

Product datasheet for **RR211358**

Dgat1 (NM_053437) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dgat1 (NM_053437) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dgat1
Synonyms:	ARAT; Dgat
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR211358 representing NM_053437
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCGACCCGGAGGGCGGGGAAGCTCTCGGCGTCGCAGGACCGGCTCGCGGGTTTCGTCACAGGAG
 GTAGTGGGCCAAGGTAGAAGAGGACGAGGTGCGAGAAGCGGCTGTGAGCCCGACTTGGGCGCGGGG
 TGACGCGCCGGCTCCGGCTCCGGCTCCAGCCATACCCGGGACAAAGACCGGCAGACCAGCGTGGGCGAC
 GGCCACTGGGAGCTGAGGTGCCATCGTCTGCAAGACTCTTTGTTGAGCTCAGACAGCGGTTTCAGCAATT
 ACCGTGGTATCCTGAATTGGTGCCTGGTATGCTGATCCTGAGTAATGCAAGTTATCTTTAGAGAATCT
 TATCAAGTATGGCATCCTGGTGGATCCCATCCAGGTGGTGTCTCTGTTTCTGAAGACCCCTACAGCTGG
 CCTGCCCATGCTTATGATCATTGCATCCAATATCTTTATTGTGGCTACATTCAGATTGAGAAGCGCCTGT
 CAGTGGGTGCCCTGACAGAGCAGATGGGCTGCTGCTACATGTGGTTAACCTGGCCACAATTATCTGCTT
 CCCAGCAGCTGTGGCCTTACTGGTTGAGTCTATCACTCCAGTGGGTTCCCTGTTTCTGCTGCGCATCATA
 TCCATCATCTTCCCAAGCTTTCTTCTACCGGATGTCAATCTGTGGTCCGCCAGCGAAGGGTCAAGG
 CCAAAGCTGTGTCTGCAGGGAAGAAGGTCAAGTGGGCTGCTGCCAGAACACTGTAAGCTATCCGGACAA
 CCTGACCTACCGAGATCTCTATTACTTCATCTTTGCTCCTACTTTGTGTTATGAAGTCAACTTTCTCGA
 TCCCCCGAATACGAAAGCGCTTTCTGCTACCGCGGGTCTTGAGATGCTCTTTTACCCAGCTTCAAG
 TGGGGCTGATCCAGCAGTGGATGGTCCCTACTATCCAGAACTCCATGAAGCCCTTCAAGGACATGGACTA
 TTCACGAATCATTGAGCGTCTCTAAAGCTGGCGGTCCCCAACCATCTGATATGGCTCATCTTCTCTAT
 TGGCTTTTCCACTCATGTCTCAATGCTGTGGCAGAGCTCCTGCAGTTTGGAGACCGGAGTCTACAGGG
 ACTGGTGAATGCTGAGTCTGTACCTACTTTTGGCAGAACTGGAATATCCCCGTGCACAAGTGGTGCAT
 CAGACACTTTTACAAGCCTATGCTCAGACTGGGCAGCAACAATGGATGGCCAGGACTGGGGTCTTTTGG
 GCGTCAGCTTTCTTTCATGAGTACCTAGTGAAGTATCCCTGAGGATGTTCCGCCTTTGGGCATTACAG
 CAATGATGGCTCAGTCCACTGGCCTGGATTGTGAACCGCTTCTTCAAGGAACTATGGCAATGCAGC
 TGTGTGGGTGACACTCATATTGGGCAACCGGTGGCTGTGCTCATGTATGTCCACGACTACTACGTGCTC
 AACTATGATGCCCGAGTGGGGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR211358 representing NM_053437
 Red=Cloning site Green=Tags(s)

MGDRGGAGSSRRRRTGSRVSVQGGSGPKVEEDEVREAAVSPDLGAGGDAPAPAPAPAHTRDKDRQTSVGD
 GHWELRCHRLQDSLFSDDSGFSNYRGILNWCVVMLILSNARLSLENLIKYGILVDP IQVVSFLFKDPYSW
 PAPCLIIASNIFIVATFQIEKRLSVGALTEQMGLLLHVNLATIIICFPAVALLVESITPVGSLFALASY
 SIIIFLKLSSYRDVNLWCRQRRVKAKAVSAGKKVSGAAAQNTVSYDNLTYRDLYYFIFAPTLCYELNFR
 SPRIRKRFLLRRVLEMLFFTLQVGLIQQWMPVTIQNSMKPFKMDYSRIERLLKLAVPNHLIWLIFFY
 WLFHSLNAVAELLQFGDREFYRDWNAESVTYFWQNWNI PVHKWCIRHFYKPLRLGSKNWMARTGVFW
 ASAFFHEYLVSIPLRMFRLWAFTAMMAQVPLAWIVNRFQGNYGNAAVVWTLIIIGQPVAVLMYVHDYVVL
 NYDAPVGA

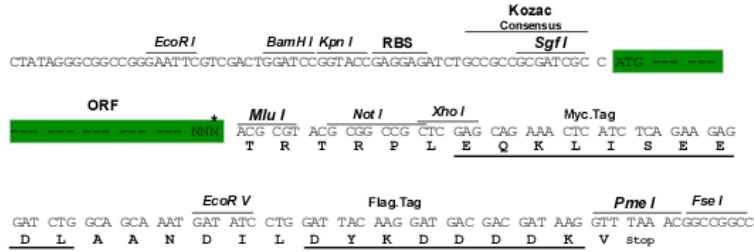
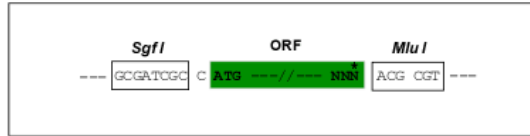
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

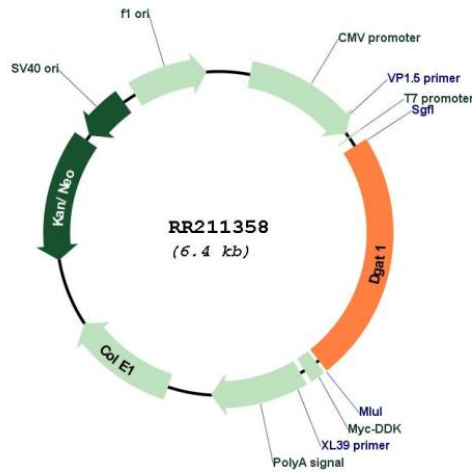
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_053437

ORF Size: 1494 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_053437.1](#), [NP_445889.1](#)

RefSeq Size: 1751 bp

RefSeq ORF: 1497 bp

Locus ID: 84497

UniProt ID: [Q9ERM3](#)

Cytogenetics: 7q34

MW: 56.9 kDa

Gene Summary: enzyme that catalyzes the final step of triglyceride synthesis; uses diacylglycerol and fatty acyl CoA as substrates [RGD, Feb 2006]