

For Research Use Only

# LPCAT1 Polyclonal antibody

Catalog Number: 16112-1-AP

Featured Product

36 Publications



## Basic Information

### Catalog Number:

16112-1-AP

### Size:

150ul, Concentration: 400 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG9035

### GenBank Accession Number:

BC020166

### GeneID (NCBI):

79888

### UNIPROT ID:

Q8NF37

### Full Name:

lysophosphatidylcholine acyltransferase 1

### Calculated MW:

534 aa, 59 kDa

### Observed MW:

59 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, 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**: A431 cells, human lung tissue, mouse spleen tissue, mouse brain tissue, rat brain tissue, A549 cells, mouse lung tissue, rat lung tissue

**IP**: mouse brain tissue,

**IHC**: human breast cancer tissue, mouse spleen tissue, mouse lung tissue, human colon cancer tissue

**IF/ICC**: A431 cells, 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
Patrick Lebok	31533087	Aging (Albany NY)	IHC
Xuedan Deng	36099794	Biomed Pharmacother	IHC, WB
Martin P Helley	26434622	Neuroscience	WB, IF

## Storage

### 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

\*\*\* 20ul sizes contain 0.1% BSA

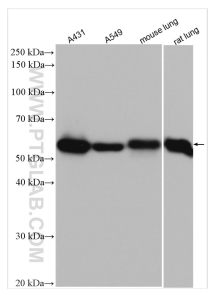
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

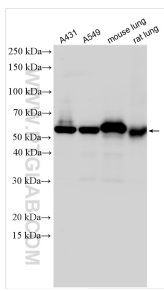
E: proteintech@ptglab.com  
W: ptglab.com

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

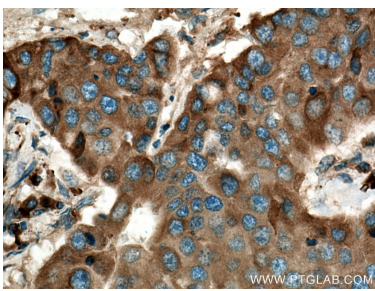
Selected Validation Data



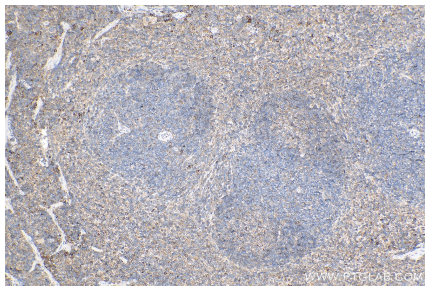
Various lysates were subjected to SDS PAGE followed by western blot with 16112-1-AP (LPCAT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



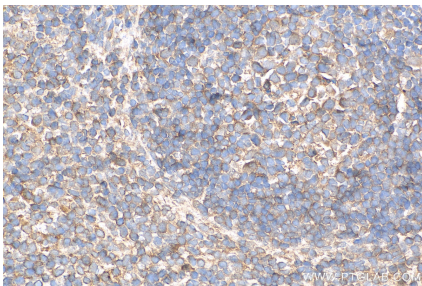
Various lysates were subjected to SDS PAGE followed by western blot with 16112-1-AP (LPCAT1 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



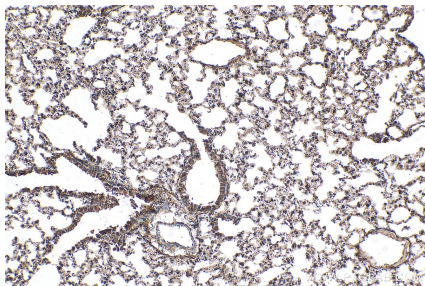
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



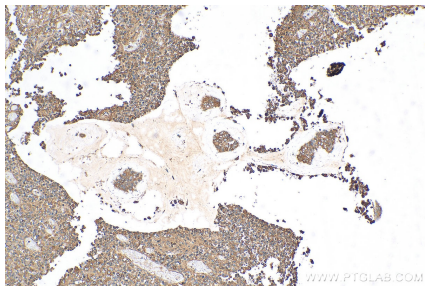
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



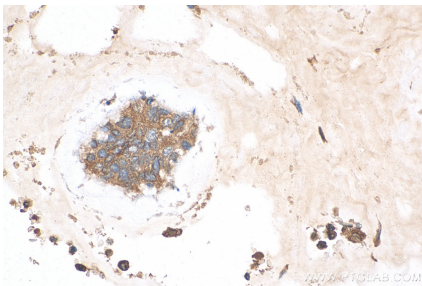
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



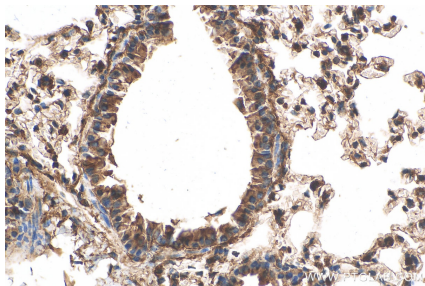
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



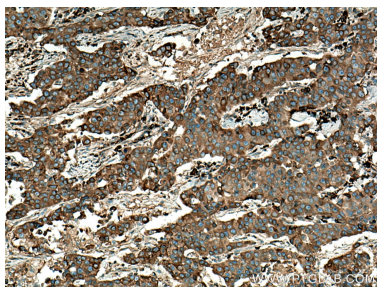
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



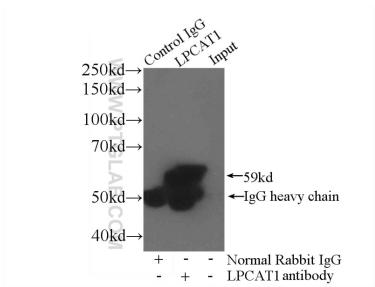
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



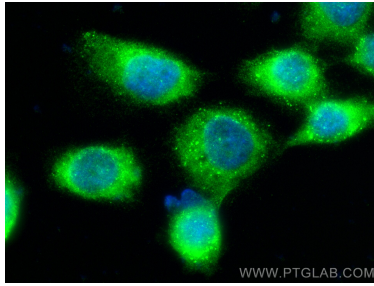
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-LPCAT1 (IP:16112-1-AP, 4ug; Detection:16112-1-AP 1:4000) with mouse brain tissue lysate 1280 ug.

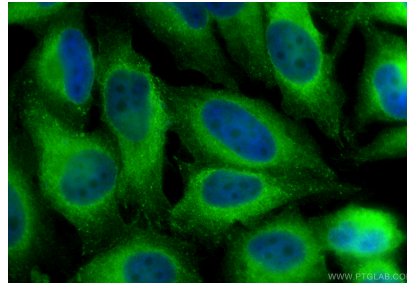


Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 16112-1-AP (LPCAT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using LPCAT1 antibody (16112-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).

IP result of anti-LPCAT1 (IP:16112-1-AP, 3ug; Detection:16112-1-AP 1:4000) with mouse brain tissue lysate 3600ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using LPCAT1 antibody (16112-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).