

## Product datasheet for **RC218854**

### MOGAT2 (NM\_025098) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MOGAT2 (NM_025098) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MOGAT2
Synonyms:	DGAT2L5; DGAT2L5.; hDC5; MGAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218854 representing NM_025098 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTAGAGTTCGCGCCCTTGTTTATGCCGTGGGAGCGCAGGCTGCAGACACTTGCTGTCCTACAGTTTG  
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GCTCCTCACTGTCCTGTATGCGGCTGGTGGTATCTGGACCGAGACAAGCCACGGCAGGGGGCCGGCAC  
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CTTTGCCAACCTGTGCACTGAGAGCACAGGCTTCTCTTCGATCTTCCCGGTATCCGCCCATCTGATG  
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AGGCTCGCCCTGACACACGGGGCACCCCTGGTCCAATCTTCTCCTTCCGGGAGAATGACCTATTTGACC  
AGATTCCTCACTCTTCTGGCTCCTGGTACGCTATATCCAGAATCGTTGCGAGAAGATCATGGGCATCTC  
CCTCCCACTCTTTCATGGCCGTGGTGTCTTCCAGTACAGCTTTGGTTTAAATCCCTACCGCCGGCCCATC  
ACCACTGTGGTGGGAAGCCCATCGAGGTACAGAAGACGCTGCATCCCTCGGAGGAGGAGTGAACCAGC  
TGACCAGCGTTATATCAAAGAGCTGTGCAACCTCTTCGAGGCCACAAAATTAAGTTCAACATCCCTGC  
TGACCAGCACTTGAGTTCTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC218854 representing NM\_025098  
Red=Cloning site Green=Tags(s)

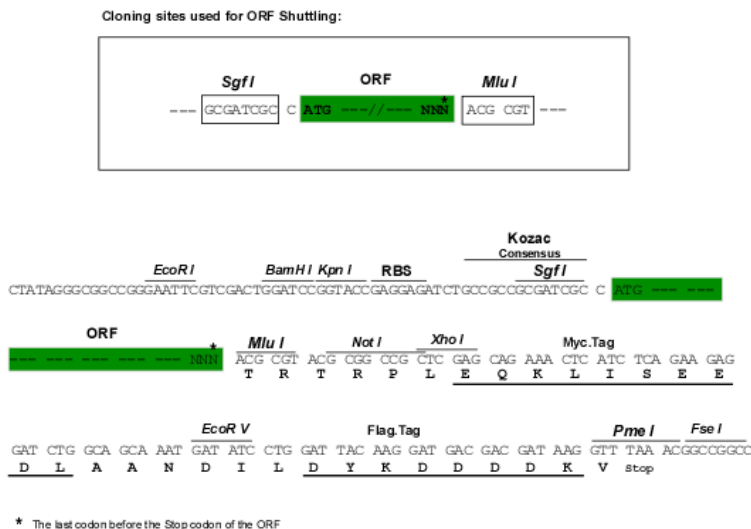
MVEFAPLFMPWERRLQTLAVLQFVFSFLALAEICTVGFIALLFTRFWLLTVLYAAWYLDLDRDKPRQGGRH  
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 MLTLWFRAPFFRDYIMSAGLVTSKESAAHILNRKGGGNLGIIVGGAQEALDARPGSFTLLLRNRKGFV  
 RLALTHGAPLVPIFSFGENDLFDQIPNSSGSLRYIQNRLQKIMGISLPLFHGRGVFQYSFGLIPYRRPI  
 TTVVGKPIEVQKTLHPSEEEVNQLHQRYIKELCNLFEAHKLFNIPADQHLEFC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6100\\_d04.zip](https://cdn.origene.com/chromatograms/mk6100_d04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_025098

**ORF Size:** 1002 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\\_025098.4](#)

**RefSeq Size:** 1005 bp

**RefSeq ORF:** 1005 bp

**Locus ID:** 80168

**UniProt ID:** [Q3SYC2](#)

**Cytogenetics:** 11q13.5

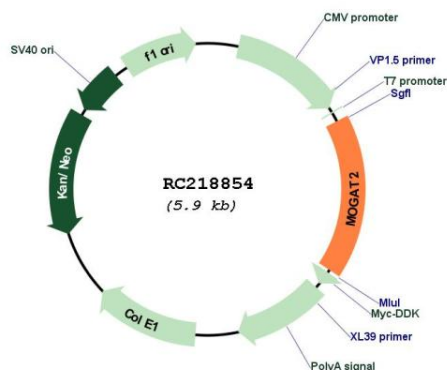
**Domains:** DAGAT

**Protein Families:** Transmembrane

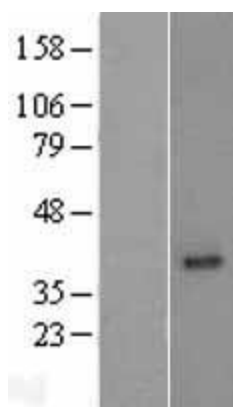
**MW:** 38 kDa

**Gene Summary:** The protein encoded by this gene is an enzyme that catalyzes the synthesis of diacylglycerol from 2-monoacylglycerol and fatty acyl-CoA. The encoded protein is important in the uptake of dietary fat by the small intestine. This protein forms a complex with diacylglycerol O-acyltransferase 2 in the endoplasmic reticulum, and this complex catalyzes the synthesis of triacylglycerol. [provided by RefSeq, Dec 2015]

### Product images:



Circular map for RC218854



Western blot validation of overexpression lysate (Cat# [LY403049]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218854 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).