OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR210677

Mgat5b (NM_172948) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mgat5b (NM_172948) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mgat5b
Synonyms:	C330018B01; GnT-IX; mGnTVB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR210677 representing NM_172948
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATCACAGTCAACCCAGATGGGAAGATAATGGTCAGAAGATGCCTGGTCACCCTGAGACCCTTTCGGC
TGTTTGTCCTGGGCATCGGCTTCTTCACTCTCTGCTTCCTGATGACATCTTTGGGAGGCCAGTTCTCTGC
CCGGCGCCTGGGGGACTCGCCCTTCACCATCCGCACAGAAGTGCCAGGCAGCCCAGAGTCACGTGGTGCC
CTTCGCAAGATGAGCGACCTGCTGGAGCTGATGGTGAAGCGCATGGATATGCTGGCCAGGCTGGAGAATA
GCAGCGAGCTGCACCGGACTGCCAGTGTGGCGCACTTAGCCGCAGACAGGCTCACCCCTGGGGCCAGCCT
CATTGAAAGGATCCAGGCCATTGCCCAGAATGTGTCTGACATCGCTGTGAAGGTGGACCAGATCCTGCGC
CACAGCCTGATTCTGCATAGCAAGGTGTCTGAAGGTCGGAGGGACCAGTGTGAAGCACCCAGTGACCCCA
AGTTCCCTGACTGTTCCGGGAAAGTGGAGTGGATGCGCGCCCGCTGGACCTCTGACCCCTGCTACGCCTT
CTTTGGAGTAGACGGCACTGAGTGCTCCTTCCTCATCTACCTCAGTGAGGTTGAGTGGTTCTGTCCCCCG
TTGCCCTGGAGGAACCAGACAGCTGCCCGGACAGCCCCCAAGTCCCTTCCCAGAGTCCAGGCTGTGTTCC
GAAGCAACCTGTCCCACCTCCTGGAGCTGATGGGCAGTGGGAAGGAGTCCCTCATCTTCATGAAGAAGCG
AACCAGGCGGTTCACCGCACAGTGGACCAAGGCTGCCAAGTACCTGGCACAGAAGCTGGGGGACATTCGG
AGGGACCAGAAGCAAATCCTTGTCCACATTGGCTTCCTGACAGAGGAGTCTGGGGACGTGTTCAGCCCAA
GGGTACTGAAGGGCGGGCCTCTGGGAGAGATGGTACAGTGGGCAGACATCCTGGCTGCTCTCTACGTGCT
GGGCCATAGCCTGCGGATCACAGTCTCCCTGAAGGAGCTGCAGAGTAACTTAGGGGTGCCGCCAGGCCGG
GGGAACTGCCCACTCACCGTACCTCTGCCTTTTGACCTCATCTACACGGACTATCACGGCTTGCAGCAGA
TGAAACAGCACATGGGACTGTCCTTCAAGAAGTACCGGTGCAGAATCCGAGTCATCGACACCTTTGGGAC
GGAGCCAGCGTACAACCACGAGGAGTATGCCACGCTGCACGGCTACCGGACCAACTGGGGTTACTGGAAC
CTCAACCCCAAGCAGTTCATGACCATGTTCCCTCACACCCCAGACAACTCCTTCATGGGCTTCGTGTCCG
AGGAGCTCAATGAGACCGAGAAGCAGCTCATCAAAGATGGCAAGGCCAGCAACATGGCGGTGGTGTACGG
CAAGGAGGCGAGTATCTGGAAGCTCCAGGGCAAGGAGAAGTTCCTGGCCGTCCTCAACAAGTACATGGAG
ATCCACGGTACCGTGTACTATGAGAGCCAGCGGCCACCCGAGGTCCCCGCCTTCGTGAAGAACCACGGCC
TCCTACCGCAGCCTGAGTTCCAGCAGCTGCTGCGGAAGGCCAAGCTCTTTATAGGGTTCGGATTCCCCTA
CGAGGGCCCAGCACCGTTGGAAGCCATTGCCAATGGCTGCATCTTCCTACAGTCTCGCTTCAGCCCGCCC
CACAGCTCCCTCAACCACGAGTTCTTCCGGGGCAAGCCCACCTCCAGGGAGGTGTTCTCCCAGCATCCGT
ATGCAGAGAACTTTATTGGCAAGCCGCACGTGTGGACCGTGGACTATAACAACTCCGATGAGTTTGAAAC
AGCCATTAAGGCCATCATGAACACCCAGGTAGACCCATATCTGCCCTATGAATATACCTGTGCAGGGATG
CTGGAACGGATCAATGCCTACATCCAACACCAGGACTTCTGTGTGGGTCCAAGCCCTCTTCCACCAGGGG
CCAGCACTGCCCAGAGTCCATTTGTCTTAGCTCCTAATGCAACTCATCTCGAGTGGGCCCAGAACATCAG
CTCAGTTCCGGGAGCCTGGCCCCCTACCCACTCTCTGCGGGCCTGGCTGGCAGCCCCTGGAAGGGCCTGC
ACGGACGCCTGCCTGGACCATGGATTGATCTGCGAGCCTTCCTTCTTCCCTTTCCTCAACAGCCAGAATT
CGTTCCTCAAGCTGCAGGTGCCCTGTGACAGCACTGAGTGGGAGATGCATCACTTGTACCCTGCCTTTGC
CCAACCCGGCCAAGAGTGCTACCTACAAAAAGAGCCACTGCTCTTCAGCTGTGCTGGTGCCAGCACCAAG
TACCAGAGGCTCTGCCCCTGCCGTGACTTCCGCAAGGGTCAGGTGGCCTTGTGCCAGGGCTGCCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

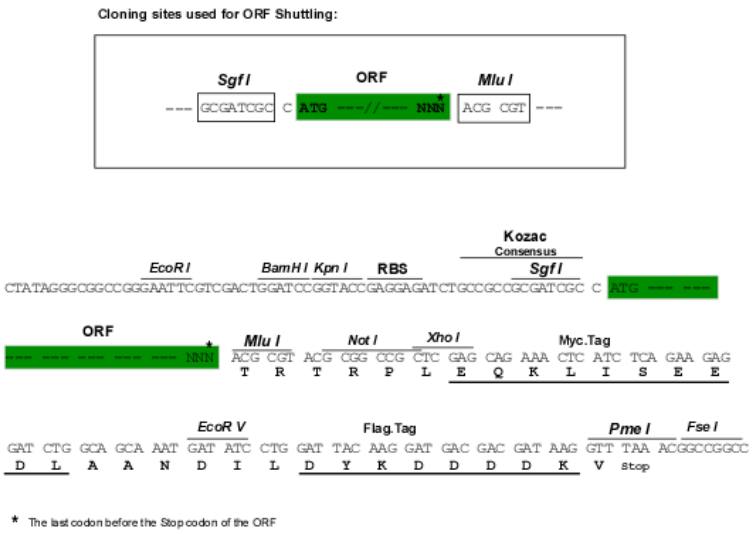
>MR210677 representing NM_172948
Red=Cloning site Green=Tags(s)

MITVNPDGKIMVRRCLVTLRPFRLFVLGIGFFTLCFLMTSLGGQFSARRLGDSPFTIRTEVPGSPESRGA
LRKMSDLLELMVKRMDMLARLENSSELHRTASVAHLAADRLTPGASLIERIQAIAQNVSDIAVKVDQILR
HSLILHSKVSEGRRDQCEAPSDPKFPDCSGKVEWMRARWTSDPCYAFFGVDGTECSFLIYLSEVEWFCPP
LPWRNQTAARTAPKSLPRVQAVFRSNLSHLLELMGSGKESLIFMKKRTRRFTAQWTKAAKYLAQKLGDIR
RDQKQILVHIGFLTEESGDVFSPRVLKGGPLGEMVQWADILAALYVLGHSLRITVSLKELQSNLGVPPGR
GNCPLTVPLPFDLIYTDYHGLQQMKQHMGLSFKKYRCRIRVIDTFGTEPAYNHEEYATLHGYRTNWGYWN
LNPKQFMTMFPHTPDNSFMGFVSEELNETEKQLIKDGKASNMAVVYGKEASIWKLQGKEKFLAVLNKYME
IHGTVYYESQRPPEVPAFVKNHGLLPQPEFQQLLRKAKLFIGFGFPYEGPAPLEAIANGCIFLQSRFSPP
HSSLNHEFFRGKPTSREVFSQHPYAENFIGKPHVWTVDYNNSDEFETAIKAIMNTQVDPYLPYEYTCAGM
LERINAYIQHQDFCVGPSPLPPGASTAQSPFVLAPNATHLEWAQNISSVPGAWPPTHSLRAWLAAPGRAC
TDACLDHGLICEPSFFPFLNSQNSFLKLQVPCDSTEWEMHHLYPAFAQPGQECYLQKEPLLFSCAGASTK
YQRLCPCRDFRKGQVALCQGCL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_172948
ORF Size:	2376 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_172948.3, NP_766536.2

RefSeq Size: 4277 bp

RefSeq ORF: 2379 bp

Locus ID: 268510

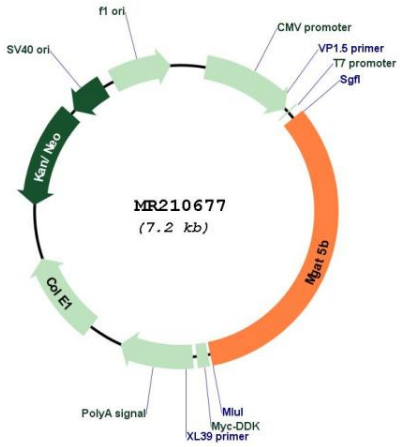
UniProt ID: Q765H6

Cytogenetics: 11 E2

MW: 89.9 kDa

Gene Summary: Glycosyltransferase that acts on alpha-linked mannose of N-glycans and O-mannosyl glycans. Catalyzes the transfer of N-acetylglucosamine (GlcNAc) to the beta 1-6 linkage of the mannose residue of GlcNAc-beta1,2-Man-alpha on both the alpha1,3- and alpha1,6-linked mannose arms in the core structure of N-glycan (By similarity). Also acts on the GlcNAc-beta1,2-Man-alpha1-Ser/Thr moiety, forming a 2,6-branched structure in brain O-mannosyl glycan (PubMed:22715095). Plays an active role in modulating integrin and laminin-dependent adhesion and migration of neuronal cells via its activity in the O-mannosyl glycan pathway. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210677