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[KO]LPCAT1 Rabbit mAb

Catalog # AP75680

Product Information

Application	WB, IHC-P, IHC-F, FC, IP
Primary Accession	Q8NF37
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	59151

Additional Information

Gene ID	79888
Other Names	LPCAT1
Dilution	WB~~1:500-1:1000 IHC-P~~N/A IHC-F~~N/A FC~~1:20-1:50 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	LPCAT1
Synonyms	AYTL2, PFAAP3
Function	Exhibits acyltransferase activity (PubMed: 18156367, PubMed:21498505). Exhibits acetyltransferase activity (By similarity). Activity is calcium-independent (By similarity). 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:18156367, 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 (By similarity). Displays a clear preference for saturated fatty acyl-CoAs, and 1-myristoyl or 1-palmitoyl LPC as acyl donors and acceptors, respectively (By similarity). 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) (By similarity). May synthesize phosphatidylcholine in pulmonary surfactant, thereby playing a pivotal role in respiratory physiology (By similarity). Involved in the regulation of lipid droplet number and size (PubMed:25491198).

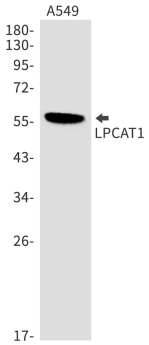
Cellular Location Endoplasmic reticulum membrane; Single-pass type II membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q3TFD2}; Single-pass type II membrane protein. Cell membrane; Single-pass type II membrane protein. Lipid droplet. Note=May adopt a monotopic topology when embedded in the lipid monolayer of the lipid droplet, with both termini exposed to the cytoplasm.

Tissue Location Erythrocytes..

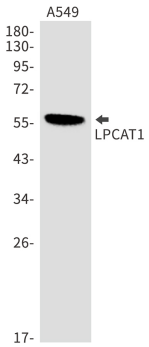
Background

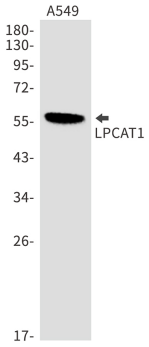
Possesses both acyltransferase and acetyltransferase activities (PubMed:16864775, PubMed:21498505). Activity is calcium-independent . Mediates the conversion of 1-acyl-sn-glycero-3-phosphocholine (LPC) into phosphatidylcholine (PC) (PubMed:21498505). Displays a clear preference for saturated fatty acyl-CoAs, and 1-myristoyl or 1-palmitoyl LPC as acyl donors and acceptors, respectively (PubMed:16704971). May synthesize phosphatidylcholine in pulmonary surfactant, thereby playing a pivotal role in respiratory physiology (PubMed:16864775). Involved in the regulation of lipid droplet number and size (PubMed:25491198).

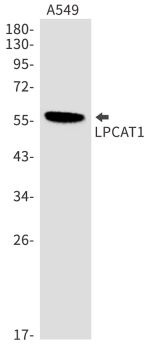
Images

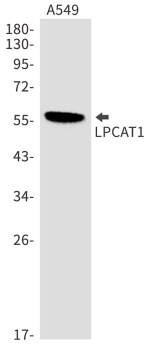


Western blot analysis of LPCAT1 in A549 lysates using LPCAT1 antibody.









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