

## Product datasheet for **RC213249**

### MOGT1 (MOGAT1) (NM\_058165) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MOGT1 (MOGAT1) (NM_058165) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MOGT1
Synonyms:	DGAT2L; DGAT2L1; MGAT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213249 representing NM_058165 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGGTAGAGTTTGCACCGCTCAACATCCAGCTGGCGCGGGCTGCAGACGGTGGCCGTGCTGCAGT  
GGGTCCTGAAATACCTGCTGCTCGGGCCGATGTCCATTGGAATCACTGTGATGCTGATCATAACA  
TTTGTTCCTTTACATCCCTTATTTGATGTGGCTTACTTTGACTGGCATAACCCAGAGCGAGGAGCAGG  
AGATCCAGCTGGATCAAAAATTGGACTCTTTGAAACACTTTAAGGACTATTTCCAATTCATCTTATCA  
AAACTCAAGATTTGGATCCAAGTCAACTATATATTTGGGTTTACCCCATGGATAATGGCAGTTGG  
AGCCTTTGGGAATTTTTCTGTAATTATTCTGACTTCAAGGACCTGTTTCTGGCTTTACTTCATATCTT  
CACGTGCTGCCACTTTGGTTCTGGTGTCTCTTTTCGAGAATATGTGATGAGTGTGGGCTGGTTTCAG  
TTTCCAAGAAAAGTGTGTCTACATGGTAAGCAAGGAGGGAGGTGAAACATCTCTGTCTATTGTCCTTGG  
GGGTGCAAAAGAATCACTGGATGCTCATCCTGAAAGTTCCTCTGTTCATCCGCCAGCGGAAAGGATTT  
GTTAAAATTGCTTTGACCCATGGCGCCTCTCTGGTCCCAGTGGTTTCTTTGGTGAATAAAGTGTGTTA  
AACAACTGACAACCCTGAAGGATCATGGATTAGAAGTGTTCAGAATAAACTGCAGAAGATCATGGGGTT  
TGCTTTGCCCTGTTTCATGCCAGGGGAGTTTTTCAGTACAATTTGGCCTAATGACCTATAGGAAAGCC  
ATCCACACTGTTGTTGGCCGCCGATCCCTGTTCTGTCAGACTCTGAACCCGACCCAGGAGCAGATTGAGG  
AGTTACATCAGACCTATATGGAGGAACCTAGGAAATTGTTTGAGGAACACAAAGGAAAGTATGCCATTCC  
AGAGCACGAGACTCTTGTTTTAAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC213249 representing NM\_058165  
Red=Cloning site Green=Tags(s)

MKVEFAPLNLIQLARRLQTVAVLQWVLKYLLLGPMISIGITVMLIIHNYLFLYIPYLMWLYFDWHTPERGGR  
 RSSWIKNWTLWKHF KDYFPIHLIKTQDLDP SHNYIFGFHPHGIMAVGAFGNFSVNYSDFKDLFPGFTSYL  
 HVLPLWFWCPVFREYVMSVGLVSVSKKSVSYMVSKEGGNISVIVLGGAKESLDAHPGKFTLFI RQRKGF  
 VKIALTHGASLVPVVSFGENELFKQTDNPEGSWIRT VQNKLQKIMGFALPLFHARGVVFQYNFGLMTYRKA  
 IHTVVGRP I PVRQTLNPTQE QIEELHQTYMEELRKL FEEHKGYGIPEHETLVLK

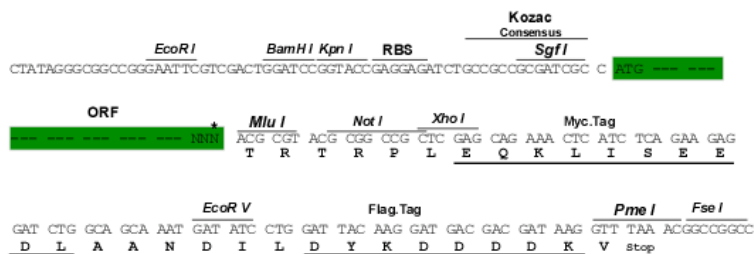
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8011\\_h03.zip](https://cdn.origene.com/chromatograms/mk8011_h03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_058165

**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\\_058165.3](#)

**RefSeq Size:** 1096 bp

**RefSeq ORF:** 1008 bp

**Locus ID:** 116255

**UniProt ID:** [Q96PD6](#)

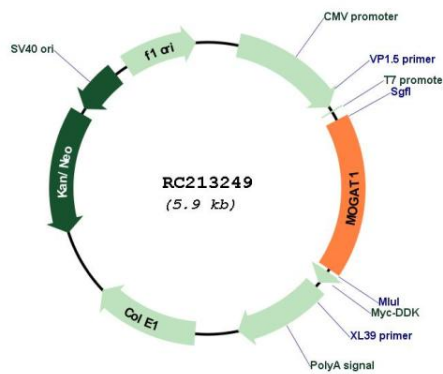
**Cytogenetics:** 2q36.1

**Protein Families:** Transmembrane

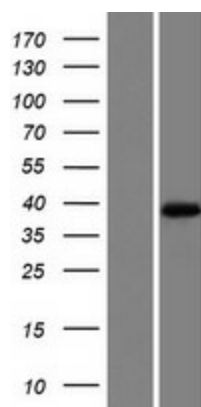
**MW:** 38.6 kDa

**Gene Summary:** Acyl-CoA:monoacylglycerol acyltransferase (MOGAT; EC 2.3.1.22) catalyzes the synthesis of diacylglycerols, the precursor of physiologically important lipids such as triacylglycerol and phospholipids (Yen et al., 2002 [PubMed 12077311]).[supplied by OMIM, Mar 2008]

**Product images:**



Circular map for RC213249



Western blot validation of overexpression lysate (Cat# [LY408961]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213249 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).