

Product datasheet for **MG201784**

Mfsd7b (BC024751) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mfsd7b (BC024751) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Mfsd7b
Synonyms: 9630055N22Rik; FLVCR; Flvcr1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201784 representing BC024751
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACAAGACTGGTTTGTCTTTCTGAGGAGAGAGTGGTAGCTAGCTGCATTATTCTCTGCAGAGGGACCC
 ACTCACAGCTCTGTCTTTGTTTTAGGCAGACAACCTCTGATAGTGTACGTTCTGTCTTTTCATTGGAATGCT
 CATATTCACATTCACACTGAACCTCGGGTACATCATCGTGGTGTTTTTACTGGTGGGATTCTTGGCTTC
 TTCATGACTGGTTACCTCCCGCTGGGCTTTGAGTTTGCTGTGGAGATCACCTACCCTGAGCTGAGGGCA
 TGTCTCAGGGCTCCTCAACACTGCTGCACAGATACTTGAATTTCTTCACATTGGCTCAAGGAAAGAT
 CACAACAGACTATAATAGTCCAGAGGCAGGAAACATTTTCTTTGTGCCTGGATGTTGTAGGCATAATT
 TTAACAGCGTTGATCAAGTCTGATCTGAGAAGGCACAATAAAACACCGGGCTTACAAACATTGACGTTA
 AAGCTGTACAGTTGATAGTCGGGTAGATCCAAAACCAAAGTATGGTGTCTATACAGTCGGAATCTTC
 ACTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201784 representing BC024751
 Red=Cloning site Green=Tags(s)

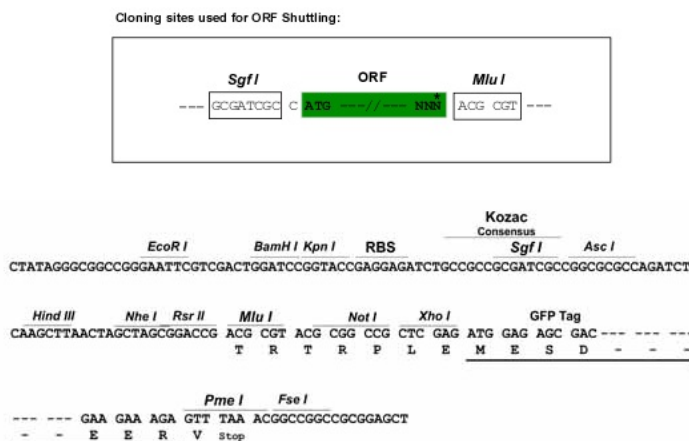
MTRLVCLSEERVVASCIIILCRGTHSQLCLCFRQTTLIVYVLSFIGMLIFTFTLNLGYIIVVFFTGILGF
 FMTGYLPLGFEFAVEITYPESEGMSSGLLNATAAQILGIFFTLAQGKITTDYNSPEAGNIFLCAMFVGI
 LTALIKSDLRRHNINTGLTNIDVKAVPDSRVDPKPKVMVSIQSESSL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:



Plasmid Map:



ACCN: BC024751

ORF Size: 564 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: [BC024751.1](#)

RefSeq Size: 3063 bp

RefSeq ORF: 566 bp

Locus ID: 226844

Cytogenetics: 1 H6

Gene Summary: Isoform 1: Heme transporter that exports cytoplasmic heme. It can also export coproporphyrin and protoporphyrin IX, which are both intermediate products in the heme biosynthetic pathway. Does not export bilirubin. Heme export depends on the presence of HPX and is required to maintain intracellular free heme balance, protecting cells from heme toxicity. Heme export provides protection from heme or ferrous iron toxicities in liver, brain, sensory neurons and during erythropoiesis, a process in which heme synthesis intensifies. Causes susceptibility to FeLV-C in vitro.[UniProtKB/Swiss-Prot Function]