

PRODUCT INFORMATION



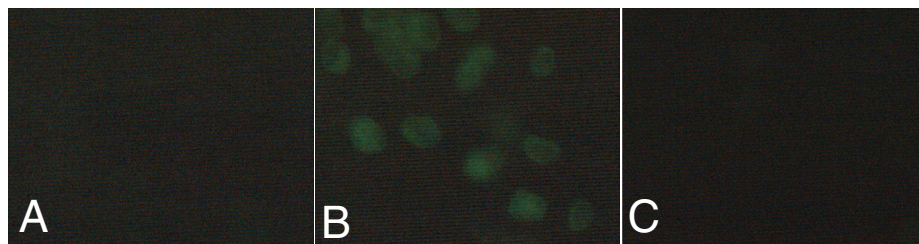
MBOAT5 Polyclonal Antibody

Item No. 14699

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms:	LPCAT3, LPLAT 5, Lysophosphatidylcholine acyltransferase 3, Lysophosphatidylserine acyltransferase, Lysophospholipid acyltransferase 5, OACT5
Immunogen:	Synthetic peptide from the C-terminal region of human MBOAT5
Species Reactivity:	(+) Human; other species not tested
Uniprot No.:	Q6P1A2
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Applications:	Flow cytometry (FC) and immunofluorescence (IF); the recommended starting dilution for FC and IF is 1:40-1:80. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Immunofluorescent staining of MCF-7 cells. MCF-7 cells were fixed in 4% formaldehyde and permeabilized followed by blocking with 1% FBS. Cells were probed with the indicated antibody *Panel A:* FITC Secondary Alone *Panel B:* MBOAT5 Monoclonal Antibody (1:40) *Panel C:* MBOAT5 Monoclonal Antibody (1:40) + 10 µg/ml immunizing peptide

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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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

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Description

Membrane bound O-acyl transferases (MBOATs) are a group of conserved, multiple transmembrane spanning enzymes involved in many biological functions including lipid biosynthesis, embryogenesis, nutrient sensing, and membrane lipid remodeling. This group of proteins is associated with pathologies such as diabetes, obesity, atherosclerosis and Alzheimer's disease.¹ MBOAT5 catalyzes the conversion of lysophosphatidylserine (1-acyl-2-hydroxy-*sn*-glycero-3-phospho-L-serine or LPS) into phosphatidylserine (1,2-diacyl-*sn*-glycero-3-phospho-L-serine or PS) (LPSAT activity), and favors polyunsaturated fatty acyl-CoAs as acyl donors compared to saturated fatty acyl-CoAs. MBOAT5 is a major enzyme contributing to LPCAT activity in the liver.² MBOAT5 and other lysophospholipid acyltransferases (LPLATs), are involved in the Lands cycle by catalyzing the reacylation of phospholipid remodeling.³ Cayman's MBOAT5 Polyclonal Antibody can be used for flow cytometry and immunofluorescence applications. The antibody recognizes MBOAT5 from human samples.

References

1. Chang, C.C.Y., Sun, J., and Chang, T.Y. Membrane-bound O-acyltransferases (MBOATs). *Front. Biol.* **6(3)**, 177-182 (2011).
2. Zhao, Y., Chen, Y.Q., Bonacci, T.M., *et al.* Identification and characterization of a major liver lysophosphatidylcholine acyltransferase. *J. Biol. Chem.* **283(13)**, 8258-8265 (2007).
3. Gijón, M.A., Riekhof, W.R., Zarini, S., *et al.* Lysophospholipid acyltransferases and arachidonate recycling in human neutrophils. *J. Biol. Chem.* **283(44)**, 30235-30245 (2008).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
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FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM