### For Research Use Only

# LPCAT1 Monoclonal antibody

Catalog Number:66044-1-lg Featured Product

8 Publications



**Basic Information** 

Catalog Number: 66044-1-lg Size: 1000 µg/ml Source:

Isotype: lgG2b

Mouse

Immunogen Catalog Number:

AG9060

GenBank Accession Number:

BC020166 GeneID (NCBI): 79888 **UNIPROT ID:** Q8NF37 Full Name:

lysophosphatidylcholine acyltransferase 1 Calculated MW:

534 aa. 59 kDa Observed MW: 55 kDa

**Purification Method:** 

Protein A purification

CloneNo.: 8B6E9

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:50-1:500 IF-P 1:200-1:800 IF/ICC 1:400-1:1600

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IHC, IF Species Specificity:

human, mouse, rat Cited Species: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: LNCaP cells, MCF-7 cells, PC-12 cells, ROS1728 cells, HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cellls, K-562 cells, HSC-T6 cells, NIH/3T3 cells, 4T1

IHC: human lung cancer tissue, human liver cancer

IF-P: mouse lung tissue, IF/ICC: HeLa cells,

## **Background Information**

 $LPCAT1, also \ named\ as\ AYTL2, PFAAP3\ and\ LysoPAFAT, belongs\ to\ the\ 1-acyl-sn-glycerol-3-phosphate$ acyltransferase family. It is a key enzyme for remodeling phospholipids, including phosphatidylcholine. The expression level of LPCAT1 is able to differentiate prostate cancer from noncancerous prostatic changes, and correlates to the tumor grade of prostate cancer. LPCAT1 possesses both acyltransferase and acetyltransferase activities. It mediates the conversion of 1-acyl-sn-glycero-3-phosphocholine (LPC) into phosphatidylcholine (PC).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Mingyue Tao	34518524	Cell Death Dis	WB,IF,IHC
Shotaro Yamano	36056156	Sci Rep	IHC
Yufei Liu	34221998	Front Oncol	IHC, WB

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

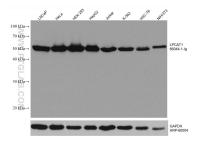
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

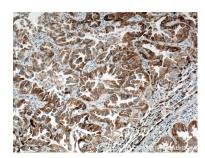
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

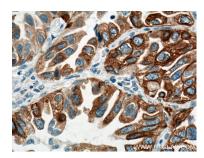
### **Selected Validation Data**



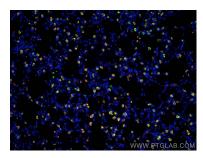
Various lysates were subjected to SDS PAGE followed by western blot with 66044-1-lg (LPCAT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control



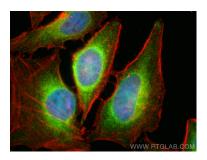
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66044-1-Ig (LPCAT1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66044-1-Ig (LPCAT1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse lung tissue using LPCAT1 antibody (66044-1-lg, Clone: 8B6E9) at dilution of 1:400 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), SFTPC antibody (10774-1-AP, green).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using LPCAT1 antibody (66044-1-lg, Clone: 8B6E9) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).