

**KD-Validated Anti-LPCAT1 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal Antibody**  
**Catalog # AGI2204****Specification****KD-Validated Anti-LPCAT1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	<a href="#">Q8NF37</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 59 kDa, observed, 55 kDa kDa
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

**KD-Validated Anti-LPCAT1 Rabbit Monoclonal Antibody - 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

**KD-Validated Anti-LPCAT1 Rabbit Monoclonal Antibody - Protein Information**

**Name** LPCAT1**Synonyms** AYTL2, PFAAP3**Function**

Exhibits acyltransferase activity (PubMed:<a href="http://www.uniprot.org/citations/18156367" target="\_blank">18156367</a>, PubMed:<a href="http://www.uniprot.org/citations/21498505" target="\_blank">21498505</a>). 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:<a href="http://www.uniprot.org/citations/18156367" target="\_blank">18156367</a>, PubMed:<a href="http://www.uniprot.org/citations/21498505" target="\_blank">21498505</a>). 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:<a href="http://www.uniprot.org/citations/25491198" target="\_blank">25491198</a>).

**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.

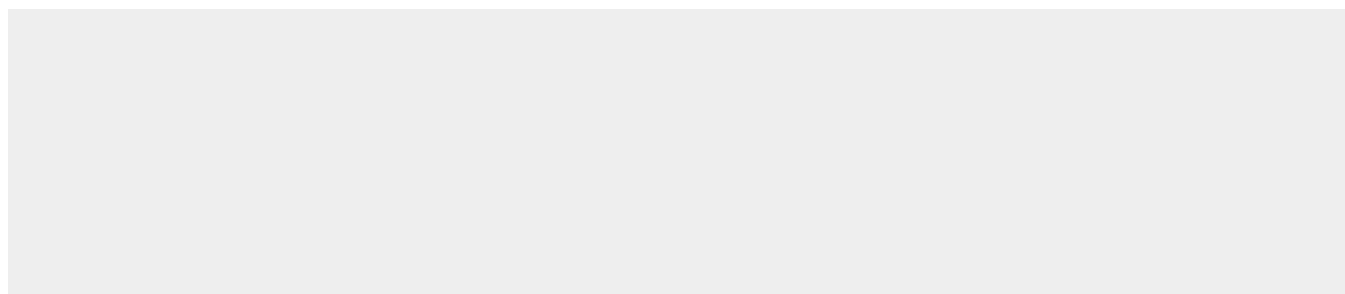
**Tissue Location**

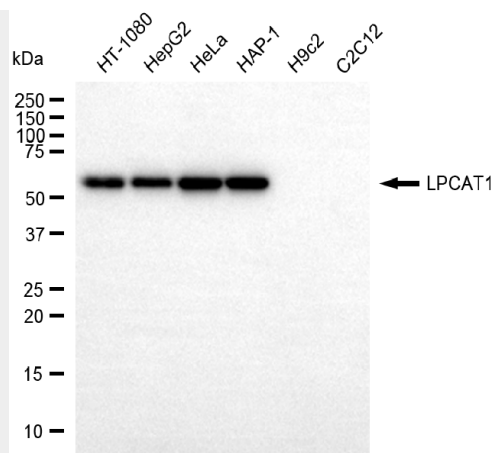
Erythrocytes..

**KD-Validated Anti-LPCAT1 Rabbit Monoclonal Antibody - Protocols**

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

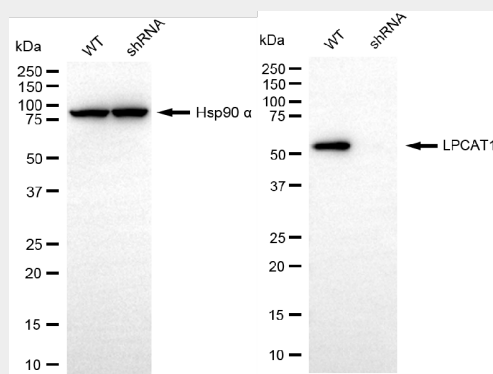
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**KD-Validated Anti-LPCAT1 Rabbit Monoclonal Antibody - Images**



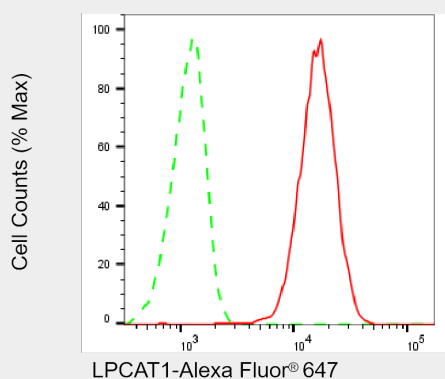
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Western blotting analysis using anti-LPCAT1 antibody (Cat#AGI2204). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-LPCAT1 antibody (Cat#AGI2204, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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Western blotting analysis using anti-LPCAT1 antibody (Cat#AGI2204). LPCAT1 expression in wild-type (WT) and LPCAT1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-LPCAT1 antibody (Cat#AGI2204, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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Flow cytometric analysis of LPCAT1 expression in HepG2 cells using anti-LPCAT1 antibody (Cat#AGI2204, 1:2,000). Green, isotype control; red, LPCAT1.