

Datasheet for ABIN7563666

LPCAT1 Protein (AA 1-534) (His tag)[Go to Product page](#)

Overview

Quantity: 1 mg

Target: LPCAT1

Protein Characteristics: AA 1-534

Origin: Mouse

Source: HEK-293 Cells

Protein Type: Recombinant

Purification tag / Conjugate: This LPCAT1 protein is labelled with His tag.

Product Details

Purpose: Custom-made recombinant Lpcat1 Protein expressed in mammalian cells.

Sequence: MRLRGRGPRA APSSSSGAGD ARRLAPPGRN PFVHELRLSA LQKAQVAFMT LTLFPIRLLF
AAFMMLLAWP FALLASLGPP DKEPEQLAL WRKVVDLLK AIMRTMWFAG GFHRVAVKGR
QALPTEAAIL TLAPHSSYFD AIPVTMTMSS IVMKAESRDI PIWGTLIRYI RPVFVSRSDQ
DSRRKTVEEI KRRAQSNQKW PQIMIFPEGT CTNRTCLITF KPGAFIPGVP VQPVVLRYPN
KLDITWTWQ GPGALKILWL TLCQFQNQVE IEFLPVYCPS EEEKRNPALY ASNVRRVMAK
ALGVSVDYD FEDCQLALAE GQLRLPADTC LLEFARLV RG LGLKPENLEK DLDKYSesar
MKRGEKIRLP EFAAYLEVPV SDALED MFSL FDES GGGEID LREYVALSV VCRPSQTLAT
IQLAFKMYGS PEDGSIDEAN LSCILKTALG VSELTVTDLF QAIDQEDKGR ITFDDFCGFA
EMYPDYAEDY LYPDQTHFDS CAQTPPAPT NGFCIDFSPE NSDFGRKNKSC KKAD **Sequence
without tag. The proposed Purification-Tag is based on experiences with the expression
system, a different complexity of the protein could make another tag necessary. In case you
have a special request, please contact us.**

Product Details

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: **Key Benefits:**

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target: LPCAT1

Alternative Name: Lpcat1 ([LPCAT1 Products](#))

Background: Lysophosphatidylcholine acyltransferase 1 (LPC acyltransferase 1) (LPCAT-1) (LysoPC acyltransferase 1) (mLPCAT1) (EC 2.3.1.23) (1-acylglycerol-3-phosphate O-acyltransferase) (EC 2.3.1.51) (1-acylglycerophosphocholine O-acyltransferase) (1-alkenylglycerophosphocholine O-acyltransferase) (EC 2.3.1.25) (1-alkylglycerophosphocholine O-acetyltransferase) (EC 2.3.1.67) (Acetyl-CoA:lyso-platelet-activating factor acetyltransferase) (Acetyl-CoA:lyso-PAF acetyltransferase) (Lyso-PAF acetyltransferase) (LysoPAFAT) (Acyltransferase-like 2),FUNCTION: Exhibits both acyltransferase and acetyltransferase activities (PubMed:16704971, PubMed:18285344, PubMed:18156367). Activity is calcium-independent (PubMed:16704971, PubMed:18285344). Catalyzes the conversion of lysophosphatidylcholine (1-acyl-sn-glycero-3-phosphocholine or LPC) into phosphatidylcholine (1,2-diacyl-sn-glycero-3-phosphocholine or PC) (PubMed:16704971, PubMed:18285344, PubMed:18156367). Catalyzes

Target Details

the conversion 1-acyl-sn-glycerol-3-phosphate (lysophosphatidic acid or LPA) into 1,2-diacyl-sn-glycerol-3-phosphate (phosphatidic acid or PA) by incorporating an acyl moiety at the sn-2 position of the glycerol backbone (By similarity). Displays a clear preference for saturated fatty acyl-CoAs, and 1-myristoyl or 1-palmitoyl LPC as acyl donors and acceptors, respectively (PubMed:16704971, PubMed:18285344). Involved in platelet-activating factor (PAF) biosynthesis by catalyzing the conversion of the PAF precursor, 1-O-alkyl-sn-glycero-3-phosphocholine (lyso-PAF) into 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine (PAF) (PubMed:18285344). May synthesize phosphatidylcholine in pulmonary surfactant, thereby playing a pivotal role in respiratory physiology (PubMed:16704971). Involved in the regulation of lipid droplet number and size (By similarity). {ECO:0000250|UniProtKB:Q1HAQ0, ECO:0000250|UniProtKB:Q8NF37, ECO:0000269|PubMed:16704971, ECO:0000269|PubMed:18156367, ECO:0000269|PubMed:18285344}.

Molecular Weight: 59.7 kDa

UniProt: [Q3TFD2](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months