10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# LCLT1 Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP5723b**

## Specification

### LCLT1 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | Q6UWP7 |
| Other Accession | Q3UN02, NP_872357.2 |
| Reactivity | **Human, Mouse** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **296-324** |

### LCLT1 Antibody (C-term) - Additional Information

**Gene ID** 253558

**Other Names**
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

**Target/Specificity**
This LCLT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 296-324 amino acids of human LCLT1.

**Dilution**
WB~~1:1000
IHC-P~~1:50~100

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
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.

**Precautions**
LCLT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### LCLT1 Antibody (C-term) - Protein Information

**Name** LCLAT1

**Synonyms** AGPAT8 {ECO:0000303|PubMed:16620771}, AL

**Function** 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 dilysocardiolipin 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).

**Cellular Location**
Endoplasmic reticulum membrane; Multi-pass membrane protein

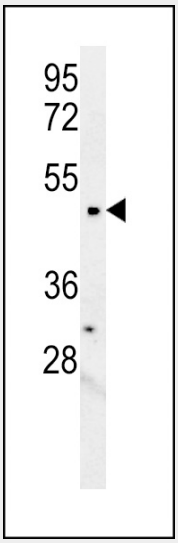
**Tissue Location**
Expressed at higher level in heart, kidney and pancreas than in brain, spleen, liver, lung, small intestine and placenta.

## LCLT1 Antibody (C-term) - Protocols

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

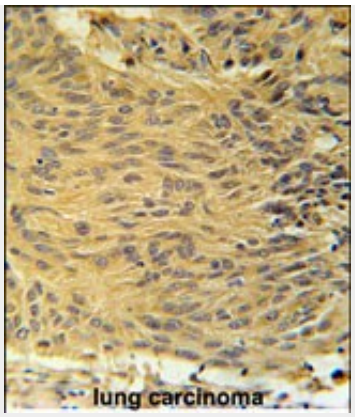
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## LCLT1 Antibody (C-term) - Images




LCLT1 Antibody (C-term) (Cat. #AP5723b) western blot analysis in mouse kidney tissue lysates (15ug/lane).This demonstrates the LCLT1 antibody detected LCLT1 protein (arrow).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999




LCLT1 Antibody (C-term) (Cat. #AP5723b) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the LCLT1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

**LCLT1 Antibody (C-term) - Background**

Acyl-CoA:lysocardiolipin acyltransferase. Possesses both lysophosphatidylinositol acyltransferase (LPIAT) and lysophosphatidylglycerol acyltransferase (LPGAT) activities. Recognizes both monolysocardiolipin and dilysocardiolipin 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.

**LCLT1 Antibody (C-term) - 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)

**LCLT1 Antibody (C-term) - 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.