

Product datasheet for **RG220595**

DGAT1 (NM_012079) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DGAT1 (NM_012079) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DGAT1
Synonyms:	ARAT; ARGP1; DGAT; DIAR7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG220595 representing NM_012079
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGCGACCGCGCAGCTCCCGCGCCGGAGGACAGGGTCGCGGCCCTCGAGCCACGGCGCGCGGGG
 CTGCGGGCGCGGAAGAAGAGGTGCGGGACGCCGCTGCGGGCCCGACGTGGGAGCCGCGGGGACGCGCC
 AGCCCCGGCCCCAACAAAGGACGGAGACGCCGGCTGGGACGCGCCACTGGGAGCTGAGGTGCCATCGC
 CTGCAGGATTCTTTATTCACTCTGACAGTGGCTTCAAGCACTACCGTGGCATCCTGAACTGGTGTGTGG
 TGATGCTGATCTTGAGCAATGCCGGTTATTTCTGGAGAACCTCATCAAGTATGGCATCCTGGTGGACCC
 CATCCAGTGGTTTCTCTGTTCTGAAGGATCCCATAGCTGGCCGCCCATGCCTGGTATTGCGGCC
 AATGTCTTTGCTGTGGCTGCATTCCAGGTTGAGAAGCGCTGGCGGTGGGTGCCCTGACGGAGCAGGCGG
 GACTGCTGCTGCACGTAGCCAACCTGGCCACCATTCTGTGTTCCAGCGGCTGTGGTCTACTGGTTGA
 GTCTATCACTCCAGTGGGCTCCCTGCTGGCGCTGATGGCGCACACCATCCTCTTCTCAAGCTCTTCTCC
 TACCGCGACGTCAACTCATGGTGCCGACAGGGCCAGGGCCAAGGCTGCCTCTGCAGGAAGAAGGCCAGCA
 GTGCTGCTGCCCCGCACACCGTGAGCTACCCGGACAATCTGACCTACCGCATCTCTACTACTTCTCTT
 CGCCCCACCTTGTGCTACGAGCTCAACTTTCCCCGCTCTCCCCGCATCCGGAAGCGTTTCTGTGCGA
 CGGATCCTTGAGATGCTGTTCTTCAACCAGCTCCAGGTGGGGCTGATCCAGCAGTGGATGGTCCCCACCA
 TCCAGAATCCATGAAGCCCTTCAAGGACATGGACTACTACGCATCATCGAGCGCTCCTGAAGCTGGC
 GGTCCCCAATCACCTCATCTGGCTCATCTTCTTACTGGCTCTTCCACTCCTGCCTGAATGCCGTGGCT
 GAGCTCATGCAGTTTGGAGACCGGGAGTTCTACCGGACTGGTGGAACTCCGAGTCTGTCACCTACTTCT
 GGCAGAACTGGAACATCCCTGTGCACAAGTGGTGCATCAGACACTTCTACAAGCCCATGCTCGAGGGG
 CAGCAGCAAGTGGATGGCCAGGACAGGGGTGTTCTGGCCTCGGCTTTCTTCCAGGAGTACCTGGTGGC
 GTCCCTCTGCGAATGTTCCGCTCTGGGCTTTCACGGCATGATGGCTCAGATCCACTGGCCTGGTTCCG
 TGGGCCGCTTTTTCCAGGGCAACTATGGCAACGCAGCTGTGTGGCTGTCGCTCATCATCGGACAGCCAAT
 AGCCGCTCCTCATGTACGTCCAGACTACTAGTGTCAACTATGAGGCCCCAGCGGCAGAGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG220595 representing NM_012079
 Red=Cloning site Green=Tags(s)

MGDRGSSRRRTGSRPSSHGGGPAEEEEVRDAAAGPDVGAAGDAPAPAPNKDGDAGVSGSHWELRCHR
 LQDSLFSDDSGF SNYRGILNWCVVMLILSNARLFLENLIKYGILVDPIQVVSLFLKDPHWPAPCLVIAA
 NVFAVAAFQVEKRLAVGALTEQAGLLLVANLATILCFPAAVVLLVESITPVGSLALMAHTILFLKLF
 YRDVNSWCRRARAKAASAGKKASSAAAPHTVSYPDNLYRDLYYFLFAPTLCELNFPSPRIRKRFLLR
 RILEMLFFTLQVGLIQQWMPVTIQNSMKPFKMDYSRIERLLKLAVPNHLIWLIFFYWLFHNSCLNAVA
 ELMQFGDREFYRDWNSVSYTFWQNWNI PVHKWCIRHFYKPM LRRGSSKWMARTGVFLASAFFHEYLV
 VPLRMFRLWAFTGMMAQIPLAWFVGRFFQGNYGNAAVWLSLIIGQPIAVLMYVHDYVVLNVEAPAAEA

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_012079

ORF Size: 1464 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_012079.2](#), [NP_036211.1](#)

RefSeq Size: 1976 bp

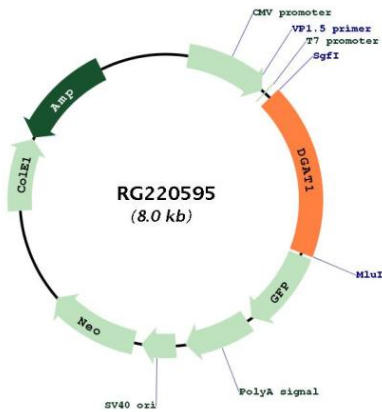
RefSeq ORF: 1467 bp

Locus ID: 8694

UniProt ID: [O75907](#)

Cytogenetics:	8q24.3
Domains:	MBOAT
Protein Families:	Transmembrane
Protein Pathways:	Glycerolipid metabolism, Metabolic pathways, Retinol metabolism
Gene Summary:	This gene encodes an multipass transmembrane protein that functions as a key metabolic enzyme. The encoded protein catalyzes the conversion of diacylglycerol and fatty acyl CoA to triacylglycerol. This enzyme can also transfer acyl CoA to retinol. Activity of this protein may be associated with obesity and other metabolic diseases. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RG220595