

# LCLT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5723b

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">Q6UWP7</a>
<b>Other Accession</b>	<a href="#">Q3UN02</a> , <a href="#">NP_872357.2</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB27045
<b>Calculated MW</b>	48920
<b>Antigen Region</b>	296-324

## Additional Information

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<b>Gene ID</b>	253558
<b>Other Names</b>	Lysocardiolipin acyltransferase 1, 231-, 1-acylglycerol-3-phosphate O-acyltransferase 8, 1-AGP acyltransferase 8, 1-AGPAT 8, Acyl-CoA:lysocardiolipin acyltransferase 1, LCLAT1, AGPAT8, ALCAT1, LYCAT
<b>Target/Specificity</b>	This LCLT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 296-324 amino acids of human LCLT1.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	LCLT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	LCLAT1
<b>Synonyms</b>	AGPAT8 {ECO:0000303 PubMed:16620771}, AL
<b>Function</b>	Exhibits acyl-CoA:lysocardiolipin acyltransferase (ALCAT) activity; catalyzes

the reacylation of lyso-cardiolipin to cardiolipin (CL), a key step in CL remodeling (By similarity). Recognizes both monolysocardiolipin and dilyocardiolipin as substrates with a preference for linoleoyl-CoA and oleoyl-CoA as acyl donors (By similarity). Also exhibits 1-acyl-sn-glycerol-3-phosphate acyltransferase activity (AGPAT) activity; converts 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:[16620771](#)). Possesses both lysophosphatidylinositol acyltransferase (LPIAT) and lysophosphatidylglycerol acyltransferase (LPGAT) activities (PubMed:[19075029](#)). Required for establishment of the hematopoietic and endothelial lineages (By similarity).

<b>Cellular Location</b>	Endoplasmic reticulum membrane; Multi-pass membrane protein
<b>Tissue Location</b>	Expressed at higher level in heart, kidney and pancreas than in brain, spleen, liver, lung, small intestine and placenta.

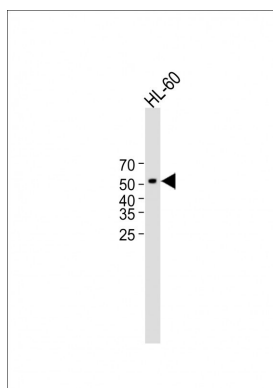
## Background

Acyl-CoA:lysocardiolipin acyltransferase. Possesses both lysophosphatidylinositol acyltransferase (LPIAT) and lysophosphatidylglycerol acyltransferase (LPGAT) activities. Recognizes both monolysocardiolipin and dilyocardiolipin as substrates with a preference for linoleoyl-CoA and oleoyl-CoA as acyl donors. Acts as a remodeling enzyme for cardiolipin, a major membrane polyglycerophospholipid. Converts lysophosphatidic acid (LPA) into phosphatidic acid (PA) with a relatively low activity. Required for establishment of the hematopoietic and endothelial lineages.

## References

Zhao, Y., et al. J. Lipid Res. 50(5):945-956(2009)  
Wang, C., et al. Blood 110(10):3601-3609(2007)  
Agarwal, A.K., et al. Arch. Biochem. Biophys. 449 (1-2), 64-76 (2006)

## Images



All lanes : Anti-LCLT1 Antibody (C-term) at 1:500 dilution  
Lane 1:HL-60 cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 49kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## Citations

- [The prognostic value of the GPAT/AGPAT gene family in hepatocellular carcinoma and its role in the tumor immune microenvironment.](#)
- [Label-free quantitative proteomic analysis of right ventricular remodeling in infant Tetralogy of Fallot patients.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.