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Product datasheet for MG206563

B4gat1 (NM_175383) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B4gat1 (NM_175383) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	B4gat1
Synonyms:	1500032M01Rik; B3gnt1; B3gnt6; BETA3GNT1; iGAT; iGNT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG206563 representing NM_175383
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAAATGTCCTACGCCATCCGATGCGCCTTCTACCAGCTGCTGCTGGCCGCGCTCATGTTGGTGGCAA
TGCTGCAGCTGCTCTACCTATCGCTGCTCTCCGGACTGCACGGCCAGGAGGAGCAGGAACAGTATTTCGA
GTTCTTCCCGCCGTCTCCGCGATCCGTAGACCAGGTAAAGTCTCAACTCCGCACCGCACTGGCCTCCGGA
GGCGTTCTGGATGCCAGCGGCGATTATCGCGTCTACAGGGGTCTATTGAAGACCACCATGGACCCCAACG
ATGTCATCTTAGCTACGCATGCCAGTGTGGACAACCTACTACACCTGTCCGGACTTCTGGAGCGCTGGGA
GGGTCCGCTGTCCGTTTCAGTGTTCGCGGCCACCAAAGAGGAGGCGCAGCTGGCCACGGTGCTGGCCTAC
GCGCTGAGTAGCCACTGCCCCGAGATGCGCGCTAGGGTCGCCATGCACCTCGTGTGCCCCTCGCGCTATG
AGGCTGCTGTGCCCGACCCCCGAGAACCTGGGGAGTTTGCCCTGCTGCGGTCCTGCCAAGAGGTCTTTGA
CAAGCTAGCCAGGGTGGCCCAGCCCGGGATTAATTATGCACTAGGGACCAACACCTCCTATCCCAATAAC
CTGTTAAGGAATCTGGCTCGGGAAGAGGCCAACTACGCCCTGGTGATTGATGTGGACATGGTGCCCAGCG
AAGGGCTGTGGAGAGGCCTGAGGGAAATGTTGGATCAGAGCAATCACTGGGATGGCACAGCCCTGGTGGT
GCCTGCATTTGAAATCCGCCGGTCCCGCCGAATGCCGATGAACAAGAACGAGCTGGTGCAGCTCTATCAG
GTGGGCGAAGTCCGGCCCTTCTATTATGGGCTGTGCACGCCTTGCCATGCGCCCACCAACTACTCCCGCT
GGGTCAACCTGCCAGAGGAGAGCTTGCTGAGACCTGCCTACGTGGTGCCCTGGAGGGACCCCTGGGAACC
ATTTTATGTGGCTGGAGGAAAGGTGCCCACATTTGACGAACGCTTTCGGCAGTATGGTTTCAATCGAATC
AGCCAGGCTTGTGAGCTGCACGTGGCAGGGTTTAATTTTGAGGTGCTGAATGAAGGTTTTCTGGTTCATA
AGGGATTCAAGGAGGCATTGAAGTTCCATCCCCAAAAGGAGGCTGAAAACCAGCGCAATAAGATCCTTTA
CCGCCAGTTCAAACAGGAGTTGAAGGCTAGGTACCCCAACTCTCCCCACCGATGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

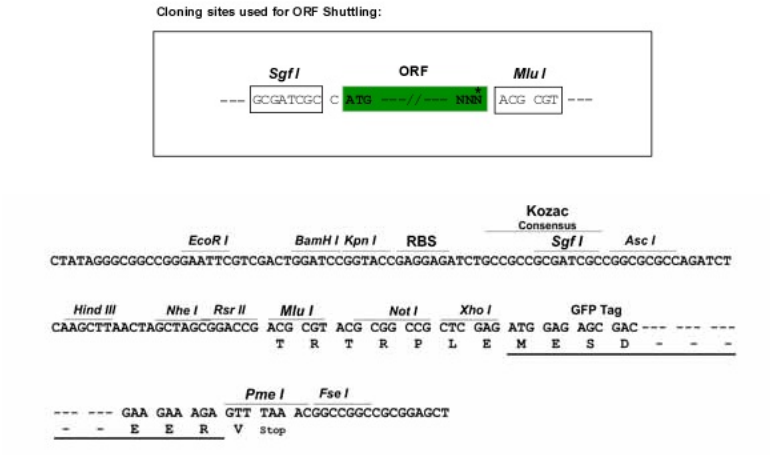
>MG206563 representing NM_175383
Red=Cloning site Green=Tags(s)

MQMSYAIRCAFYQLLLAALMLVAMLQLLYLSLLSGLHGQEEQEQYFEFFPPSPRSVDQVKSQLRTALASG
GVLDASGDYRVYRGLLKTTMDPNDVILATHASVDNLLHLSGLLERWEGPLSVSVFAATKEEAQLATVLAY
ALSSHCPEMRARVAMHLVCPSRYEAAVPDPREPGEFALLRSCQEVFDKLARVAQPGINYALGTNTSYPNN
LLRNLAREEANYALVIDVDMVPSEGLWRGLREMLDQSNHWDGTALVVPAFEIRRSRRMPMNKNELVQLYQ
VGEVRPFYYGLCTPCHAPTNYSRWVNLPEESLLRPAYVVPWRDPWEPFYVAGGKVPTFDERFRQYGFNRI
SQACELHVAGFNFEVLNEGFLVHKGFKEALKFHPQKEAENQRNKILYRQFKQELKARYPNSPHRC

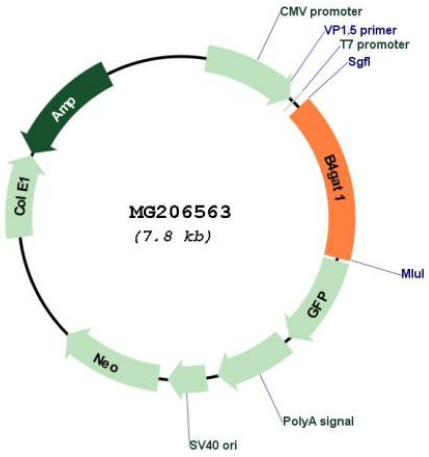
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_175383

ORF Size:	1245 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_175383.2, NP_780592.1
RefSeq Size:	2035 bp
RefSeq ORF:	1248 bp
Locus ID:	108902
UniProt ID:	Q8BWP8
Cytogenetics:	19 A
Gene Summary:	Beta-1,4-glucuronyltransferase involved in O-mannosylation of alpha-dystroglycan (DAG1). Transfers a glucuronic acid (GlcA) residue onto a xylose (Xyl) acceptor to produce the glucuronyl-beta-1,4-xylose-beta disaccharide primer, which is further elongated by LARGE1, during synthesis of phosphorylated O-mannosyl glycan. Phosphorylated O-mannosyl glycan is a carbohydrate is a carbohydrate structure present in alpha-dystroglycan (DAG1), which is required for binding laminin G-like domain-containing extracellular proteins with high affinity (PubMed:25279699). Required for axon guidance; via its function in O-mannosylation of alpha-dystroglycan (DAG1) (PubMed:23217742).[UniProtKB/Swiss-Prot Function]