

Product datasheet for **MR216106**

Mgat4a (NM_173870) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mgat4a (NM_173870) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mgat4a
Synonyms:	9530018I07Rik; glcNAc-T-IVa; GnT-IVa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR216106 representing NM_173870
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGGCTCCGAAATGGAAGTGTGGCCACTGCGCTGGTATTTGTCACGTCCTTCCTTACCCTATCCTGGT
 ATACCACGTGGCAAAATGGGAAAGAAAACTAATTGCTTATCAACGAGAATTCCTTGCTCTAAAAGAGCG
 TCTTCGAGTGGCCGAGCATAGGATATCTCAGCGCTCCTCGGAGCTAAACACCATTGTCCAGCAGTCCCGC
 AGAGCTGGAGCAGAGACTAATGGAAGTAAGACAGCTCTGAGTACAATCTCAGATAATACCATAAAGCTTC
 TAAAAGAGTTGACAAGCAAAAACTACTTCGAGTGCCAAGTATTTATTATCATTGCTCATCTATTGCA
 AAATGAAAGAAGCCTTCAGCCCGCCGTACAGATTGGCAGTGAAGAACGGGAGTTTCAATAGTTATGGGA
 ATTCCTACTGTGAAGAGAGAAGTAAATCTTACCTCGTAGAAACCCTTCACTCCCTTATTGATAATCTGT
 ATCCTGAAGAGAAGCTGGACTGTGTTATAGTCGCTTCATAGGAGAGACAGATCTTGATTATGTTACAG
 CGTTGTTGCCAACCTGGAGAAAGATTTCTAGAGAAATTAGTTCTGGCCTGCTGGAATAATCTCTCCT
 CCTGAAAGCTATTACCCGACTTGACAAACCTGAAGGAGACGTTCCGAGACTCCAAGGAAAGAGTGAGAT
 GGAGAACCAAGCAAAACCTGGATTACTGTTTTCTGATGATGATGCTCAGGAGAAGGGCATCTACTACAT
 TCAGCTTGAAGACGATATTATTGTCAAACAAAATTTTAAATACCATAAAGAAATTTGCACTTCAACTT
 TCTTCGGAAGAATGGATGATTCTAGAGTTTTCCAGCTTGGCTTCATTGGAAAAATGTTCCAGGCGCCGG
 ACCTGGCGCTGGTCGTGGAGTTCATCCTCATGTTCTATAAGGAGAAGCCATTGACTGGCTGCTGGACCA
 CATTCTCTGGGTGAAGTCTGCAACCCCGAAAAAGATGCTAAACACTGCGACAGACAGAAGGCAACCTA
 CGAATCCGCTCCGACCCCTCCCTCTCCAGCACGTGGCCCTACACTCGTCTGTGCGGGGAAGATTGAGA
 AACTCACGGATAAAGATTACATGAAGCCATTGCTTCTCAAGGTCCAGTGAACCCGCTGCAGAGGCTC
 CACCTCCCTGAAGGTGTACCAAGGGCACACCCTGGAGAAGACCTACATGGGGGAAGACTTCTTTTGGGCC
 ATCACCCCGACGCTGGAGACTACATCTTGTTTAAATTTGACAAACCGGTCAACGTGGAGAGTTATTTGT
 TCCACAGCGGCAATCAAGAGCACCCAGGAGACATCCTGCTGAACACGACCGTGGATGTTCTCCCTCTTAA
 GAGCGACAGTTTGGAAATCAGCAAGAAACCAAGACAAACGATTAGAAGATGGCTATTTGAGAATAGGA
 AAATTTGAGTATGGTGTGCAGAGGGAATTGTGGATCCTGGTCTAAACCCTATTTGAGCCTTTGACTTT
 CCGTTATTCAGAACTCAGCTGTTGGGCCATTCTAATGAGATTCATATTAAGTACCAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR216106 representing NM_173870
 Red=Cloning site Green=Tags(s)

MRLRNGTVATALVFVTSFLTLWYTTWQNGKEKLIAYQREFLALKERLVAEHRISQRSSSELNTIVQQFR
 RAGAETNGSKTALSTISDNTIKLLKELTSKKSRLVPSIYYHLPHLLQNERSLQPAVQIGSGRTGVSIVMG
 IPTVKREVKSYLVETLHSLIDNLYPEEKLDVIVVFIGETDLDYVHSVVANLEKEFSREISSGLLEIISP
 PESYYPDLTNLKETFGDSKERVWRKQNLDYCFLLMYAQEKIYYIQLEDDIIVKQNYFNTIKNFALQL
 SSEEWMILEFSQLGFIGKMFQAPDLALVVEFILMFYKEKPIDWLLDHILWVKVCPKDAKHCDRQKANL
 RIRFRPSLFQHVGLHSSLGKIQLTDKDYMKPLLLKVHVNPPEVSTSLKVYQGHLEKTYMGEDFFWA
 IPTTAGDYILFKFDKPVNVEYLFHSGNQEHDPDILLNTTVDVLPKSDSLEISKETKDKRLEDGYFRIG
 KFEYGVAEIVDPGLNPI SAFRLSVIQNSAVWAILNEIHIKKVTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9015_f08.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_173870

ORF Size: 1605 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_173870.3](#), [NP_776295.1](#)

RefSeq Size: 7054 bp

RefSeq ORF: 1608 bp

Locus ID: 269181

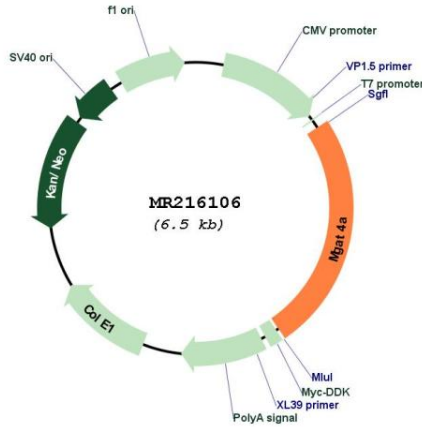
UniProt ID: [Q812G0](#)

Cytogenetics: 1 B

MW: 61.9 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 GlcNAc β 1-4 branch on the GlcNAc β 1-2Man α 1-3 arm of the core structure of N-linked glycans. Essential for the production of tri- and tetra-antennary N-linked sugar chains. Involved in glucose transport by mediating SLC2A2/GLUT2 glycosylation, thereby controlling cell-surface expression of SLC2A2 in pancreatic beta cells.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR216106