

PRODUCT INFORMATION



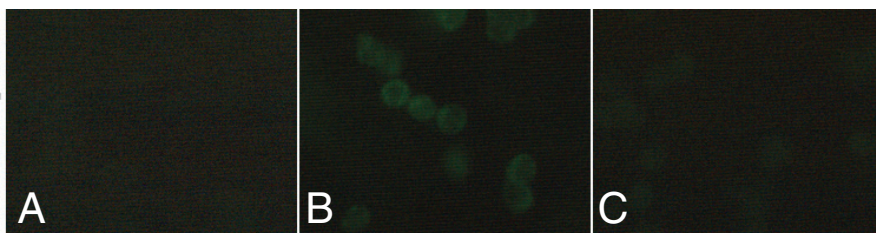
MBOAT4 Polyclonal Antibody

Item No. 18614

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms:	Ghrelin O-Acyltransferase, GOAT, Membrane-bound O-Acyltransferase Domain-containing Protein 4
Immunogen:	Synthetic peptide from the internal intracellular region of human MBOAT4
Species Reactivity:	(+) Human; other species not tested
Uniprot No.:	Q96T53
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 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:* MBOAT4 Polyclonal Antibody (1:40) *Panel C:* MBOAT4 Polyclonal Antibody (1:40) + 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 MBOAT4 is responsible for the octanoylation of ghrelin at serine 3, and can use a number of fatty acids as substrates including octanoic acid, decanoic acid, and tetradecanoic acid.² Increases in the expression of MBOAT4 are dependent on preproghrelin expression during insulin-induced adipogenesis.³ Cayman's MBOAT4 Polyclonal Antibody detects MBOAT in MCF-7 and RT-4 cells by flow cytometry and immunofluorescence in 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. Gutierrez, J.A., Solenberg, P.J., Perkins, D.R., *et al.* Ghrelin octanoylation mediated by an orphan lipid transferase. *Proc. Nat. Acad. Sci. USA* **105**(17), 6320-6325 (2008).
3. Gurriarán-Rodríguez, U., Al-Massadi, O., Crujeiras, A.B., *et al.* Preproghrelin expression is a key target for insulin action on adipogenesis. *J. Endocrinol.* **210**(2) (2011).

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