

LPAAT-θ Polyclonal Antibody

Catalog # AP70767

Product Information

Application	WB, IHC-P, IF
Primary Accession	<u>Q53EU6</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48705

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. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	GPAT3 (<u>HGNC:28157</u>)
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: <u>17170135</u>). 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: <u>19318427</u>). Protects cells against lipotoxicity (PubMed: <u>30846318</u>).
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

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).

Images



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