

Product datasheet for **RC200168**

Acyltransferase like 1 (LPCAT2) (NM_017839) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acyltransferase like 1 (LPCAT2) (NM_017839) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acyltransferase like 1
Synonyms:	AGPAT11; AYTL1; LysoPAFAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC200168 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCCGGTGCGCCAGGCGGCGGAAGTGGCGGCCACAGTGCCAGGTGCCGGCGTCGGGAACGTGGGGC
 TCGGGCCGCCATGGTGCCTCGTCCAGGCGTCTTCTTCCGCGCGCGGTGCCGAACCCCTTCGTGCAGCA
 GACGCAGATCGGCTCCGCGAGGCGGGTCCAGATTGCTCTTCTGGGATTATCTTGCTTCCAATTCGTGTC
 TTATTGGTTGCGTTAATTTTATTACTTGCATGGCCATTTGCTGCAATTTCAACAGTATGCTGCTGAA
 AGCTGACCCACCAATAACTGGTTGGAGGAGGAAAATTACTCAAACAGCTTTGAAATTTCTGGTCTGTC
 TATGTTCTTTTCAATGGGATTTATAGTTGCTGTAAAAGGAAAGATTGCAAGTCTTTGGAAGCACCAGTT
 TTTGTTGCTGCCCTCATTCAACATTCTTTGATGGAATGCTGTGTTGTAGCTGGGTTACCTTCTATGG
 TATCTCGAAATGAGAATGCACAAGTCCCTCTGATTGGCAGACTGTTACGGGCTGTCAACCAGTTTTGGT
 GTCCTGTAGATCCGGATTCGCAAAAAACACAATAAATGAAATAATAAAGCGAACAACATCAGGAGGA
 GAATGGCCCCAGATACTAGTTTTCCAGAAAGTACTTGTACTAATCGTTCCTGTTTGATTACTTTTTAAAC
 CAGGAGCCTTCATTCCAGGAGTCCAGTGCAGCCAGTCCCTCCTCAGATACCCAAACAAGCTGGATACTGT
 GACCTGGACATGGCAAGGATATACATTCATTACGCTTTGTATGCTTACTTTCTGCCAGCTTTCACAAA
 GTAGAAGTTGAGTTTATGCCAGTTCAAGTACCAATGATGAAGAAAAAATGATCCTGTCCTTTTTGCCA
 ATAAAGTCGGAATTTAATGGCAGAAGCTCTGGGAATACCAGTAACAGATCATACCTATGAAGACTGCAG
 ATTGATGATTTACGACAGGACAGCTAACATTGCCTATGGAAGCTGGGCTGGTGGAAATTTACTAAAATTAGC
 CGAAAAATTGAAATTAGATTGGGATGGTGTTCGTAAGCATTGGATGAATATGCATCTATTGCGAGTTCCT
 CAAAAGGAGGAAGAAATTTGAATTGAAGAATTCGCAAGTATTTAAAGTTGCTGTTTCAGATGCTTGAG
 ACAACTTTTTGCACTCTTTGACAGGAACCATGATGGCAGCATTGACTTCGAGAGTATGTGATTGGCCTG
 GCTGTCTTGTGCAACCCTTCCAACACAGAGGAGATCATCCAGGTGGCATTAAAGCTGTTTGACGTTGATG
 AGGATGGCTACATAACGGAGGAAGAGTTCTCCACCATTCTACAGGCTTCCTTGGAGTGCCTGACCTTGA
 TGTTTCTGGTCTTCAAGGAAATAGCCCAAGGGACTCAATTTCTATGAGGAATTTAAAAGTTTTGCC
 TTAAGCATCCAGAATATGCTAAGATATTTACAACATACCTAGACCTCCAGACGTGCCATGTGTTTTCAT
 TACCAAAAAGTCCAGACAACCCCTCCACCGCCAGTAATAAAGTCAGCCCTGAAAAGCATGAAGAGAG
 TACCTCAGACAAAAAAGATGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200168 protein sequence
 Red=Cloning site Green=Tags(s)

MSRCAQAAEVAATVPGAGVGNVGLRPPMVPRQASFFPPVPNPFVQQTQIGSARRVQIVLLGIILLPIRV
 LLVALILLLAWPFAAISTVCCPEKLTHPITGWRRKITQTALKFLGRAMFFSMGFIVAVKGGKIASPLEAPV
 FVAAPHSTFFDGIACVVAGLPSMVSRENAAQVPLIGRLLRAVQPVLVSRVDPDSRKNITINEIIKRTTSGG
 EWPQILVFPEGTCTNRSCLITFKPGAFIPGVVPVQLLRYPNKLDVTWTWQGYTFIQLCMLTFCQLFTK
 VEVEFMPVQVPNDEEKNDPVLFANKVRNLMAEALGIPVTDHTYEDCRLMISAGQLTLPMEAGLVEFTKIS
 RKLKLDWDGVRKHLDEYASIASSSKGGRIIEEFKYLKLPVSDVLRQLFALFDRNHDGSDIFREYVIGL
 AVL CNPSNTEEIIQVAFKLFVDEDEGYITEEFSTILQASLGVPDLVSGLFKEIAQGDSISYEEFKSFA
 LKHPEYAKIFTTYLDLQCHVFLPKEVQTPSTASNKVSPEKHEESTSDKKDD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

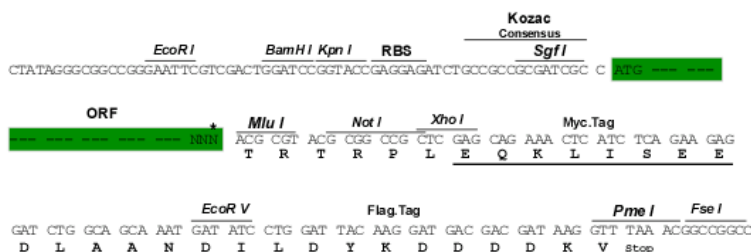
https://cdn.origene.com/chromatograms/mk6198_c09.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_017839

ORF Size: 1632 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_017839.5](#)
RefSeq Size: 5395 bp

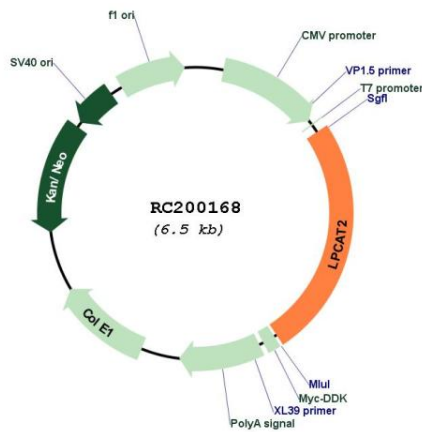
RefSeq ORF: 1635 bp

Locus ID: 54947

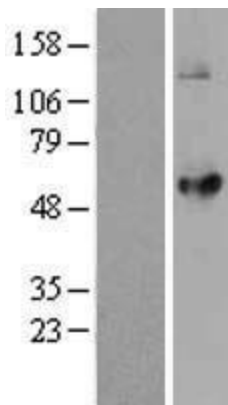
UniProt ID: [Q7L5N7](#)

Cytogenetics:	16q12.2
Domains:	EFh, Acyltransferase
Protein Families:	Transmembrane
MW:	60.2 kDa
Gene Summary:	This gene encodes a member of the lysophospholipid acyltransferase family. The encoded enzyme may function in two ways: to catalyze the biosynthesis of platelet-activating factor (1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine) from 1-O-alkyl-sn-glycero-3-phosphocholine, and to catalyze the synthesis of glycerophospholipid precursors from arachidonyl-CoA and lysophosphatidylcholine. The encoded protein may function in membrane biogenesis and production of platelet-activating factor in inflammatory cells. The enzyme may localize to the endoplasmic reticulum and the Golgi. [provided by RefSeq, Feb 2009]

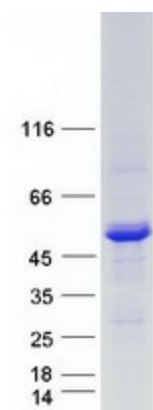
Product images:



Circular map for RC200168



Western blot validation of overexpression lysate (Cat# [LY402622]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200168 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LPCAT2 protein (Cat# [TP300168]). The protein was produced from HEK293T cells transfected with LPCAT2 cDNA clone (Cat# RC200168) using MegaTran 2.0 (Cat# [TT210002]).