

Goat Anti-LCAT Antibody (internal region)

Catalog # AF4306a

Specification

Goat Anti-LCAT Antibody (internal region) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Isotype Calculated MW WB, E <u>P04180</u> <u>NP_000220.1</u>, 24530, <u>16816</u>, <u>3931</u> Human Human Goat IgG 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

Dilution WB~~1:1000 E~~N/A

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, PubMed:10329423, PubMed:19065001, PubMed:26195816). The cholesterol ester is then transported back to the liver. Has a preference for plasma 16:0-18:2 or 18:O-18:2 phosphatidylcholines (PubMed:<a



href="http://www.uniprot.org/citations/8820107" target="_blank">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:10722751). Catalyzes the hydrolysis of 1-O-alkyl-2-acetyl-snglycero-3-phosphocholine (platelet-activating factor or PAF) to 1-Oalkyl-sn-glycero-3-phosphocholine (lyso-PAF) (PubMed:8016111). Also catalyzes the transfer of the acetate group from PAF to 1-hexadecanoyl- sn-glycero-3-phosphocholine forming lyso-PAF (PubMed:8016111). Catalyzes the esterification of (24S)-hydroxycholesterol (24(S)OH-C), also known as cerebrosterol to produce 24(S)OH-C monoesters (PubMed:24620755).

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-LCAT Antibody (internal region) - Images



250kDa 150kDa
100kDa
75kDa
 50kDa
37kDa
25kDa
20kDa
15kDa

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