

Product datasheet for **RC210488**

AGPAT7 (LPCAT4) (NM_153613) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AGPAT7 (LPCAT4) (NM_153613) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AGPAT7
Synonyms:	AGPAT7; AYTL3; LPAAT-eta; LPEAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC210488 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCCAGGGAAGTCCGGGGACTGGGCCCCCTAGATCCCACCCCGACCCCAAGCATCCCCAACCC
 CCTTCGTGCATGAGTTACATCTCTCTCGCTCCAGAGGGTTAAGTTCTGCCTCCTGGGGGATTGCTGGC
 CCCCATCCGAGTGCTTCTGGCCTTTATCGTCTCTTTCTCCTCTGGCCCTTTGCCTGGCTTCAAGTGGCC
 GGTCTTAGTGAGGAGCAGCTTCAGGAGCCAATTACAGGATGGAGGAAGACTGTGTGCCACAACGGGGTGC
 TAGGCCTGAGCCGCTGCTGTTTTCTGCTGGGCTTCTCCGGATTCCGGTTCGTGGCCAGCGAGCCTC
 TCGCCTCAAGCCCTGCTTGTGCTGCCCCACTCCACTTTCTTTGACCCATTGTTCTGCTGCC
 TGTGACCTGCCAAAGTTGTGTCCGAGCTGAGAACCTTCCGTTCTGTATTGGAGCCCTTCTCGAT
 TCAACCAAGCCATCCTGGTATCCCGCATGACCCGGCTTCTCGACGCAGAGTGGTGGAGGAGTCCGAAG
 GCGGGCCACCTCAGGAGGCAAGTGGCCGAGGTGCTATTCTTTCTGAGGGCACCTGTTCCAACAAGAAG
 GCTTTGCTTAAGTTCAAACAGGAGCCTTCATCGCAGGGTGCCTGTGCAGCCTGTCTCATCCGCTACC
 CCAACAGTCTGGACACCACAGCTGGGCATGGAGGGTCTGGAGTACTCAAAGTCTCTGGCTCACAGC
 CTCTCAGCCCTGCAGATTGTGGATGTGGAGTTCCTTCTGTGTATCACCCAGCCCTGAGGAGAGCAGG
 GACCCACCCCTATGCCAACATGTTCCAGAGGGTTCAGGACAGGCTCTGGGCATTCCAGCCACCGAAT
 GTGAGTTTGTAGGGAGCTTACCTGTGATTGTGGTGGGCCGGTGAAGGTGGCGTTGAACACAGCTCTG
 GAACTGGGAAAAGTCTTCGAAGGCTGGGCTGTCCGCTGGCTATGTGGACGCTGGGCGAGCCAGGC
 CGGAGTCGAATGATCAGCCAGGAAGAGTTGCCAGGCAGCTACAGCTCTGTGATCCTCAGACGGTGGCTG
 GTGCCTTTGGCTACTTCCAGCAGGATACCAAGGTTTGGTGGACTTCCGAGATGTGGCCCTGCACTAGC
 AGCTCTGGATGGGGCAGGAGCCTGGAAGAGCTAACTCGTCTGGCCTTTGAGCTCTTTGCTGAAGAGCAA
 GCAGAGGGTCCCAACCGCTGCTGTACAAAGACGGCTTACGACCATCCTGCACCTGCTGCTGGTTTAC
 CCCACCCCTGCTGCCACAGCTTTGCATGCTGAGCTGTGCCAGGCAGGATCCAGCCAAGGCCTCTCCCTCTG
 TCAGTTCCAGAATCTCCCTCCATGACCCACTCTATGGGAACTCTTACGACCTACCTGCGCCCCCA
 CACACCTCTCGAGGCACCTCCAGACACCAATGCCTCATCCCCAGGCAACCCACTGCTCTGGCCAATG
 GGACTGTGCAAGCACCAAGCAGAAGGGAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210488 protein sequence
 Red=Cloning site Green=Tags(s)

MSQSPGDWAPLDPTPGPPASPMPFVHELHL SRLQRVKFCLLGALLAPIRVLLAFIVLFLWPFAWLQVA
 GLSEELQEPITGWRKTVCHNGVLGLSRLLFLLGFLRIRVRGQRASRLQAPVLAAPHSTFFDPIVLLP
 CDLPKVVSRANLSVPVIGALLRFNQAILVSRHDPASRRRVVEEVRRRATSGGKWPQVLFPEGTCSNKK
 ALLKFKPGAFIAGVPVQPVLI RYPNSLDTTSAWRGPGVLKVLWLTASQPCSIVDVEFLPVYHPSPEESR
 DPTLYANNVQRVMAQALGIPATECEFGVSLPVI VVGRKVALEPQLWELGKVLKAGLSAGYVDAGAEPG
 RSRMISQEEFARQLQLSDPQTVAGAFGYFQDTKGLVDFRDVALALAALDGGRSLEELTRLAFELFAEEQ
 AEGPNRLLYKDFSTILHLLGSPHPAATALHAELCQAGSSQGLSLCQFQNFSLHDPYGLKLFSTYLRPP
 HTSRGLTSQTPNASPGNPTALANGTVQAPKQKGD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6133_b09.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_153613

ORF Size: 1572 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_153613.3](#)
RefSeq Size: 1908 bp

RefSeq ORF: 1575 bp

Locus ID: 254531

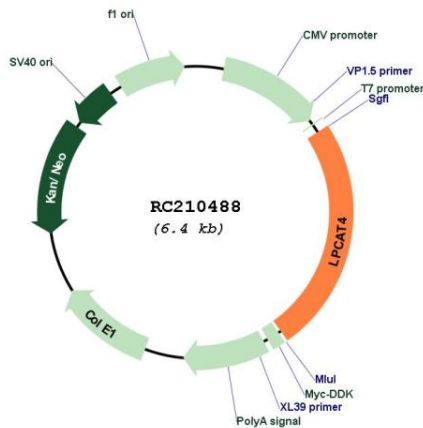
UniProt ID: [Q643R3](#)
Cytogenetics: 15q14

Protein Families: Transmembrane

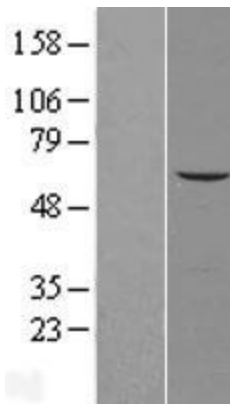
MW: 57.2 kDa

Gene Summary: Members of the 1-acylglycerol-3-phosphate O-acyltransferase (EC 2.3.1.51) family, such as AGPAT7, catalyze the conversion of lysophosphatidic acid (LPA) to phosphatidic acid (PA), a precursor in the biosynthesis of all glycerolipids. Both LPA and PA are involved in signal transduction (Ye et al., 2005 [PubMed 16243729]).[supplied by OMIM, May 2008]

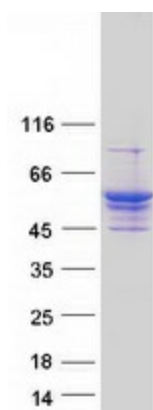
Product images:



Circular map for RC210488



Western blot validation of overexpression lysate (Cat# [LY403514]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210488 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LPCAT4 protein (Cat# [TP310488]). The protein was produced from HEK293T cells transfected with LPCAT4 cDNA clone (Cat# RC210488) using MegaTran 2.0 (Cat# [TT210002]).