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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℃

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, acetyltransferase activity is enhanced and PAF synthesis increases (By similarity). Involved in the regulation of lipid droplet number and size (PubMed:25491198).

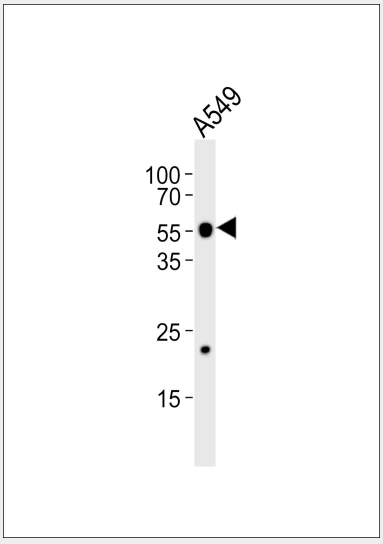
Cellular Location
Endoplasmic reticulum membrane; Single-pass type II membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q8BYI6}; Single-pass type II membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q8BYI6}; Single-pass type II membrane protein. Lipid droplet

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 Cytomety
- Cell Culture

LPCAT2 Antibody - Images



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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).
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Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).