

# LCAT Rabbit mAb

Catalog # AP78438

#### **Product Information**

**Application** WB, IHC-P, IF, ICC, IP

Primary Accession P04180

Reactivity Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human LCAT

**Purification** Affinity Purified

Calculated MW 49578

## **Additional Information**

**Gene ID** 3931

Other Names LCAT

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

#### **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). 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:<u>8016111</u>). Also catalyzes the transfer of the acetate group from PAF to 1-hexadecanoyl-sn-glycero-3-phosphocholine forming lyso-PAF (PubMed:<u>8016111</u>). Catalyzes the esterification of (24S)-hydroxycholesterol (24(S)OH-C), also known as cerebrosterol to produce 24(S)OH-C monoesters (PubMed:<u>24620755</u>).

**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).

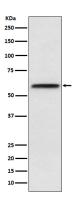
**Tissue Location** Detected in blood plasma (PubMed:10222237, PubMed:3458198,

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

### **Images**



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