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Product datasheet for RG200228

AGPAT2 (NM_006412) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AGPAT2 (NM_006412) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AGPAT2
Synonyms:	1-AGPAT2; BSCL; BSCL1; LPAAB; LPAAT-beta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG200228 representing NM_006412
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCTGTGGCCGTGTCTGGCCGCGGCGCTGCTGTTGCTGCTGCTGCTGGTGCAGCTGAGCCGCGCGG
CCGAGTTCTACGCCAAGGTCGCCCTGTACTGCGCGCTGTGCTTCACGGTGTCCGCCGTGGCCTCGCTCGT
CTGCCTGCTGCGCCACGGCGGCCGGACGGTGGAGAACATGAGCATCATCGGCTGGTTCGTGCGAAGCTTC
AAGTACTTTTACGGGCTCCGCTTCGAGGTGCGGGACCCGCGCAGGCTGCAGGAGGCCCGTCCCTGTGTCA
TCGTCTCCAACCACCAGAGCATCCTGGACATGATGGGCCTCATGGAGGTCCTTCCGGAGCGCTGCGTGCA
GATCGCCAAGCGGGAGCTGCTCTTCCTGGGGCCCGTGGGCCTCATCATGTACCTCGGGGGCGTCTTCTTC
ATCAACCGGCAGCGCTCTAGCACTGCCATGACAGTGATGGCCGACCTGGGCGAGCGCATGGTCAGGGAGA
ACCTCAAAGTGTGGATCTATCCCGAGGGTACTCGCAACGACAATGGGGACCTGCTGCCTTTTAAGAAGGG
CGCCTTCTACCTGGCAGTCCAGGCACAGGTGCCCATCTTCCCCGTGGTGTACTCTTCCTTCTCCTCCTTC
TACAACACCAAGAAGAAGTTCTTCACTTCAGGAACAGTCACAGTGCAGGTGCTGGAAGCCATCCCCACCA
GCGGCCTCACTGCGGCGGACGTCCCTGCGCTCGTGGACACCTGCCACCGGGCCATGAGGACCACCTTCCT
CCACATCTCCAAGACCCCCCAGGAGAACGGGGCCACTGCGGGGTCTGGCGTGCAGCCGGCCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

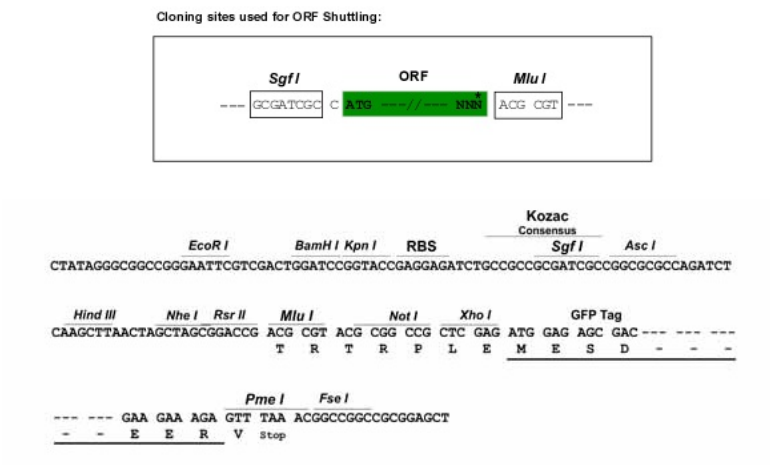
>RG200228 representing NM_006412
Red=Cloning site Green=Tags(s)

MELWPCLAAALLLLLLLVQLSRAAEFYAKVALYCALCFTVSAVASLVCLLRHGGRTVENMSIIGWFVRSF
KYFYGLRFEVRDPRRLQEARPCVIVSNHQSILDMMGLMEVLPERCVQIAKRELLFLGPVGLIMYLGGVFF
INRQRSSTAMTVMADLGERMVRENLKVWIYPEGTRNDNGDLLPFKKGAFYLAVQAQVPIFPVVYSSFSSF
YNTKKKFFTSGTVTVQVLEAIPTSGLTAADVPALVDTCHRAMRTTFLHISKTPQENGATAGSGVQPAQ

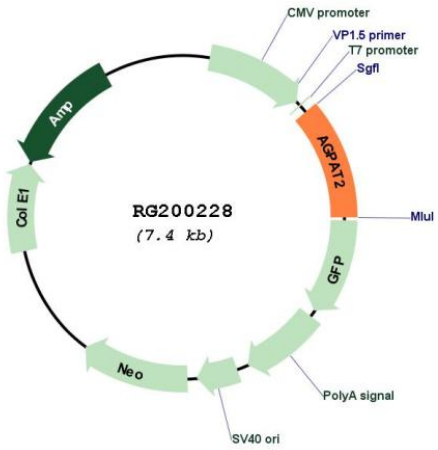
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_006412

ORF Size: 834 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:	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_006412.3, NP_006403.2
RefSeq Size:	1576 bp
RefSeq ORF:	837 bp
Locus ID:	10555
UniProt ID:	O15120
Cytogenetics:	9q34.3
Domains:	Acyltransferase
Protein Families:	Transmembrane
Protein Pathways:	Ether lipid metabolism, Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways

Gene Summary: This gene encodes a member of the 1-acylglycerol-3-phosphate O-acyltransferase family. The protein is located within the endoplasmic reticulum membrane and converts lysophosphatidic acid to phosphatidic acid, the second step in de novo phospholipid biosynthesis. Mutations in this gene have been associated with congenital generalized lipodystrophy (CGL), or Berardinelli-Seip syndrome, a disease characterized by a near absence of adipose tissue and severe insulin resistance. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]