

Product datasheet

info@arigobio.com

ARG42186 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody

Package: 50 μg Store at: -20°C

Summary

Product Description Goat Polyclonal antibody recognizes LCAT / Lecithin Cholesterol Acyltransferase

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Cow, Dog, Pig

Tested Application IHC-P, WB

Host Goat

Clonality Polyclonal

Isotype IgG

Target Name LCAT / Lecithin Cholesterol Acyltransferase

Species Human

Immunogen Synthetic peptide around the internal region of Human LCAT / Lecithin Cholesterol Acyltransferase. (C-

EDGDDTVATRSTE) (NP_000220.1)

Conjugation Un-conjugated

Alternate Names Phosphatidylcholine-sterol acyltransferase; Phospholipid-cholesterol acyltransferase; Lecithin-

cholesterol acyltransferase; EC 2.3.1.43

Application Instructions

Application table	Application	Dilution
	IHC-P	5 μg/ml
	WB	0.3 - 1 μg/ml
	WB: Recommend incubate at RT for 1h. IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human testis	
Observed Size	~ 55 kDa	

Properties

Form Liquid

Purification Affinity purified

Buffer Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 0.5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol LCAT

Gene Full Name lecithin-cholesterol acyltransferase

Background This gene encodes the extracellular cholesterol esterifying enzyme, lecithin-cholesterol acyltransferase.

The esterification of cholesterol is required for cholesterol transport. Mutations in this gene have been

found to cause fish-eye disease as well as LCAT deficiency. [provided by RefSeq, Jul 2008]

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). 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). [UniProt]

Calculated Mw 50 kDa

PTM O- and N-glycosylated. O-glycosylation on Thr-431 and Ser-433 consists of sialylated galactose beta

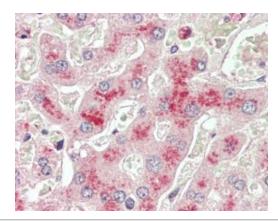
1-->3N-acetylgalactosamine structures. N-glycosylated sites contain sialylated triantennary and/or

biantennary complex structures. [UniProt]

Cellular Localization Secreted. Note=Secreted into blood plasma (PubMed:3458198, PubMed:8820107, PubMed:10222237).

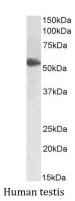
Produced in astrocytes and secreted into cerebral spinal fluid (CSF). [UniProt]

Images



ARG42186 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG42186 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody at 5 μ g/ml dilution followed by AP-staining.



ARG42186 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody WB image

Western blot: 35 μg of Human testes lysate (in RIPA buffer) stained with ARG42186 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody at 1 $\mu g/ml$ dilution and incubated at RT for 1 hour.