKELNLVLEE
IKRAVSERQALRDGEGNRTWGRLTEDPRLKPWNVSHRHVLHLPTVFHHLPHLLAKESSLQPAVRVGQGRT
GVSVVMGIPSVRREVHSYLTDTLHSLISELSPQEKEDSVIVVLIAETDPQYTSAVTENIKALFPTEIHSG
LLEVISPSPHFYPDFSRLRESFGDPKERVRWRTKQNLDYCFLMMYAQSKGIYYVQLEDDIVAKPNYLSTM
KNFALQQPSEDWMILEFSQLGFIGKMFKSLDLSLIVEFILMFYRDKPIDWLLDHILWVKVCNPEKDAKHC
DRQKANLRIRFKPSLFQHVGTHSSLAGKIQKLKDKDFGKHALRKEHVNPPAEVSTSLKTYQHFTLEKAYL
REDFFWAFTPAAGDFIRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLPFDNPQSEKEALQEGRSAT
LRYPRSPDGYLQIGSFYKGVAEGEVDPAFGPLEALRLSIQTDSPVWVILSEIFLKKAD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mm9029_b12.zip

**Restriction Sites:** SgfI-MluI

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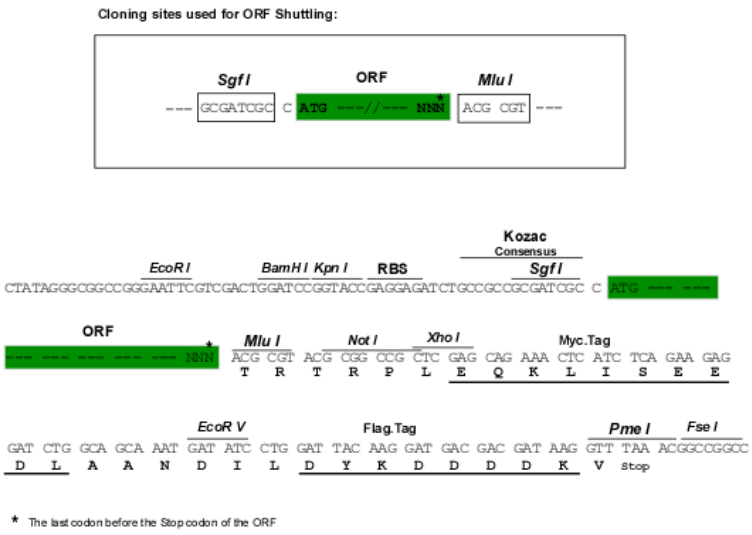
**Cloning Scheme:**




**ACCN:** NM_145926

**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_145926.3, NP_666038.3

**RefSeq Size:** 2429 bp

**RefSeq ORF:** 1647 bp

**Locus ID:** 103534

**UniProt ID:** Q812F8

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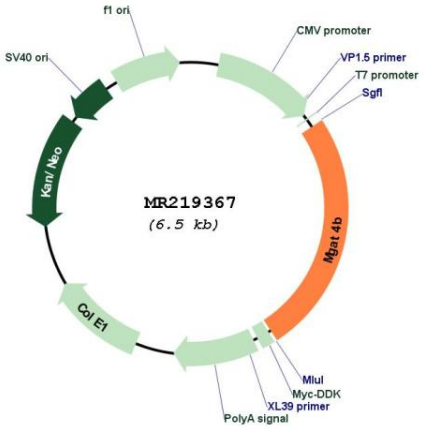
**Cytogenetics:** 11 B1.3

**MW:** 63.8 kDa

**Gene Summary:** Glycosyltransferase that participates in the transfer of N-acetylglucosamine (GlcNAc) to the core mannose residues of N-linked glycans. Catalyzes the formation of the GlcNAcbeta1-4 branch on the GlcNAcbeta1-2Manalpha1-3 arm of the core structure of N-linked glycans. Essential for the production of tri- and tetra-antennary N-linked sugar chains. Has lower affinities for donors or acceptors than MGAT4A, suggesting that, under physiological conditions, it is not the main contributor in N-glycan biosynthesis (By similarity). [UniProtKB/Swiss-Prot Function]

## Product images:




Circular map for MR219367

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