

Goat Anti-LCAT Antibody (aa366-378) (internal region)

Catalog # AF4305a

Specification

Goat Anti-LCAT Antibody (aa366-378) (internal region) - Product Information

Application WB
Primary Accession P04180

Other Accession NP 000220.1, 24530, 16816, 3931

Reactivity Human

Predicted Human, Mouse, Rat, Pig, Cow, Dog

Host Goat Isotype IgG Calculated MW 49578

Goat Anti-LCAT Antibody (aa366-378) (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 (aa366-378) (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-LCAT Antibody (aa366-378) (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:19065001, PubMed:26195816, PubMed: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). 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-sn-glycero-3-phosphocholine (platelet-activating factor or PAF) to 1-O-alkyl-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" target="_blank">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:3458198, PubMed:8820107, PubMed:10222237) Produced in astrocytes and secreted into cerebral spinal fluid (CSF) (PubMed:10222237).

Tissue Location

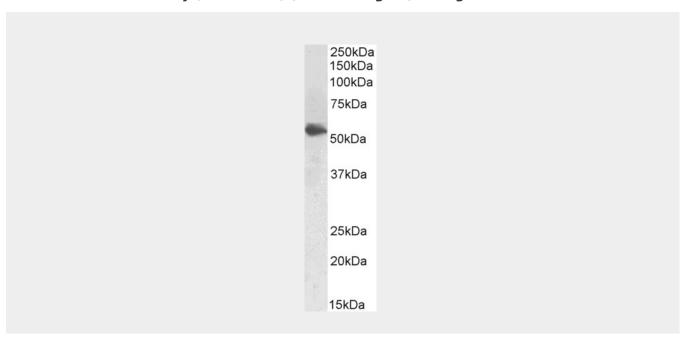
Detected in blood plasma (PubMed:3458198, PubMed:8820107, PubMed:10222237). Detected in cerebral spinal fluid (at protein level) (PubMed:10222237). Detected in liver (PubMed:3797244, PubMed:3458198). Expressed mainly in brain, liver and testes

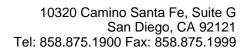
Goat Anti-LCAT Antibody (aa366-378) (internal region) - Protocols

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

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

Goat Anti-LCAT Antibody (aa366-378) (internal region) - Images







AF4305a (1 μ g/ml) staining of Human Testes lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.