

LCAT Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9868c**Specification**

LCAT Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P04180](#)**LCAT Antibody (Center) Blocking Peptide - Additional Information**

Gene ID 3931

Other NamesPhosphatidylcholine-sterol acyltransferase, Lecithin-cholesterol acyltransferase,
Phospholipid-cholesterol acyltransferase, LCAT**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LCAT Antibody (Center) Blocking Peptide - 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:10722751).

[8016111](http://www.uniprot.org/citations/8016111)). Also catalyzes the transfer of the acetate group from PAF to 1-hexadecanoyl- sn-glycero-3-phosphocholine forming lyso-PAF (PubMed:[8016111](http://www.uniprot.org/citations/8016111)). Catalyzes the esterification of (24S)-hydroxycholesterol (24(S)OH-C), also known as cerebrosterol to produce 24(S)OH-C monoesters (PubMed:[24620755](http://www.uniprot.org/citations/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

LCAT Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

LCAT Antibody (Center) Blocking Peptide - Images

LCAT Antibody (Center) Blocking Peptide - Background

LCAT encodes the extracellular cholesterol esterifying enzyme, lecithin-cholesterol acyltransferase. The esterification of cholesterol is required for cholesterol transport.

LCAT Antibody (Center) Blocking Peptide - References

Weissglas-Volkov, D., et al. Circ Cardiovasc Genet 3(1):31-38(2010)McGeachie, M., et al. Circulation 120(24):2448-2454(2009)Chen, S.N., et al. BMC Med. Genet. 10, 111 (2009) :Voora, D., et al. Circ Cardiovasc Genet 1(2):100-106(2008)