

# PRODUCT INFORMATION



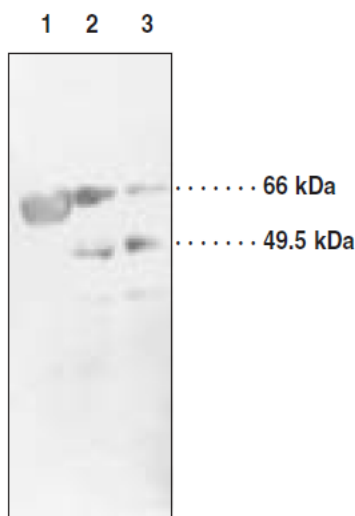
## LCAT Polyclonal Antibody

Item No. 10009323

### Overview and Properties

<b>Contents:</b>	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
<b>Synonyms:</b>	Lecithin:Cholesterol Acyltransferase, Phosphatidylcholine-Sterol O-Acyltransferase
<b>Immunogen:</b>	Synthetic peptide from an internal region of human LCAT
<b>Species Reactivity:</b>	(+) Human, mouse, porcine, bovine; other species not tested
<b>Uniprot No.:</b>	P04180
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Host:</b>	Rabbit
<b>Applications:</b>	Western blot (WB); the recommended starting dilution is 1:200 (1 µg/ml). Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



Lane 1: Human plasma (20 µg)  
Lane 2: Human plasma minus albumin (10 µg)  
Lane 3: Human plasma minus albumin (5 µg)

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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Lecithin:cholesterol acyltransferase (LCAT) has both phospholipase and acyltransferase activities. LCAT catalyzes the fatty acid transfer from the *sn*-2 position of phosphatidylcholine (lecithin) to cholesterol and to a lesser degree to other acceptor molecules.<sup>1,2</sup> This enzyme is critical to the process of reverse cholesterol transport or movement of cholesterol esters into high density lipoprotein (HDL) particles from cells.<sup>3</sup> LCAT is abundant in blood-plasma, however it is present in other fluids and tissues such as ovary. This protein may be detected on immunoblot at 49.5 kDa as well as at 66 kDa when fully glycosylated.<sup>4,5</sup> Plasma samples should be diluted prior to electrophoresis and immunoblotting to avoid the band-broadening effect caused by comigration with endogenous albumin.

## References

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1. Glomset, J.A. Physiological role of lecithin cholesterol acyltransferase. *Am. J. Clin. Nutr.* **23(8)**, 1129-1136 (1970).
2. McLean, J., Fielding, C., Drayna, D., *et al.* Cloning and expression of human lecithin-cholesterol acyltransferase cDNA. *Proc. Natl. Acad. Sci. U.S.A.* **83(8)**, 2335-2339 (1986).
3. Linsel-Nitschke, P. and Tall, A.R. HDL as a target in the treatment of atherosclerotic cardiovascular disease. *Nat. Rev. Drug Discov.* **4(3)**, 193-205 (2005).
4. Marcel, Y.L., Vézina, C.A., Weech, P.K., *et al.* Lecithin: Cholesterol Acyltransferase, a review and immunochemical studies. *Adv. Exp. Med. Biol.* **201**, 163-179 (1986).
5. Chisholm, J.W., Gebre, A.K., and Parks, J.S. Characterzation of C-terminal histidine-tagged human recombinant lecithin:cholesterol acyltransferase. *J. Lipid Res.* **40(8)**, 1512-1519 (1999).

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