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KD-Validated Anti-LPCAT1 Rabbit Monoclonal Antibody

Rabbit monoclonal Antibody
Catalog # AGI2204

Product Information

Application	WB, FC
Primary Accession	Q8NF37
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB180
Calculated MW	59151
Gene Name	LPCAT1
Aliases	LPCAT1; Lysophosphatidylcholine Acyltransferase 1; AGPAT10; AGPAT9; LPLAT8; AYTL2; Acetyl-CoA:Lyso-Platelet-Activating Factor Acetyltransferase; 1-Alkenylglycerophosphocholine O-Acyltransferase; 1-Alkylglycerophosphocholine O-Acetyltransferase; 1-Acylglycerophosphocholine O-Acyltransferase; 1-Acylglycerol-3-Phosphate O-Acyltransferase; Phosphonoformate Immuno-Associated Protein 3; Acetyl-CoA:Lyso-PAF Acetyltransferase; Lysophospholipid Acyltransferase 8; Lyso-PAF Acetyltransferase; LysoPC Acyltransferase 1; Acyltransferase-Like; LPC Acyltransferase 1; LysoPAFAT; FLJ12443; LPCAT-1; PFAAP3; Acyltransferase Like 2; EC 2.3.1.23; EC 2.3.1.51; EC 2.3.1.25; EC 2.3.1.67; Lpcat
Immunogen	Recombinant protein of human LPCAT1

Additional Information

Gene ID	79888
Other Names	Lysophosphatidylcholine acyltransferase 1, LPC acyltransferase 1, LPCAT-1, LysoPC acyltransferase 1, 2.3.1.23, 1-acylglycerol-3-phosphate O-acyltransferase, 2.3.1.51, Acetyl-CoA:lyso-platelet-activating factor acetyltransferase, Acetyl-CoA:lyso-PAF acetyltransferase, Lyso-PAF acetyltransferase, LysoPAFAT, Acyltransferase-like 2, Phosphonoformate immuno-associated protein 3, LPCAT1, AYTL2, PFAAP3

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..

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