

ARG42192 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes LCAT / Lecithin Cholesterol Acyltransferase
Tested Reactivity	Hu, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	LCAT / Lecithin Cholesterol Acyltransferase
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 300-313 of Human LCAT / Lecithin Cholesterol Acyltransferase. (RDFQRFADLHFEE)
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
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Rat brain, U87, HeLa and SMMC-7721	
Observed Size	~ 60 kDa	

Properties

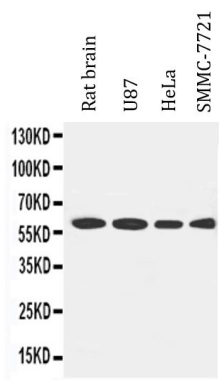
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody 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:1022237). Produced in astrocytes and secreted into cerebral spinal fluid (CSF). [UniProt]

Images



ARG42192 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody WB image

Western blot: Rat brain, U87, HeLa and SMMC-7721 cell lysates stained with ARG42192 anti-LCAT / Lecithin Cholesterol Acyltransferase antibody.