



LPAAT-θ Polyclonal Antibody

Catalog No	YP-Ab-02661
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	AGPAT9
Protein Name	Glycerol-3-phosphate acyltransferase 3
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	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.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	48kD
Cell Pathway	Endoplasmic reticulum membrane ; Multi-pass membrane protein .
Tissue Specificity	Widely expressed. Expressed in liver, kidney, testis, brain, heart, skeletal muscle, thyroid, prostate, thymus and placenta. Also expressed lung and adipose tissue.
Function	catalytic activity:Acyl-CoA + sn-glycerol 3-phosphate = CoA + 1-acyl-sn-glycerol 3-phosphate.,domain:The HXXXX 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.

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],

matters needing attention

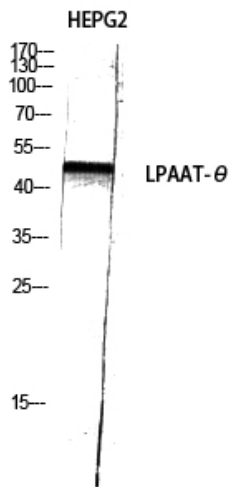
Avoid repeated freezing and thawing!

Usage suggestions

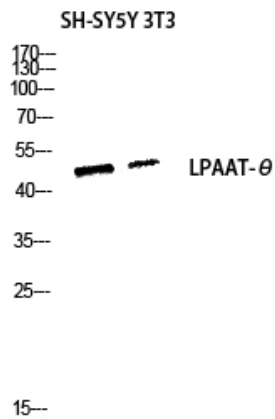
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



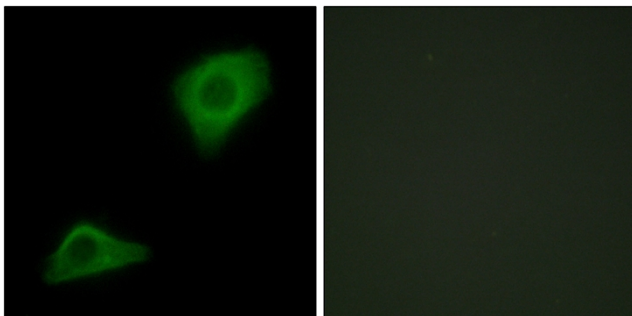
Products Images



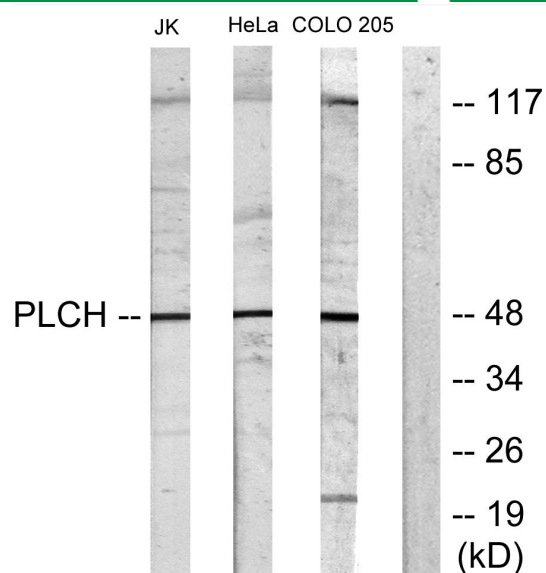
Western Blot analysis of HEPG2 using LPAAT-θ Polyclonal Antibody diluted at 1:1000



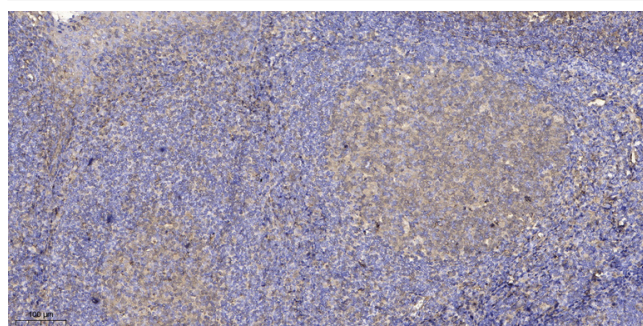
Western blot analysis of SH-SY5Y 3T3 lysis using LPAAT-θ antibody. Antibody was diluted at 1:1000



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).