

Product datasheet for **MG218673**

Dgat2 (NM_026384) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dgat2 (NM_026384) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dgat2
Synonyms:	0610010B06Rik; ARAT; DGAT-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218673 representing NM_026384 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGACCCATCGCCGCTACTCCGGGTCTGCGGGTGAGCGTCGGGCGGAAGCTGCCCGCAGCG
AAAACAAGAATAAAGGATCTGCCCTGTCACGCGAGGGTCTGGGCGATGGGCACTGGCTCCAGCATCCT
CTCAGCCCTCAAGACATCTTCTGTACCTGGCTCAACAGATCTAAGGTGAAAAACAGCTGCAGGTC
ATCTCAGTACTACAATGGTCTATCCTCCTGGTCTAGGAGTGGCCTGCAGTGTACCTCATGTACA
CCTTCTGCACAGACTGCTGGCTGATAGCTGTGCTCTACTTCACCTGGCTGGCATTGACTGGAACACGCC
CAAGAAAGGTGGCAGGAGATCGCAGTGGTGCGAACTGGGCCGTGTGGCGCTACTTCCGAGACTACTTT
CCCATCCAGCTGGTGAAGACACACAACCTGCTGACCACCAGGAATATATCTTTGGATACCACCCCATG
GCATCATGGGCTGGGTGCCTTCTGTAACCTCAGCACAGAGGCTACTGAAGTCAGCAAGAAGTTTCTGG
CATAAGGCCCTATTTGGCTACGTTGGCTGGTAACTTCCGATGCCTGTGCTTCCGAGTACCTGATGTCT
GGAGGCATCTGCCCTGTCAACCGAGACACCATAGACTACTTGCTCTCAAGAATGGGAGTGGCAATGCTA
TCATCATCGTGGTGGGAGGTGCAGCTGAGTCCCTGAGCTCCATGCCTGGCAAGAACGCAGTACCCTGAA
GAACCCGAAAGGCTTTGTGAAGCTGGCCCTGCCCATGGAGCTGATCTGGTTCCCACTTATTCCTTTGGA
GAGAATGAGGTATACAAGCAGGTGATCTTTGAGGAGGTTCTGGGCGGATGGTCCAGAAGAAGTTCC
AGAAGTATATTGGTTTCGCCCTGCATCTTCCATGGCCGAGGCTCTTCTCCTCTGACACCTGGGGGCT
GGTGCCCTACTCCAAGCCATCACCACCGTCGTGGGGAGCCATCACTGTCCCCAAGCTGGAGCACCCG
ACCCAGAAAGACATCGACCTGTACCATGCCATGTACATGGAGGCCCTGGTGAAGCTTTTGACAATCACA
AGACCAAATTTGGCCTTCCAGAGACTGAGGTGCTGGAGGTGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG218673 representing NM_026384
 Red=Cloning site Green=Tags(s)

MKTLIAAYSGLRGERRAEARSSENKNKGSALSREGRWGTGSSILSALQDIFSVTLNRSKVEKQLQV
 ISVLQWVLSFLVLGVACSVILMYTFCTDCWLI AVL YFTWLAFDWNTPKKGGRRSQWVRNWAVWRYFRDYF
 PIQLVKTHNLLTTRNYIFGYHPHGIMGLGAF CNFSTEATEVSKKFPGIRPYLATLAGNFRMPVLR EYLM S
 GGICPVNRDTIDYLLSKNGSGNAIIIVVGGAAESLSSMPGKNAVTLKNRKGFVKLALRHGADLVPTYSFG
 ENEVYKQVIFEEGWSGRWVQKFKQYIGFAPCIFHGRGLFSSDTWGLVPYSKPITTVVGEPI TVPKLEHP
 TQKDIDL YHAMYMEALVKLFDNHKTKFGLPETEVLEVN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_026384

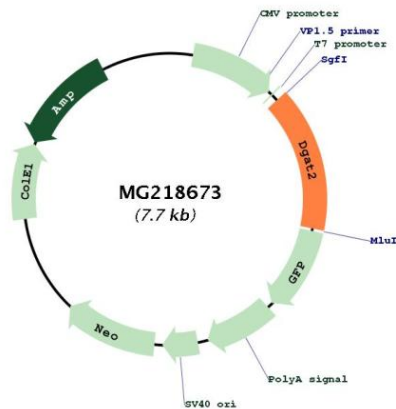
ORF Size: 1164 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none"> 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:	<u>NM_026384.3</u> , <u>NP_080660.1</u>
RefSeq Size:	2251 bp
RefSeq ORF:	1167 bp
Locus ID:	67800
UniProt ID:	<u>Q9DCV3</u>
Cytogenetics:	7 E1
Gene Summary:	Essential acyltransferase that catalyzes the terminal and only committed step in triacylglycerol synthesis by using diacylglycerol and fatty acyl CoA as substrates. Required for synthesis and storage of intracellular triglycerides. Probably plays a central role in cytosolic lipid accumulation. In liver, is primarily responsible for incorporating endogenously synthesized fatty acids into triglycerides. Functions also as an acyl-CoA retinol acyltransferase (ARAT) (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MG218673