

Product datasheet for **MG210677**

Mgat5b (NM_172948) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mgat5b (NM_172948) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mgat5b
Synonyms:	C330018B01; GnT-IX; mGnTVB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG210677 representing NM_172948
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGATCACAGTCAACCCAGATGGGAAGATAATGGTCAGAAGATGCCTGGTCACCCTGAGACCCTTTCGGC
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CTTCGCAAGATGAGCGACCTGCTGGAGCTGATGGTGAAGCGCATGGATATGCTGGCCAGGCTGGAGAATA
GCAGCGAGCTGCACCGGACTGCCAGTGTGGCGCACTTAGCCGCAGACAGGCTCACCCCTGGGGCCAGCCT
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TACCAGAGGCTCTGCCCTGCCGTGACTTCCGCAAGGGTCAGGTGGCCTTGTGCCAGGGCTGCCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210677 representing NM_172948
 Red=Cloning site Green=Tags(s)

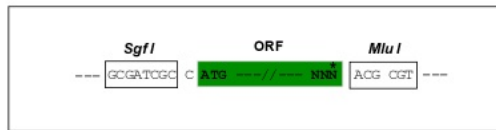
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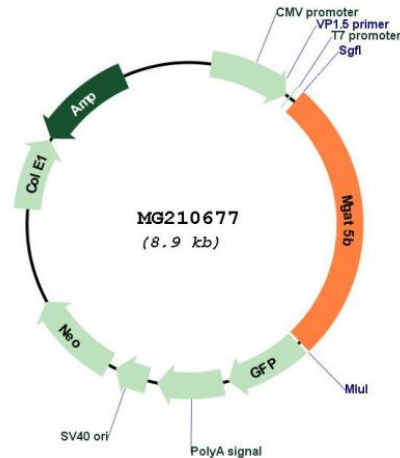
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


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

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]