## PRODUCT INFORMATION

## Expression system

E.coli

## Domain

79-534aa

## UniProt No.

Q8NF37

## NCBI Accession No.

NP_079106

## Alternative Names

Lysophosphatidylcholine acyltransferase 1, AYTL2, Ipcat, PFAAP3

## PRODUCT SPECIFICATION

## Molecular Weight

53.4 kDa (479aa)

## Concentration

$0.25 \mathrm{mg} / \mathrm{ml}$ (determined by Bradford assay)

## Formulation

Liquid in. 20 mM Tris-HCl buffer ( pH 8.0 ) containing 1M urea, $10 \%$ glycerol

## Purity

> 90\% by SDS-PAGE

## Tag

His-Tag

## Application

SDS-PAGE, Denatured

## Storage Condition

Can be stored at +2 C to +8 C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

## Description

Lysophosphatidylcholine acyltransferase 1, also known as LPCAT1, belongs to the 1-acyl-sn-glycerol-3-phosphate acyltransferase family. It is a key enzyme for remodeling phospholipids, including phosphatidylcholine. LPCAT1 possesses both acyltransferase and acetyltransferase activities. It mediates the conversion of 1-acyl-sn-glycero-3-phosphocholine (LPC) into phosphatidylcholine (PC). Recombinant human LPCAT1 protein, fused to His-tag at Nterminus, was expressed in E. coli.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>SAEKEPE QPPALWRKVV DFLLKAIMRT MWFAGGFHRV AVKGRQALPT EAAILTLAPH SSYFDAIPVT MTMSSIVMKA ESRDIPIWGT LIQYIRPVFV SRSDQDSRRK TVEEIKRRAQ SNGKWPQIMI FPEGTCTNRT CLITFKPGAF IPGAPVQPVV LRYPNKLDTI TWTWQGPGAL EILWLTLCQF HNQVEIEFLP VYSPSEEEKR NPALYASNVR RVMAEALGVS VTDYTFEDCQ LALAEGQLRL PADTCLLEFA RLVRGLGLKP EKLEKDLDRY SERARMKGGE KIGIAEFAAS LEVPVSDLLE DMFSLFDESG SGEVDLRECV VALSVVCRPA RTLDTIQLAF KMYGAQEDGS VGEGDLSCIL KTALGVAELT VTDLFRAIDQ EEKGKITFAD FHRFAEMYPA FAEEYLYPDQ THFESCAETS PAPIPNGFCA DFSPENSDAG RKPVRKKLD

## General References

Yamazaki T., et al. (2012) Biol Pharm Bull. 35(9):1509-15.
Kazachkov M., et al. (2001) Lipids. 43(10):895-902.

DATA

SDS-PAGE


3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

