

**LCAT Antibody**  
**Rabbit mAb**  
**Catalog # AP92546**

## Specification

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### LCAT Antibody - Product Information

Application	WB, IHC, ICC, IP
Primary Accession	<a href="#">P04180</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
LCAT;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	49578 Da

### LCAT Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human LCAT
Description	Central enzyme in the extracellular metabolism of plasma lipoproteins. Synthesized mainly in the liver and secreted into plasma where it converts cholesterol and phosphatidylcholines (lecithins) to cholesteryl esters and lysophosphatidylcholines on the surface of high and low density lipoproteins (HDLs and LDLs).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### LCAT Antibody - Protein Information

**Name** LCAT

#### **Function**

Central enzyme in the extracellular metabolism of plasma lipoproteins. Synthesized mainly in the liver and secreted into plasma where it converts cholesterol and phosphatidylcholines (lecithins) to cholesteryl esters and lysophosphatidylcholines on the surface of high and low density lipoproteins

(HDLs and LDLs) (PubMed:<a href="http://www.uniprot.org/citations/10329423" target="\_blank">10329423</a>, PubMed:<a href="http://www.uniprot.org/citations/19065001" target="\_blank">19065001</a>, PubMed:<a href="http://www.uniprot.org/citations/26195816" target="\_blank">26195816</a>). The cholesterol ester is then transported back to the liver. Has a preference for plasma 16:0-18:2 or 18:0-18:2 phosphatidylcholines (PubMed:<a href="http://www.uniprot.org/citations/8820107" target="\_blank">8820107</a>). Also produced in the brain by primary astrocytes, and esterifies free cholesterol on nascent APOE-containing lipoproteins secreted from glia and influences cerebral spinal fluid (CSF) APOE- and APOA1 levels. Together with APOE and the cholesterol transporter ABCA1, plays a key role in the maturation of glial-derived, nascent lipoproteins. Required for remodeling high- density lipoprotein particles into their spherical forms (PubMed:<a href="http://www.uniprot.org/citations/10722751" target="\_blank">10722751</a>). Catalyzes the hydrolysis of 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine (platelet-activating factor or PAF) to 1-O-alkyl-sn-glycero-3-phosphocholine (lyso-PAF) (PubMed:<a href="http://www.uniprot.org/citations/8016111" target="\_blank">8016111</a>). Also catalyzes the transfer of the acetate group from PAF to 1-hexadecanoyl- sn-glycero-3-phosphocholine forming lyso-PAF (PubMed:<a href="http://www.uniprot.org/citations/8016111" target="\_blank">8016111</a>). Catalyzes the esterification of (24S)-hydroxycholesterol (24(S)OH-C), also known as cerebrosterol to produce 24(S)OH-C monoesters (PubMed:<a href="http://www.uniprot.org/citations/24620755" target="\_blank">24620755</a>).

#### **Cellular Location**

Secreted. Note=Secreted into blood plasma (PubMed:10222237, PubMed:3458198, PubMed:8820107) Produced in astrocytes and secreted into cerebral spinal fluid (CSF) (PubMed:10222237).

#### **Tissue Location**

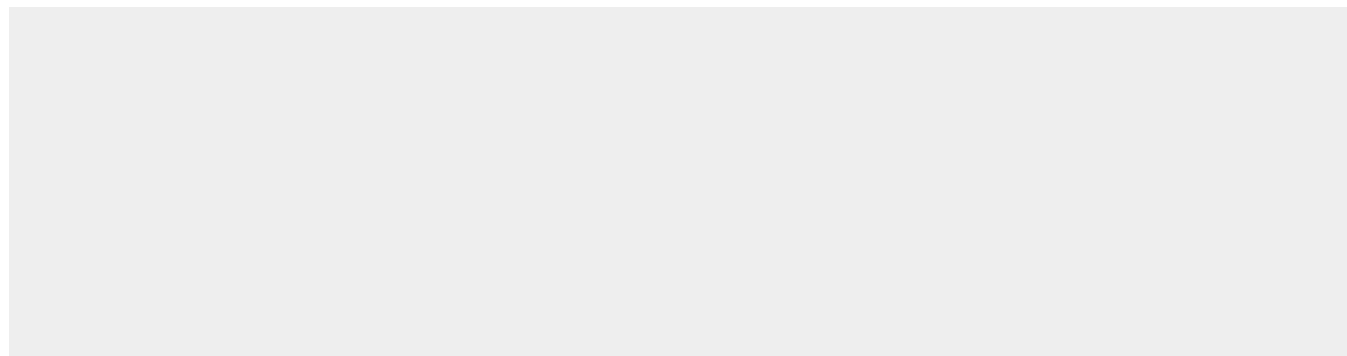
Detected in blood plasma (PubMed:10222237, PubMed:3458198, PubMed:8820107). Detected in cerebral spinal fluid (at protein level) (PubMed:10222237). Detected in liver (PubMed:3458198, PubMed:3797244). Expressed mainly in brain, liver and testes

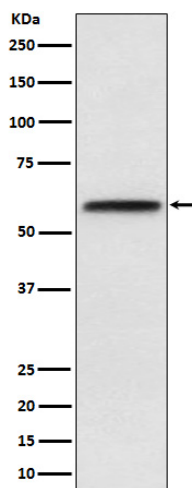
#### **LCAT Antibody - Protocols**

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](#)

#### **LCAT Antibody - Images**





Western blot analysis of LCAT expression in Human plasma lysate.