

Product datasheet for **RC200228**

AGPAT2 (NM_006412) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AGPAT2 (NM_006412) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AGPAT2
Synonyms:	1-AGPAT2; BSCL; BSCL1; LPAAB; LPAAT-beta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200228 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCTGTGGCCGTGTCTGGCCGCGCGCTGCTGTTGCTGCTGCTGGTGCAGCTGAGCCGCGCGG
CCGAGTCTACGCCAAGGTGCGCCTGTACTGCGCGCTGTGCTCACGGTGTCCGCCGTGGCCTCGCTCGT
CTGCCTGCTGCGCCACGGCGGCCGACGGTGGAGAACATGAGCATCATCGGCTGGTTCGTGCGAAGCTTC
AAGTACTTTTACGGGCTCCGCTTCGAGGTGCGGGACCCGCGCAGGCTGCAGGAGGCCCGTCCCTGTGTCA
TCGTCTCCAACCACCAGAGCATCCTGGACATGATGGCCCTCATGGAGTCTTCCGGAGCGCTGCGTGCA
GATCGCCAAGCGGGAGCTGCTTTCCTGGGGCCCGTGGGCTCATCATGTACCTCGGGGGCGTCTTCTTC
ATCAACCGGCAGCGCTCTAGCACTGCCATGACAGTGATGGCCGACCTGGGCGAGCGCATGGTCAGGGAGA
ACCTCAAAGTGTGGATCTATCCCGAGGGTACTCGCAACGACAATGGGGACCTGCTGCCTTTAAGAAGGG
CGCCTTACCTGGCAGTCCAGGCACAGGTGCCATCTTCCCGTGGTGTACTCTTCTTCTCCTCCTTC
TACAACACCAAGAAGAAGTTCTTCACTTCAGGAACAGTCACAGTGCAGGTGCTGGAAGCCATCCCCACCA
GCGGCCTCACTGCGGCGGACGTCCCTGCGCTCGTGGACACCTGCCACGGGCCATGAGGACCACCTTCT
CCACATCTCCAAGACCCCCAGGAGAACGGGGCCACTGCGGGGTCTGGCGTGCAGCCGGCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200228 protein sequence
Red=Cloning site Green=Tags(s)

MELWPCLAAALLLLLLLVLQSRAAEFYAKVALYCALCFTVSAVASLVCLLRHGGRTVENMSIIGWVRSF
 KYFYGLRFEVRDPRRLQEARPCVIVSNHQSIIDMMGLMEVLPERCVQIAKRELLFLGPVGLIMYLGGVFF
 INRQRSSTAMTVMADLGERMVRENLKVWIYPEGTRNDNGDLLPFKKGAFYLAVQAQVPIFPVYSSFSF
 YNTKKKFFTSQVTVQVLEAIPTSGLTAADVLPALVDTCHRMRRTTFLHISKTPQENGATAGSGVQPAQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6081_d06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006412

ORF Size: 834 bp

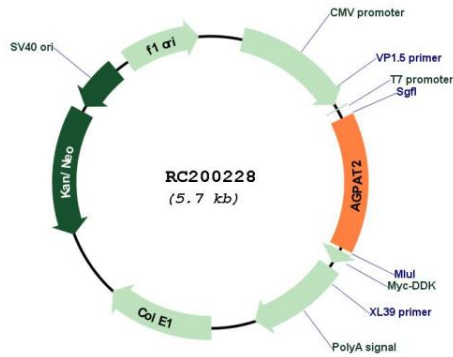
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

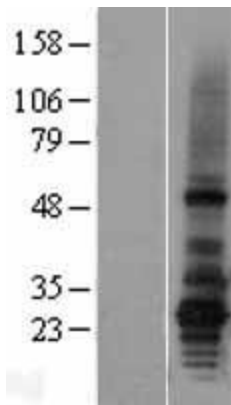
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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_006412.4</u>
RefSeq Size:	1576 bp
RefSeq ORF:	837 bp
Locus ID:	10555
UniProt ID:	<u>O15120</u>
Cytogenetics:	9q34.3
Domains:	Acyltransferase
Protein Families:	Transmembrane
Protein Pathways:	Ether lipid metabolism, Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways
MW:	31 kDa
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]

Product images:



Circular map for RC200228



Western blot validation of overexpression lysate (Cat# [LY401930]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200228 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).