

Product datasheet for **MR204945**

Mogat2 (NM_177448) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mogat2 (NM_177448) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mogat2
Synonyms:	DGAT2L5; Mgat1l; MGAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204945 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGGAGTTTCGCCCCCTGTTGGTACCATGGGAGCGCAGGTTACAGACCTTCGCGGTCTTCAGTGGG
TCTTCTCCTTCTGGCCTTGGCCAGCTCTGCATCGTCATCTTCGTAGGCCTCTATTACAAAGTTCTG
GCTTCTCTGTCCTGTATGCCACCTGGTGGTACCTGGACTGGGACAAGCCGCGGAGGGAGGCCGCC
ATCCAGTCTTCAGACGCTTGGCCATATGGAAGTACATGAAGGATTATTTCCCTGTCTTTGGTCAAGA
CAGCTGAGCTGGACCCTCCCGAACTACATCGCGGGCTTCCACCCCATGGAGTCTAGCAGCTGGAGC
CTTTCTAACCTGTGCACTGAAAGCACGGGCTTACCTCGCTTTCCCGGCATCCGCTCCTATCTGATG
ATGCTGACTGTGTGGTCCGGGCCCCCTTCTCCGAGATTACATCATGTCTGGGGGGCTGGTCTCATCAG
AAAAGGTGAGTGCCGATCACATTCTGTCCAGGAAGGGCGCGGGAACCTGCTTGCCATCATCGTTGGGGG
CGCACAGGAGGCACTGGACGCCAGGCCTGGAGCCTACAGGCTGTCTGTAAGAATCGCAAGGGCTTCATC
AGGCTCGCCCTGATGCATGGGCGAGCTCTGTGCCAATCTTCTCCTTTGGAGAAAACAACCTGTTCAACC
AGGTTGAGAACCCCTGGTACCTGGCTGCGCTGGATCCAGAACCGGCTACAGAAGATCATGGGCATCTC
CCTCCCTCTCTCCACGGCAGAGGTGTCTCCAGTACAGCTTTGGCCTCATGCCCTCCGCCAGCCCATC
ACCACCATAGTGGGAAGCCCATCGAGGTGCAGATGACACCACAGCCCTCAAGGGAGGAGGTGGACCGGC
TTCATCAGCGCTATATCAAGGAGCTCTGCAAGCTCTTTGAGGAGCACAACTCAAGTTCAACGTCCCTGA
GGACCAGCATCTGGAGTTCTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR204945 protein sequence
Red=Cloning site Green=Tags(s)

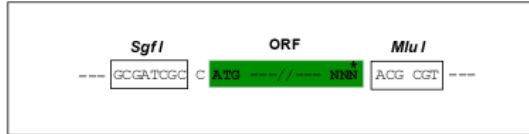
MVEFAPLLVPWERRLQTFAVLQWVFSFLALAQLCIVIFVGLLFTFRWLFVSVLYATWWYLDWDKPRQGGRP
 IQFFRRLLAIWKYMKDYFPVSLVKTAELDPSRNYIAGFHPHGVLAAGAFLNLCTESTGFTSLFPGIRSYLM
 MLTVWFRAPFFRDYIMSGGLVSSEKVSADHILSRKGGGNLLAIIVGGAQEALDARPGAYRLLLLKNRKGFI
 RLALMHGAALVPIFSFGENLNFNQVENTPGTWLRWIQNRLQKIMGISLPLFHGRGVFQYSFGLMPFRQPI
 TTIVGKPIEVQMPQPSREEVDRLHQRYIKELCKLFEEHKLKFNVPEDQHLEFC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_177448

ORF Size: 1005 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_177448.3](#)

RefSeq Size: 1787 bp

RefSeq ORF: 1005 bp

Locus ID: 233549

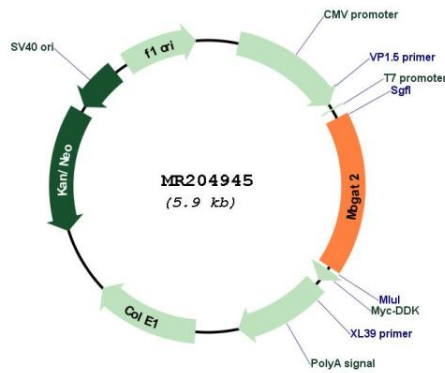
UniProt ID: [Q80W94](#)

Cytogenetics: 7 E1

MW: 38.6 kDa

Gene Summary: Catalyzes the formation of diacylglycerol from 2-monoacylglycerol and fatty acyl-CoA. Has a preference toward monoacylglycerols containing unsaturated fatty acids in an order of C18:3 > C18:2 > C18:1 > C18:0. Plays a central role in absorption of dietary fat in the small intestine by catalyzing the resynthesis of triacylglycerol in enterocytes. May play a role in diet-induced obesity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204945