

Product datasheet for **RG232538**

DGAT2 (NM_001253891) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: DGAT2 (NM_001253891) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: DGAT2
Synonyms: ARAT; GS1999FULL; HMFN1045
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG232538 representing NM_001253891
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGACCCCTCATAGCCGCTACTCCGGGTCTCGCGGGCAGCGTCAGGCCGAGGCTGACCGGAGCC
 AGCGCTC**CACGGAGGACCTGCGCTGTCGCGGAGGGTCTGGGAGATGGGGAGTGGCTGCAGTGCCAT**
CCTCATGTACATATTCTGCACTGATTGCTGGCTCATCGCTGTGCTCTACTTCACTTGGCTGGTGTGGG
TGGAACACACCCAAGAAAGGTGGCAGGAGTACAGTGGTCCGAACTGGGCTGTGTGGCGCTACTTTC
GAGACTACTTTCCATCCAGCTGGTGAAGACACAACCTGCTGACCACCAGGAACTATATCTTTGGATA
 CCACCCCATGGTATCATGGGCCTGGGTGCCTTCTGCAACTT**CAGCACAGAGGCCACAGAAGT**GAGCAAG
 AAGTTC**CCAGGCATACGGCCTTACCTGGCTACACTGGCAGGCAACTTCCGAATGCCTGTGTTGAGGGAGT**
 ACCTGATGTCTGGAGGTATCTGCCTGTGAGCCGGGACACCATAGACTATTTGCTTTCAAAGAATGGGAG
 TGGCAATGCTATCATCATCGTGGTCGGGGTGGCGCTGAGTCTCTGAGCTCCATGCCTGGCAAGAATGCA
 GTCACCTGCGGAACCGCAAGGGCTTTGTGAACTGGCCCTGCGTCATGGAGCTGACCTGGTTC**CCATCT**
 ACTCCTTTGGAGAGAATGAAGTGTACAAGCAGGTGATCTCGAGGAGGGCTCCTGGGCGCGATGGTCCA
 GAAGAAGTTCAGAAATACATTGGTTTCGCCCATGCATCTTCCATGGTCGAGGCCTCTTCTCCTCCGAC
 ACCTGGGGCTGGTGCCTACTCCAAGCCATCACCAGTGTGTGGGAGAGCCATCACCATCCCAAGC
 TGGAGCACCCAACCCAGCAAGACATCGACCTGTACCACACCATGTACATGGAGGCCTGGTGAAGCTCTT
 CGACAAGCACAAGACCAAGTTCCGCCTCCCGGAGACTGAGGTCCTGGAGGTGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG232538 representing NM_001253891
 Red=Cloning site Green=Tags(s)

MKTLIAAAYSGVLRGERQAEADRSQRSHGGPALSREGSGRWGVACSAILMYIFCTDCWLIIVLYFTWL VFD
 WNTPKKGRRSQWVRNVAWVRYFRDYFPIQLVKTHNLLTTRNYIFGYHPHGIMGLGAF CNFSTEATEVSK
 KFPGIRPYLATLAGNFRMPVLR EYLMSSGGICPVSRDTIDYLLSKNGSGNAIIIVVGGAAESLSSMPGKNA
 VTLRNRKGFVKLALRHGADLVPIYSFGENEVYKQVIFEEGSGRWVQKKFKQYIGFAPCIFHGRGLFSSD
 TWGLVPYSKPITTVVGEPIITIPKLEHPTQQDIDLYHTMYMEALVKLFDKHKTKFGLPETEVLEVN

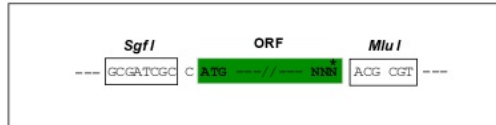
TRTRPLE - GFP Tag - V

Restriction Sites:

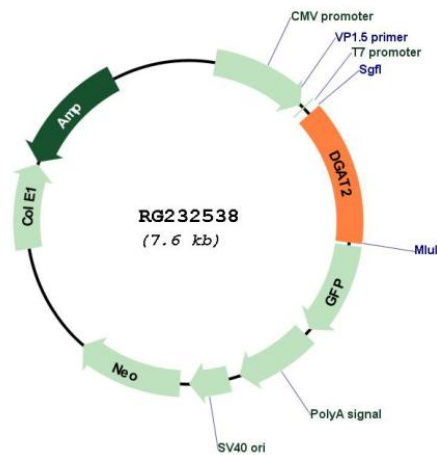
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001253891

ORF Size: 1035 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:	<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:	NM_001253891.1 , NP_001240820.1
RefSeq Size:	2336 bp
RefSeq ORF:	1038 bp
Locus ID:	84649
UniProt ID:	Q96PD7
Cytogenetics:	11q13.5
Protein Families:	Transmembrane
Protein Pathways:	Glycerolipid metabolism, Metabolic pathways, Retinol metabolism
Gene Summary:	This gene encodes one of two enzymes which catalyzes the final reaction in the synthesis of triglycerides in which diacylglycerol is covalently bound to long chain fatty acyl-CoAs. The encoded protein catalyzes this reaction at low concentrations of magnesium chloride while the other enzyme has high activity at high concentrations of magnesium chloride. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]