

Product datasheet for **RC220083**

LPCAT1 (NM_024830) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LPCAT1 (NM_024830) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LPCAT1
Synonyms:	AGPAT9; AGPAT10; AYTL2; lpcat; LPCAT-1; lysoPAFAT; PFAAP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC220083 representing NM_024830
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGCTGCGGGATGCGGACCCGGGCCCCCTGCCTCCAGCGCAGGGGCCAGCGACGCTCGGCTGC
 TGGCGCCCCGGGGCGGAACCCCTTCGTGCACGAGCTGCGCCTCAGCGCCCTGCAGAAGGCCAGGTGGC
 CCTCATGACACTGACGCTCTTCCCGTCCGGCTCCTGGTTGCCGCTGCCATGATGCTGCTGGCCTGGCC
 CTCGCACTTGTGCATCCCTGGGCTCTGCGGAGAAGGAACCCGAGCAGCCCCGGCCCTGTGGAGGAAGG
 TTGTGGACTTCTGCTGAAGGCCATCATGCGCACCATGTGGTTCGCCGGCGGCTTCCACCGGGTGGCCGT
 GAAGGGGCGCAGGCGCTGCCACCGAGGGGCCATCCTCAGCTCGCGCCTCACTCGTCTACTTCGAC
 GCCATCCCTGTGACCATGACGATGTCTCCATCGTGATGAAGGCAGAGAGCAGAGACATCCCGATCTGGG
 GAACTCTGATCCAGTATACGGCCTGTGTTCTGTGCCGGTCCAGCAGGATTCTCGCAGAAAACAGT
 AGAAGAAATCAAGAGACGGGCGCAGTCCAACGGAAAGTGGCCACAGATAATGATTTTTCCAGAAGGAACT
 TGTACAAAACAGGACCTGCCTAATTACCTTCAAACCTGGTGATTCATCCCTGGAGCGCCCGTCCAGCCTG
 TGGTTTTACGATATCAAATAAACTGGACACCATCACATGGACGTGGCAAGGACCTGGAGCGCTGAAAT
 CCTGTGGCTCACGCTGTGTCAAGTTTACAACCAAGTGGAAATCGAGTTCCCTTCTGTGTACAGCCCTTCT
 GAGGAGGAGAAGAGGAACCCCGCCTGTATGCCAGCAACGTGCGGCGAGTCATGGCCGAGGCCTTGGGTG
 TCTCCGTGACTGACTACAGTTCGAGGACTGCCAGCTGGCCCTGGCGGAAGGACAGCTCCGTCTCCCCGC
 TGACACTTGCCTTTTGAATTTGCCAGGCTCGTGGGGCCCTCGGGCTAAAACGAGAAAAGCTTGAAAAA
 GATCTGGACAGATACTCAGAAAGAGCCAGGATGAAGGGAGGAGAGAAGATAGGTATTGCGGAGTTTGCCG
 CCTCCCTGGAAGTCCCCGTTTCTGACTTGTGGAAGACATGTTTTCACTGTTGACGAGAGCGCGCAGCGG
 CGAGGTGACCTGCGAGAGTGTGTGGTTGCCCTGTCTGTGCTGCCGGCCGGCCCGGACCTGGACACC
 ATCCAGCTGGCTTTCAAGATGTACGAGCGCAAGAGGACGGCAGCGTCGCGCAAGGTGACCTGTCCTGCA
 TCCTCAAGACGGCCCTGGGGTGGCAGAGCTCACCGTGACCGACCTATCCGAGCCATTGACCAAGAGGA
 GAAGGGGAAGATCACATTCGCTGACTTCCACAGGTTTGCAGAAATGTACCCTGCCTTCGACAGGAATAC
 CTGTACCCGGATCAGACACATTTCAAAGCTGTGCAGAGACCTCACCTGCCCAATCCCAAACGGCTTCT
 GTGCCGATTTAGCCCGGAAAACCTCAGACGCTGGGCGGAAGCCTGTTCCGAAGAAGCTGGAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220083 representing NM_024830
 Red=Cloning site Green=Tags(s)

MRLRGCGPRAAPASSAGASDARLLAPPGRNPFVHELRLSALQKAQVALMTLTLFPVRLLVAAAMMLLAWP
 LALVASLGSAAKEPEQPPALWRKVVDLFLKAIMRTMWFAGGFHRVAVKGRQALPTEAAIILTLAPHSSYFD
 AIPVTMTMSSIVMKAESRDIPIWGLTIQYIRPVFVSRSDQDSRRKTVEEIKRRAQSNGKWPQIMIFPEGT
 CTNRTCLITFKPGAFIPGAPVQPVVLRYPNKLDITWTWQGPAGALEILWLTLCQFHNQVEIEFLPVYSPS
 EEEKRNPAIYASNVRRVMAEALGVSVDYTFEDCQLALAEQRLRPADTCLLEFARLVRGLGLKPEKLEK
 DLDRYSERARMKGGKIGIAEFAASLEVPVSDLLEDMSLFDSESGSVEVDLRECVVALSVVCRPARTLDT
 IQLAFKMYGAQEDGSGEGDLSCILKTALGVAELTVTDLFRAIDQEEKGITTFADHFRFAEMYPAFAEEY
 LYPDQTHFESCAETSPAPIPNGFCADFPENS DAGRKPVRKKLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6095_e10.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_024830

ORF Size: 1602 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024830.5](#)

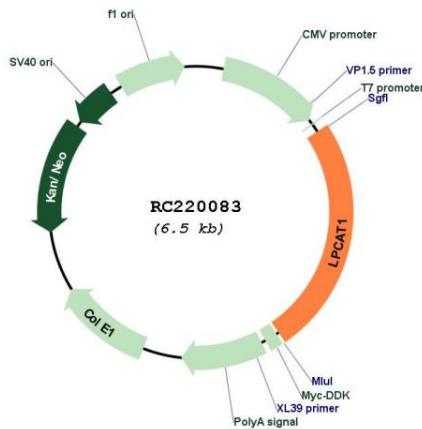
RefSeq Size: 3994 bp

RefSeq ORF: 1605 bp

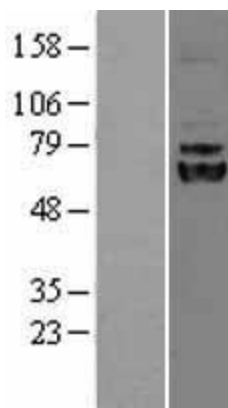
Locus ID: 79888

UniProt ID: [Q8NF37](#)
Cytogenetics: 5p15.33
Domains: EFh, Acyltransferase
Protein Families: Transmembrane
MW: 59 kDa
Gene Summary: This gene encodes a member of the 1-acyl-sn-glycerol-3-phosphate acyltransferase family of proteins. The encoded enzyme plays a role in phospholipid metabolism, specifically in the conversion of lysophosphatidylcholine to phosphatidylcholine in the presence of acyl-CoA. This process is important in the synthesis of lung surfactant and platelet-activating factor (PAF). Elevated expression of this gene may contribute to the progression of oral squamous cell, prostate, breast, and other human cancers. [provided by RefSeq, Sep 2016]

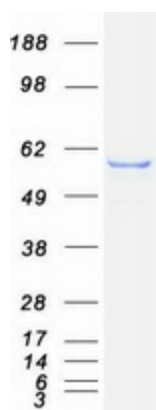
Product images:



Circular map for RC220083



Western blot validation of overexpression lysate (Cat# [LY403037]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220083 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LPCAT1 protein (Cat# [TP320083]). The protein was produced from HEK293T cells transfected with LPCAT1 cDNA clone (Cat# RC220083) using MegaTran 2.0 (Cat# [TT210002]).