

# MBOAT7 Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19694c

#### **Product Information**

Application WB, E
Primary Accession Q96N66

Other Accession Q8CHK3, Q0VCY6, NP 001139528.1, NP 001139554.1, NP 001139555.1,

NP 077274.3

**Reactivity** Human, Rat, Mouse **Predicted** Mouse, Bovine

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB40838Calculated MW52765Antigen Region151-180

### **Additional Information**

**Gene ID** 79143

Other Names Lysophospholipid acyltransferase 7, LPLAT 7, 231-,

1-acylglycerophosphatidylinositol O-acyltransferase, 231n4, Bladder and breast carcinoma-overexpressed gene 1 protein, Leukocyte receptor cluster member 4, Lysophosphatidylinositol acyltransferase, LPIAT, Lyso-PI acyltransferase, Membrane-bound O-acyltransferase domain-containing protein 7, O-acyltransferase domain-containing protein 7, h-mboa-7,

MBOAT7, BB1, LENG4, OACT7

**Target/Specificity**This MBOAT7 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 151-180 amino acids from the Central

region of human MBOAT7.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** MBOAT7 Antibody(Center) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name MBOAT7 ( HGNC:15505)

**Synonyms** BB1, LENG4, OACT7

**Function** Acyltransferase which catalyzes the transfer of an acyl group from an

acyl-CoA to a lysophosphatidylinositol (1- acylglycerophosphatidylinositol or

LPI) leading to the production of a phosphatidylinositol

(1,2-diacyl-sn-glycero-3-phosphoinositol or PI) and participates in the reacylation step of the phospholipid remodeling pathway also known as the

Lands cycle (PubMed: 18094042, PubMed: 18772128). Prefers

arachidonoyl-CoA as the acyl donor, thus contributing to the regulation of free levels arachidonic acid in cell (PubMed:18094042, PubMed:18772128). In liver, participates in the regulation of triglyceride metabolism through the phosphatidylinositol acyl-chain remodeling regulation (PubMed:32253259).

**Cellular Location** Endoplasmic reticulum membrane; Multi-pass membrane protein.

Note=Localized in specific membrane structures termed

mitochondria-associated membranes (MAMs) which connect the endoplasmic

reticulum (ER) and the mitochondria.

**Tissue Location** Overexpressed in metastatic breast and bladder carcinomas relative to

normal breast epithelium and urothelium

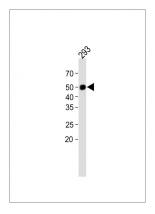
## **Background**

This gene encodes a member of the membrane-bound O-acyltransferases family of integral membrane proteins that have acyltransferase activity. The encoded protein is a lysophosphatidylinositol acyltransferase that has specificity for arachidonoyl-CoA as an acyl donor. This protein is involved in the reacylation of phospholipids as part of the phospholipid remodeling pathway known as the Land cycle. Alternative splicing results in multiple transcript variants.

#### References

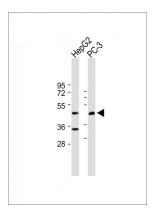
Gijon, M.A., et al. J. Biol. Chem. 283(44):30235-30245(2008) Lee, H.C., et al. Mol. Biol. Cell 19(3):1174-1184(2008) Wende, H., et al. Immunogenetics 51 (8-9), 703-713 (2000): Fukunaga-Johnson, N., et al. Anticancer Res. 16 (3A), 1085-1090 (1996):

### **Images**

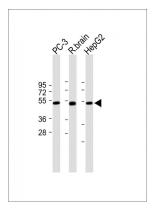


All lanes: Anti-MBOAT7 Antibody(Center) at 1:1000 dilution Lane 1: 293 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 50kDa Blocking/Dilution buffer: 5% NFDM/TBST.

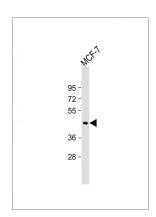
All lanes: Anti-MBOAT7 Antibody(Center) at 1:1000



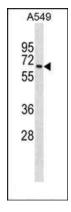
dilution Lane 1: HepG2 whole cell lysate Lane 2: PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 45kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes: Anti-MBOAT7 Antibody(Center) at 1:1000 dilution Lane 1: PC-3 whole cell lysate Lane 2: rat brain tissue lysate Lane 3: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 53kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-MBOAT7 Antibody (Center) at 1:2000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MBOAT7 Antibody (Center) (Cat. #AP19694c) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the MBOAT7 antibody detected the MBOAT7 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.