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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, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40838
Calculated MW	52765
Antigen Region	151-180

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

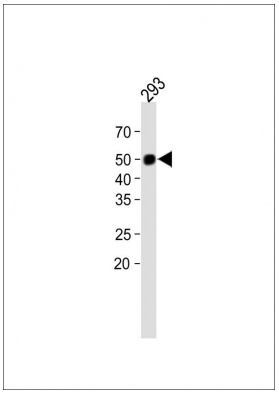
Background

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

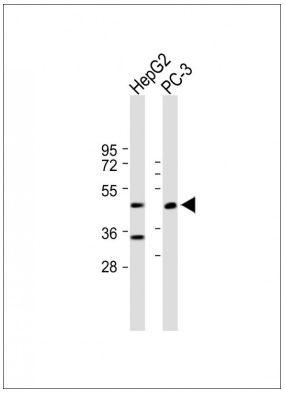
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Lee, H.C., et al. Mol. Biol. Cell 19(3):1174-1184(2008)
Wende, H., et al. Immunogenetics 51 (8-9), 703-713 (2000) :
Fukunaga-Johnson, N., et al. Anticancer Res. 16 (3A), 1085-1090 (1996) :

Images

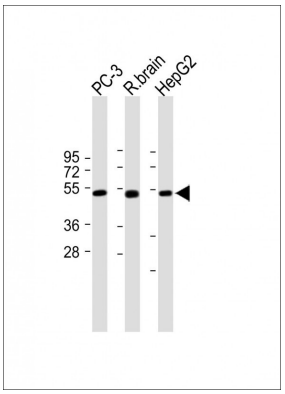


All lanes : Anti-MBOAT7 Antibody(Center) at 1:1000 dilution Lane 1: 293 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 50kDa Blocking/Dilution buffer: 5% NFDM/TBST.

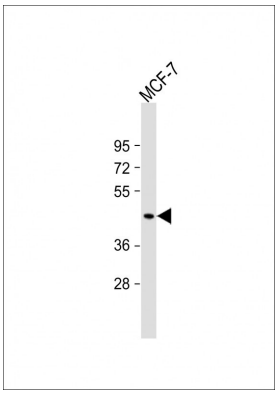
All lanes : Anti-MBOAT7 Antibody(Center) at 1:1000



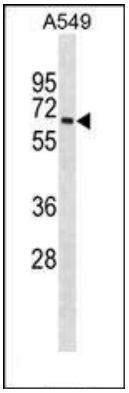
dilution Lane 1: HepG2 whole cell lysate Lane 2: PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 45kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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'.