

Product datasheet for **MR203727**

B3gat1 (BC023052) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B3gat1 (BC023052) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B3gat1
Synonyms:	GlcAT-P, HNK-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203727 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGACCGTGACATCGTGGAAGTGGTGCGCACAGAGTACGTGTACACGAGGCCGCCACCCTGGTCCG
ACACGCTGCCACCATCCATGTGGTGACGCCACCTACAGTAGACCGGTGCAGAAGGCAGAGCTGACGCG
AATGGCCAACACACTACTGCATGTGCCAACCTTCACTGGCTAGTGGTGGAGGATGCTCCACGCAGGACG
CCCCTCACGCGCGCTTGTGCGGACACTGGCCTCAACTACACACCTGCACGTAGAGACACCACGCA
ACTATAAGCTGCGAGGTGATGCCGAGACCCTCGCATCCACGTGGCACCATGCAGCGCAACCTGGCACT
GGCTGGCTGCGGAGACCTTCCACGGAACCTACTCAGCCAGGCGTAGTGTACTTCGCGGATGATGAC
AACACGTACAGTCTGGAGCTCTTTGAAGAGATGCGCAGCAAGAAGGGTGTCCGTGTGGCTGTGGCCT
TTGTTGGTGGCCTTCGGTATGAGGCCCCACGGTGAATGGGGCAGGAAAGTGGTTGGCTGGAAGACAGT
CTTCGACCCCCACCGCCCTTTGCAATAGACATGGCTGGATTTGCTGTCAACCTCCGGCTCATCTTGCA
CGAAGTCAAGCCTACTTTAAGCTACGTGGTGTGAAGGGAGGCTACCAGGAAAGCAGTCTCCTTCGAGAAC
TTGTCACCCTCAATGACCTGGAGCCCAAGGCAGCAAATGTACCAAGATCTTGGTCTGGCATAACACGAAC
AGAGAAGCCAGTGTGGTCAATGAGGGGAAGAAGGGCTTCACCGACCCCTCAGTGGAGATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR203727 protein sequence
Red=Cloning site Green=Tags(s)

```
MSDRDIVEVVRTEVYVTRPPPWSDTLPTIHVVTPYSRPVQKAELTRMANTLLHVPNLHWLVVEDAPRRT
PLTARLLRDTGLNYTHLHVETPRNYKLRGDARDPRIPRGTMQRNLALRWLRETFPRNSTQPGVVVFADDD
NTYSLELFEEMRSTRRVSVMPVAFVGGRLRYEAPRVNGAGKVVGWKTVFDPHRPFAIDMAGFAVNLRLILQ
RSQAYFKLRGVKGGYQESSLLRELVTLNDLEPKAANCTKILVWHTRTEKPVLVNEGKKGFTDPSVEI
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: BC023052

ORF Size: 831 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: [BC023052](#), [AAH23052](#)

RefSeq Size: 1709 bp

RefSeq ORF: 833 bp

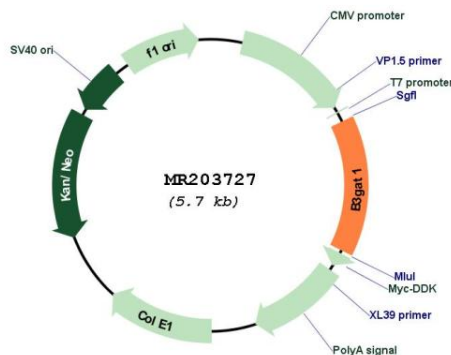
Locus ID: 76898

Cytogenetics: 9 A4

MW: 31.8 kDa

Gene Summary: Involved in the biosynthesis of L2/HNK-1 carbohydrate epitope on glycoproteins. Can also play a role in glycosaminoglycan biosynthesis. Substrates include asialo-orosomucoid (ASOR), asialo-fetuin, and asialo-neural cell adhesion molecule. Requires sphingomyelin for activity: stearyl-sphingomyelin was the most effective, followed by palmitoyl-sphingomyelin and lignoceroyl-sphingomyelin. Activity was demonstrated only for sphingomyelin with a saturated fatty acid and not for that with an unsaturated fatty acid, regardless of the length of the acyl group.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR203727