For Research Use Only

MBOAT7 Recombinant antibody

Catalog Number:83546-3-RR



Purification Method:

Basic Information

Catalog Number: GenBank Accession Number: 83546-3-RR BC006309

BC006309 Protein A purfication

Positive Controls:

IF/ICC: HuH-7 cells,

IHC: mouse testis tissue,

 Size:
 GeneID (NCBI):
 CloneNo.:

 1000 ug/ml
 79143
 240505E8

 Source:
 UNIPROT ID:
 Recommended Dilutions:

 Rabbit
 Q96N66
 IHC 1:250-1:1000

 Isotype:
 Full Name:
 IF/ICC 1:125-1:500

IgG membrane bound O-acyltransferase

Immunogen Catalog Number: domain containing 7
AG24466 Calculated MW:

472 aa, 53 kDa

Applications

Tested Applications:

IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval met 16.0

with citrate buffer pH 6.0

Background Information

MBOAT7 (membrane-bound O-acyltransferase domain containing 7), also known as LPIAT, LENG4, or BB1, belongs to the MBOAT superfamily. MBOAT7 acylates lyso-phosphatidylinositol (lyso-PI) with arachidonyl-CoA and is involved in phosphatidylinositol acyl-chain remodeling in the Lands cycle (PMID: 30959108; PMID: 35509994). MBOAT7 deficiency in humans leads to developmental disorders of the central nervous system, with intellectual disability, epilepsy, and autism spectrum disorder (PMID: 37316513). The calculated molecular weight of MBOAT7 is 53 kDa. This antibody can recognize the 45 kDa isoform of MBOAT7.

Storage

Storage:

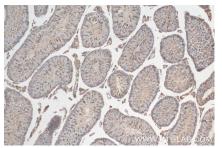
Store at -20°C. Stable for one year after shipment.

Storage Buffer

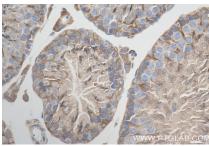
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

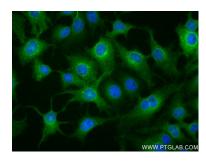
Selected Validation Data



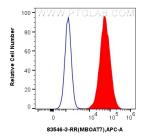
Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using 83546-3-RR (MBOAT7 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



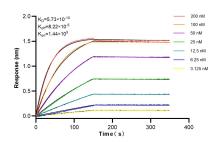
Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using 83546-3-RR (MBOAT7 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HuH-7 cells using MBOAT7 antibody (83546-3-RR, Clone: 240505E8) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10^6 A549 cells were intracellularly stained with 0.25 ug MBOAT7 Recombinant antibody (83546-3-RR, Clone:240505E8) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83546-3-RR against Human MBOAT7 were performed. The affinity constant is 0.573 nM.