

Product datasheet for **RR204536**

Mgat4a (NM_001012225) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mgat4a (NM_001012225) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mgat4a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RR204536 representing NM_001012225
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGGCTCCGAAATGGAAGTGTGGCCACTGCGCTGGTGTGTTGTCACGTCCTTCCTTACCCTGTCCTGGT
 ATACCACATGGCAAATGGGAAAGAAAAATTAATTGCTTACCAACGAGAATTCCTCGCTTTAAAAGAACG
 TCTTCGAGTGGCCGAACATAGGATATCTCAGCGCTCCTCTGAGCTAAACACCATTGTCCAACAGTCCGC
 CGAGCTGGAGCGGAGACTAATGGAAATAATACCATAAAGCTTCTAAAAGAGTTGACAAGCAAAAAATCAC
 TTCAAGTGCCAAGTATTTATTATCATTTGCCTCATCTATTGCAAATGAAAGAAGCCTTCAGCCC GCCGT
 ACAGATTGGCAGTGAAGAACGGGAGTTCAATAGTCATGGGGATTCTACTGTGAAGAGAGAAGTTAA
 TCTTACCTCATAGAGACCCTTCACTCCCTATTGATAATCTGTATCCTGAAGAGAAGCTGGACTGTGTTA
 TAGTTGCTTTCATAGGAGAGACAGATCTTGATTATGTTACAGCGTTGTTGCCAACCTGGAGAAAGATT
 TTCTAGAGAAATTAGTTCGGCTTGCTAGAAGTAACTCTCCTCCTGAAAGCTATTACCCGACTTAACA
 AACCTGAAGGAGACGTTCCGAGACTCCAAGGAAAGAGTAAGATGGAGAACGAAGCAAAACCTGGACTATT
 GTTTTCTGATGATGATGCTCAGGAGAAGGGCATTACTACATTAGCTTGAAGATGATATTATTGTCAA
 GCAAACTATTTAATACCATAAAAAATTTGCACTTCAACTTTCTTCTGAAGAATGGATGATTCTAGAG
 TTTTCCAGCTGGGCTTCATTGGGAAGATGTTCCAGGCGCCGGACCTAGCTCTGGTTGTGGAGTTCAATC
 TCATGTTCTATAAGGAGAAGCCATTGACTGGCTCTTGGACCACATTCTCGGTGAAGGTCTGCAACCC
 CGAAAAAGATGCCAAACTGCGACAGACAGAAGGCAACCTACGAATCCGCTCCGACCCTCCCTCTTC
 CAGCACGTGGGTCTACACTCATCTCTGTCGGGAAAATTCAGAACTTACGGATAAAGATTACATGAAAC
 CATTGCTTCTCAAGTCCAGTGAACCCGCTGCAGAGGTCTCCACTTCCCTGAAGGTGTACCAAGGGCA
 CACACTGGAGAAGACCTACATGGGGAAAGACTTCTTTTGGCCATCACCCACAGCTGGAGACTACATC
 TTGTTTAAATTTGATAAACCGGTCAATGTGGAGAGTTATTTGTTCCACAGCGGAATCAAGAGCACCCAG
 GGGACATCCTGCTGAACACGACCGTGGAGTTCTGCCTCTTAAAGAGCGACAGTTTGGAGATCAGCAAAGA
 AACCAAAGACAAACGATTAGAAGATGGCTATTTTCAAGATAGGGAAATTTGAGTACGGAGTTGCAGAGGGA
 ATTGTGGATCCTGGACTGAACCTATCTCAGCCTTTCGACTGTCGGTTATTACAGAACTCTGCTGTCTGG
 CCATTCTCAATGAGATTCATATTAAGAAAGTCACCAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR204536 representing NM_001012225
 Red=Cloning site Green=Tags(s)

MRLRNGTVATALVFVTSFLTLWYTTWQNGKEKLIAYQREFLALKERLRVAEHRISQRSSSELNTIVQQFR
 RAGAETNGNNTIKLLKELTSKKSQVPSIYYHLPHELLQNERSLQPAVQIGSGRTGVSIVMGIPTVKREVK
 SYLIETLHSLIDNLYPEEKLDYVVFVIGETDLDYVHVSVANLEKEFSREISSGLLEVISPPESYYPDLT
 NLKETFGDSKERVRWRKQNLDYCFLLMYAQEKIYYIQLEDDIIVKQNYFNTIKNFALQLSSEEMILE
 FSQLGFIGKMFQAPDLALVVEFILMFYKEKPIDWLLDHLWVKVCPNPEKDAKHCDRQKANLRIRFRPSLF
 QHVGLHSSLGKIQKLTDKDYMKPLLLKIHVNPPAEVSTSLKVYQGHLEKTYMGEDFFWAIPTAGDYI
 LFKFDKPVNVESYLFHSGNQEHDPDILLNTTVEVPLKSDSLEISKETDKRLEDGYFRIGKFEYGAEG
 IVDPLNPI SAFRLSVIQNSAVWAILNEIHIKKVTS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001012225

ORF Size: 1578 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_001012225.2](#), [NP_001012225.1](#)

RefSeq Size: 7181 bp

RefSeq ORF: 1581 bp

Locus ID: 367252

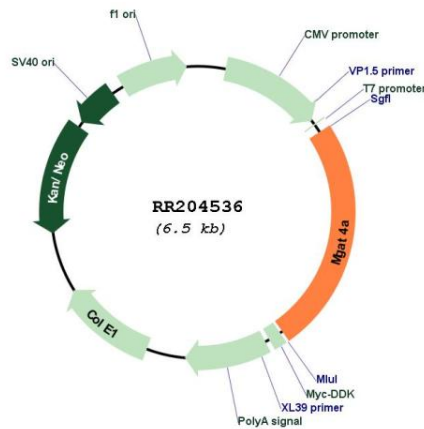
UniProt ID: [Q5M854](#)

Cytogenetics: 9q21

MW: 60.6 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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR204536