

LPCAT2 Antibody
Affinity-Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50790**Specification**

LPCAT2 Antibody - Product Information

Application	WB
Primary Accession	Q7L5N7
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60,31 KDa
Antigen Region	345-373

LPCAT2 Antibody - Additional Information**Gene ID** 54947**Other Names**

Lysophosphatidylcholine acyltransferase 2, LPC acyltransferase 2, LPCAT-2, LysoPC acyltransferase 2, 1-acylglycerol-3-phosphate O-acyltransferase 11, 1-AGP acyltransferase 11, 1-AGPAT 11, 1-acylglycerophosphocholine O-acyltransferase, 1-alkylglycerophosphocholine O-acetyltransferase, Acetyl-CoA:lyso-platelet-activating factor acetyltransferase, Acetyl-CoA:lyso-PAF acetyltransferase, Lyso-PAF acetyltransferase, LysoPAFAT, Acyltransferase-like 1, Lysophosphatidic acid acyltransferase alpha, LPAAT-alpha, LPCAT2, AGPAT11, AYTL1

Dilution

WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

LPCAT2 Antibody - Protein Information**Name** LPCAT2**Synonyms** AGPAT11, AYTL1**Function**

Exhibits both acyltransferase and acetyltransferase activities (PubMed:17182612, PubMed:20363836, PubMed:21498505). 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:21498505). Catalyzes 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 (PubMed:20363836). 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:17182612). Also converts lyso-PAF to 1-O-alkyl-2-acyl-sn-glycero-3-phosphocholine (PC), a major component of cell membranes and a PAF precursor (By similarity). Under resting conditions, acyltransferase activity is preferred (By similarity). Upon acute inflammatory stimulus, acyltransferase activity is enhanced and PAF synthesis increases (By similarity). Involved in the regulation of lipid droplet number and size (PubMed:25491198).

Cellular Location

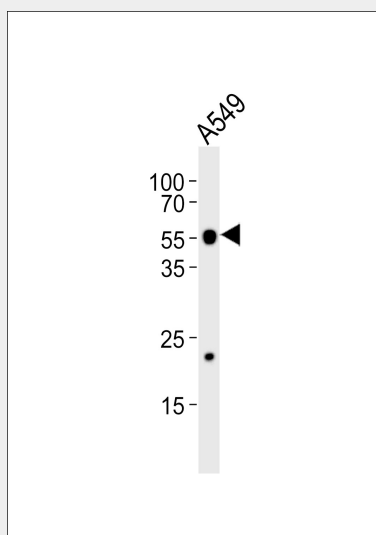
Endoplasmic reticulum membrane; Single-pass type II membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q8BYI6}; Single-pass type II membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q8BYI6}; Single-pass type II membrane protein. Lipid droplet

LPCAT2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LPCAT2 Antibody - Images



Western blot analysis of lysate from A549 cell line, using LPCAT2 Antibody (AP50790). AP50790 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

LPCAT2 Antibody - Background

Possesses both acyltransferase and acetyltransferase activities. Activity is calcium-dependent. 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). Also converts lyso-PAF to 1-O-alkyl-2-acyl-sn-glycero-3-phosphocholine (PC), a major component of cell membranes and a PAF precursor. Under resting conditions, acyltransferase activity is preferred. Upon acute inflammatory stimulus, acetyltransferase activity is enhanced and PAF synthesis increases. Also catalyzes the conversion of 1-acyl-sn-glycero-3-phosphocholine to 1,2-diacyl-sn-glycero-3-phosphocholine.

LPCAT2 Antibody - References

Shindou H., et al. J. Biol. Chem. 282:6532-6539(2007).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Bechtel S., et al. BMC Genomics 8:399-399(2007).
Agarwal A.K., et al. J. Lipid Res. 51:2143-2152(2010).
Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).