

**LPAAT- $\theta$  Polyclonal Antibody**  
Catalog # AP70767**Specification****LPAAT- $\theta$  Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q53EU6</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**LPAAT- $\theta$  Polyclonal Antibody - Additional Information**

Gene ID 84803

**Other Names**

AGPAT9; GPAT3; MAG1; HMFN0839; Glycerol-3-phosphate acyltransferase 3; GPAT-3; 1-acylglycerol-3-phosphate O-acyltransferase 9; 1-AGP acyltransferase 9; 1-AGPAT 9; Acyl-CoA:glycerol-3-phosphate acyltransferase 3; hGPAT3; Lung cancer metastas

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**LPAAT- $\theta$  Polyclonal Antibody - Protein Information**Name GPAT3 ([HGNC:28157](#))

Synonyms AGPAT9, MAG1

**Function**

Converts glycerol-3-phosphate to 1-acyl-sn-glycerol-3-phosphate (lysophosphatidic acid or LPA) by incorporating an acyl moiety at the sn-1 position of the glycerol backbone (PubMed:[17170135](http://www.uniprot.org/citations/17170135)). Also converts LPA into 1,2-diacyl-sn-glycerol-3-phosphate (phosphatidic acid or PA) by incorporating an acyl moiety at the sn-2 position of the glycerol backbone (PubMed:[19318427](http://www.uniprot.org/citations/19318427)). Protects cells against lipotoxicity (PubMed:[30846318](http://www.uniprot.org/citations/30846318)).

**Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein

### Tissue Location

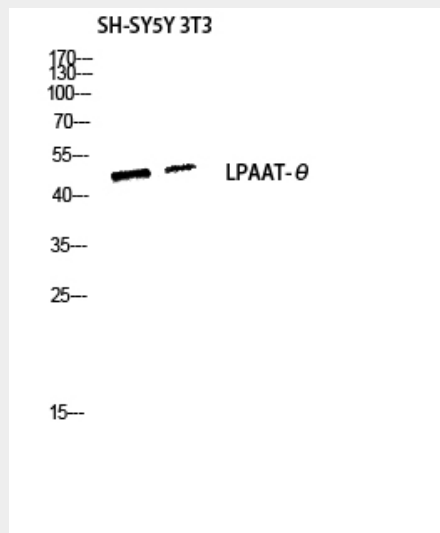
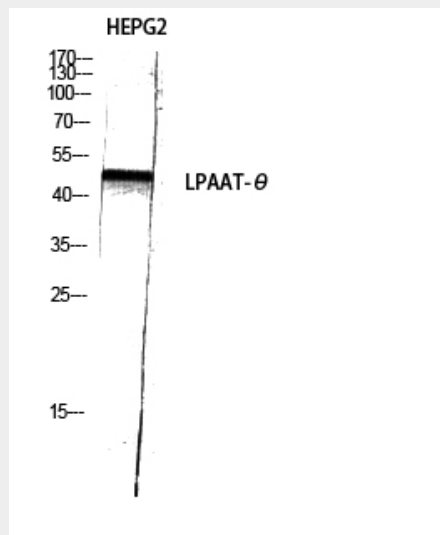
Widely expressed. Expressed in liver, kidney, testis, brain, heart, skeletal muscle, thyroid, prostate, thymus and placenta. Also expressed lung and adipose tissue

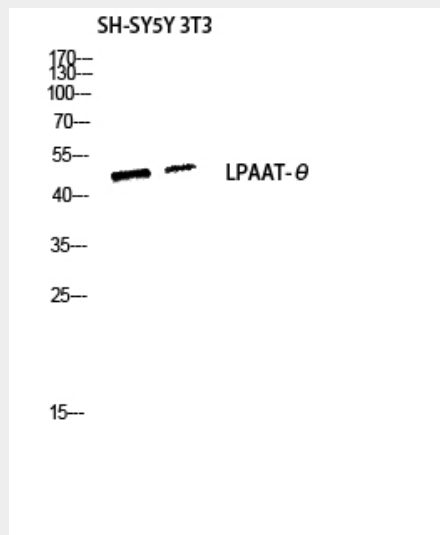
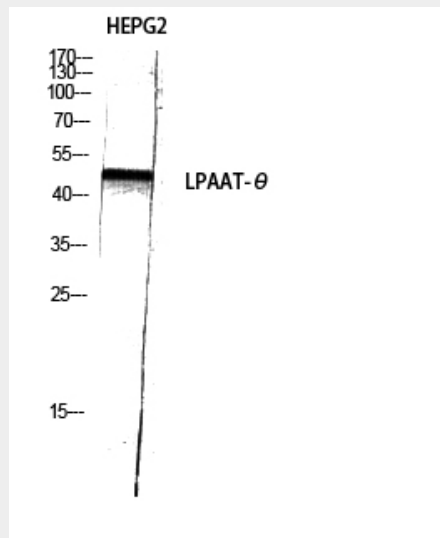
### LPAAT- $\theta$ Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### LPAAT- $\theta$ Polyclonal Antibody - Images





### LPAAT-θ Polyclonal Antibody - Background

May transfer the acyl-group from acyl-coA to the sn-1 position of glycerol-3-phosphate, an essential step in glycerolipid biosynthesis. Also transfers the acyl-group from acyl-coA to the sn-2 position of 1-acyl-sn-glycerol-3-phosphate (lysophosphatidic acid, or LPA), forming 1,2-diacyl-sn-glycerol-3-phosphate (phosphatidic acid, or PA).