

**Goat Anti-LCAT Antibody (internal region)**  
Catalog # AF4306a**Specification****Goat Anti-LCAT Antibody (internal region) - Product Information**

Application	WB
Primary Accession	<a href="#">P04180</a>
Other Accession	<a href="#">NP_000220.1</a> , <a href="#">24530</a> , <a href="#">16816</a> , <a href="#">3931</a>
Reactivity	Human
Predicted	Human
Host	Goat
Isotype	IgG
Calculated MW	49578

**Goat Anti-LCAT Antibody (internal region) - Additional Information**

Gene ID 3931

**Other Names**

Phosphatidylcholine-sterol acyltransferase, 2.3.1.43, Lecithin-cholesterol acyltransferase, Phospholipid-cholesterol acyltransferase, LCAT

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-LCAT Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-LCAT Antibody (internal region) - 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: [10329423](http://www.uniprot.org/citations/10329423), PubMed: [19065001](http://www.uniprot.org/citations/19065001), PubMed: [26195816](http://www.uniprot.org/citations/26195816)). 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: [8820107](http://www.uniprot.org/citations/8820107)). 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

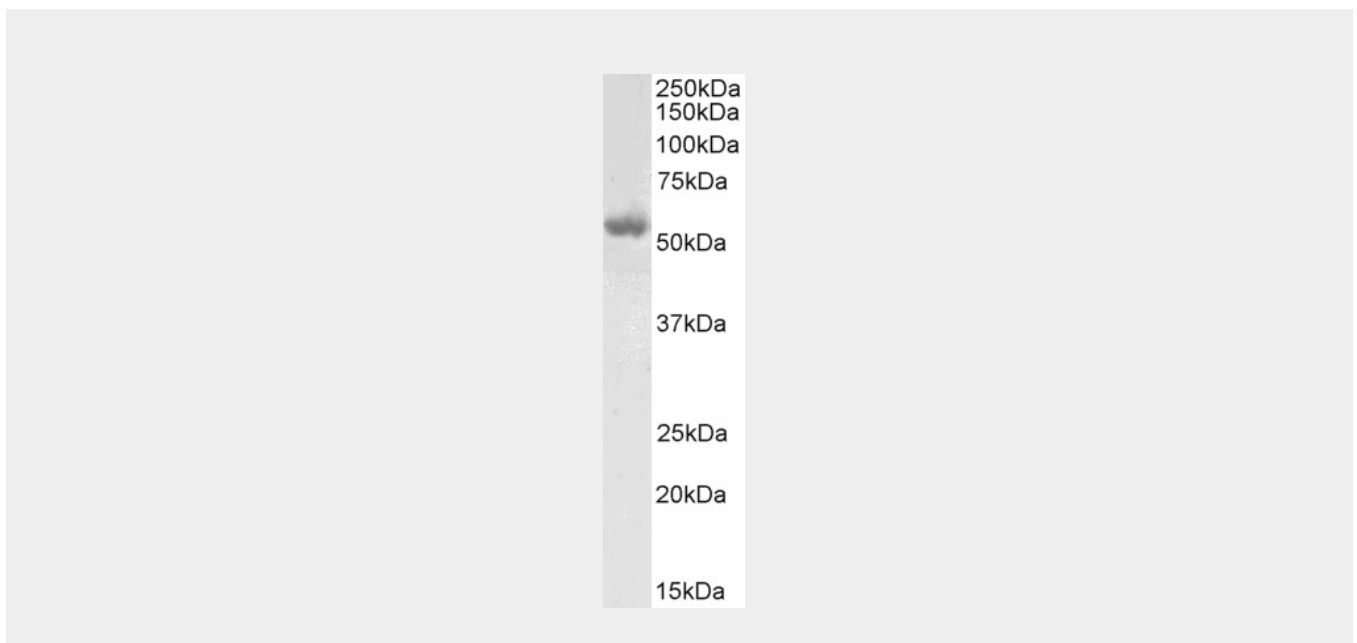
Detected in blood plasma (PubMed:10222237, PubMed:3458198, PubMed:8820107). Detected in cerebral spinal fluid (at protein level) (PubMed:10222237). Detected in liver (PubMed:3458198, PubMed:3797244). Expressed mainly in brain, liver and testes

### Goat Anti-LCAT Antibody (internal region) - 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](#)

### Goat Anti-LCAT Antibody (internal region) - Images



AF4306a (1  $\mu$ g/ml) staining of Human Testes lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.