

## **LPAAT-θ Polyclonal Antibody**

Catalog No: YT2584

Reactivity: Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: LPAAT-θ

Fields: >>Glycerolipid metabolism;>>Glycerophospholipid metabolism;>>Metabolic

pathways

Gene Name: AGPAT9

**Protein Name:** Glycerol-3-phosphate acyltransferase 3

Q53EU6

Q8C0N2

Human Gene Id: 84803

**Human Swiss Prot** 

No:

Mouse Gene ld: 231510

**Mouse Swiss Prot** 

No:

**Rat Gene Id:** 305166

Rat Swiss Prot No: Q4V8J4

Immunogen: The antiserum was produced against synthesized peptide derived from human

AGPAT9. AA range:381-430

Specificity: LPAAT-θ Polyclonal Antibody detects endogenous levels of LPAAT-θ protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 48kD

**Background:** This gene encodes a member of the lysophosphatidic acid acyltransferase

protein family. The encoded protein is an enzyme which catalyzes the conversion

of glycerol-3-phosphate to lysophosphatidic acid in the synthesis of

triacylglycerol. Multiple alternatively spliced variants, encoding the same protein,

have been identified. [provided by RefSeq, Jan 2012],

**Function:** catalytic activity:Acyl-CoA + sn-glycerol 3-phosphate = CoA + 1-acyl-sn-glycerol

3-phosphate.,domain:The HXXXXD motif is essential for acyltransferase activity

and may constitute the binding site for the phosphate moiety of the glycerol-3-phosphate.,enzyme regulation:Inhibited by N-ethylmaleimide (NEM).,function:Esterifies acyl-group from acyl-ACP to the sn-1 position of

glycerol-3-phosphate, an essential step in glycerolipid biosynthesis.

Overexpression activates the mTOR pathway.,pathway:Glycerolipid metabolism;

triacylglycerol biosynthesis.,pathway:Phospholipid metabolism; CDP-

diacylglycerol biosynthesis; CDP-diacylglycerol from sn-glycerol 3-phosphate: step 1/3.,similarity:Belongs to the 1-acyl-sn-glycerol-3-phosphate acyltransferase family.,tissue specificity:Widely expressed. Expressed in liver, kidney, testis,

brain, heart, skeletal muscle, thyroid, prostate, thymus and placenta.

Subcellular Location:

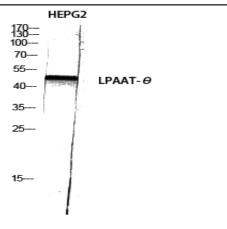
Endoplasmic reticulum membrane ; Multi-pass membrane protein .

**Expression:** 

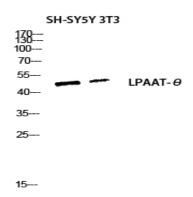
Widely expressed. Expressed in liver, kidney, testis, brain, heart, skeletal muscle, thyroid, prostate, thymus and placenta. Also expressed lung and adipose

tissue.

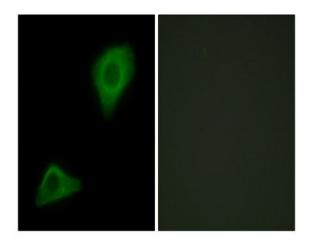
## **Products Images**



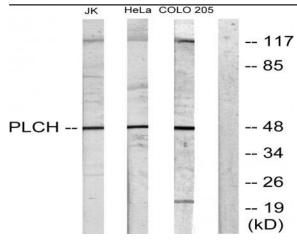
Western Blot analysis of HEPG2 using LPAAT-0 Polyclonal Antibody diluted at 1:1000



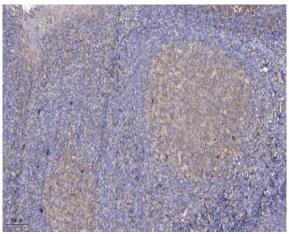
Western blot analysis of SH-SY5Y 3T3 lysis using LPAAT- $\theta$  antibody. Antibody was diluted at 1:1000



Immunofluorescence analysis of HepG2 cells, using PLCH Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, COLO205 cells, HeLa cells, and HUVEC cells, using PLCH Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).