

For Research Use Only

# MBOAT7 Recombinant antibody

Catalog Number: 83546-3-RR



## Basic Information

<b>Catalog Number:</b> 83546-3-RR	<b>GenBank Accession Number:</b> BC006309	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 79143	<b>CloneNo.:</b> 240505E8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q96N66	<b>Recommended Dilutions:</b> IHC 1:250-1:1000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> membrane bound O-acyltransferase domain containing 7	
<b>Immunogen Catalog Number:</b> AG24466	<b>Calculated MW:</b> 472 aa, 53 kDa	

## Applications

<b>Tested Applications:</b> IHC, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human	<b>IHC :</b> mouse testis tissue, <b>IF/ICC :</b> HuH-7 cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

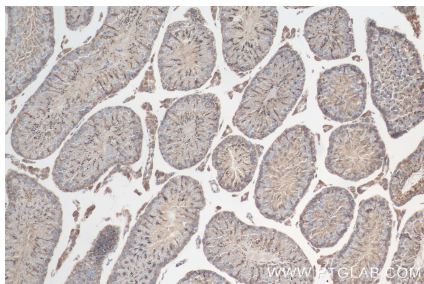
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

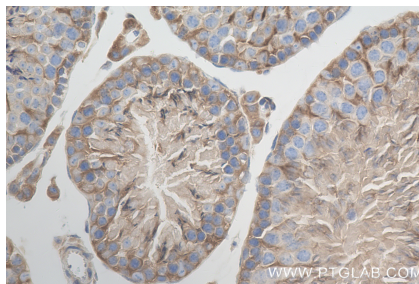
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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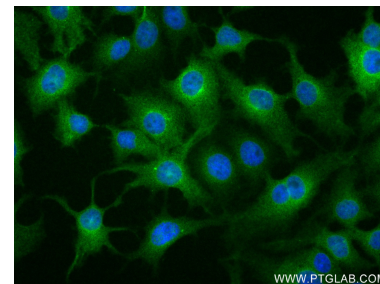
## Selected Validation Data



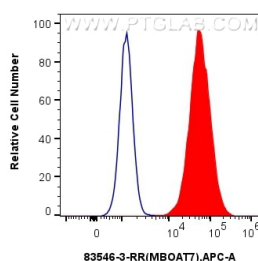
Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 83546-3-RR (MBOAT7 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



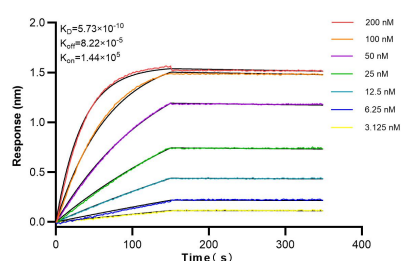
Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 83546-3-RR (MBOAT7 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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<sup>6</sup> 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.