

**AGPAT3 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8686c****Specification**

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**AGPAT3 Antibody (Center) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q9NRZ7</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	43381
Antigen Region	241-269

**AGPAT3 Antibody (Center) - Additional Information****Gene ID** 56894**Other Names**

1-acyl-sn-glycerol-3-phosphate acyltransferase gamma, 1-acylglycerol-3-phosphate O-acyltransferase 3, 1-AGP acyltransferase 3, 1-AGPAT 3, Lysophosphatidic acid acyltransferase gamma, LPAAT-gamma, AGPAT3, LPAAT3

**Target/Specificity**

This AGPAT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 241-269 amino acids from the Central region of human AGPAT3.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

AGPAT3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**AGPAT3 Antibody (Center) - Protein Information****Name** AGPAT3

## Synonyms LPAAT3

**Function** Converts 1-acyl-sn-glycerol-3-phosphate (lysophosphatidic acid or 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:[21173190](#)). Acts on LPA containing saturated or unsaturated fatty acids C16:0-C20:4 at the sn-1 position using C18:1, C20:4 or C18:2-CoA as the acyl donor (PubMed:[21173190](#)). Also acts on lysophosphatidylcholine, lysophosphatidylinositol and lysophosphatidylserine using C18:1 or C20:4-CoA (PubMed:[21173190](#)). Has a preference for arachidonoyl-CoA as a donor (By similarity). Has also a modest lysophosphatidylinositol acyltransferase (LPIAT) activity, converts lysophosphatidylinositol (LPI) into phosphatidylinositol (By similarity).

## Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Nucleus envelope

## Tissue Location

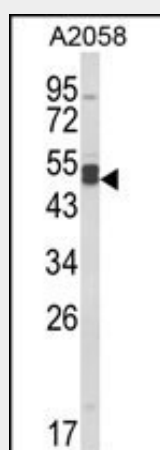
Widely expressed with highest levels in testis, pancreas and kidney, followed by spleen, lung, adipose tissue and liver.

## AGPAT3 Antibody (Center) - Protocols

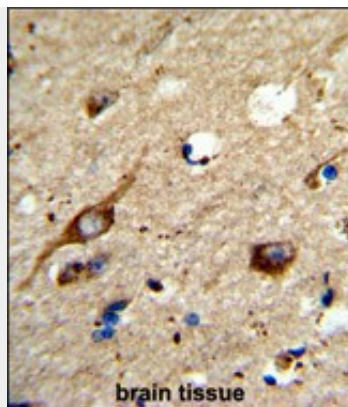
Provided below are standard protocols that you may find useful for product applications.

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

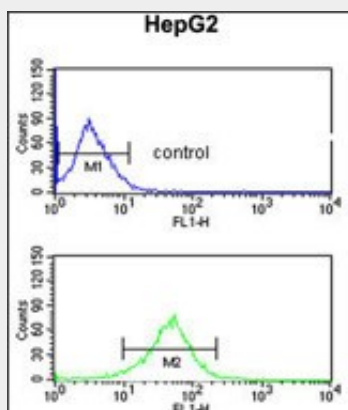
## AGPAT3 Antibody (Center) - Images



Western blot analysis of AGPAT3 Antibody (Center) (Cat. #AP8686c) in A2058 cell line lysates (35ug/lane). AGPAT3 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with AGPAT3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



AGPAT3 Antibody (Center) (Cat. #AP8686c) flow cytometric analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **AGPAT3 Antibody (Center) - Background**

AGPAT3 is an acyltransferase that converts lysophosphatidic acid into phosphatidic acid, which is the second step in the de novo phospholipid biosynthetic pathway. This protein may be an integral membrane protein.

### **AGPAT3 Antibody (Center) - References**

Leung, D.W. et.al., Front. Biosci. 6, D944-D953 (2001)  
Lu, B., et.al., Biochem. J. 385 (PT 2), 469-477 (2005)