

**LCLT1 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP5723b****Specification**

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**LCLT1 Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [Q6UWP7](#)  
Other Accession [NP\\_872357.2](#)

**LCLT1 Antibody (C-term) Blocking peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**LCLT1 Antibody (C-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/16620771" target="\_blank">16620771</a>). Possesses both lysophosphatidylinositol acyltransferase (LPIAT) and lysophosphatidylglycerol acyltransferase (LPGAT) activities (PubMed:<a href="http://www.uniprot.org/citations/19075029" target="\_blank">19075029</a>). 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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**LCLT1 Antibody (C-term) Blocking peptide - Images****LCLT1 Antibody (C-term) Blocking peptide - 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.

**LCLT1 Antibody (C-term) Blocking peptide - 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)