10320 Camino Santa Fe, Suite G
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AGPAT3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8686c

Specification

AGPAT3 Antibody (Center) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	Q9NRZ7
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
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

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

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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). Also has a modest lysophosphatidylinositol acyltransferase (LPIAT) activity, converts lysophosphatidylinositol (LPI) into phosphatidylinositol (By similarity).

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

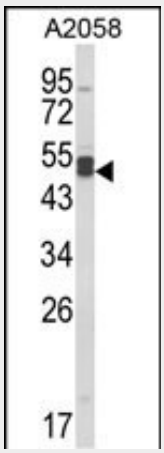
Tissue Location
Widely expressed with highest levels in testis, pancreas and kidney, followed by spleen, lung, adipose tissue and liver.

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 Cytomety
- 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.

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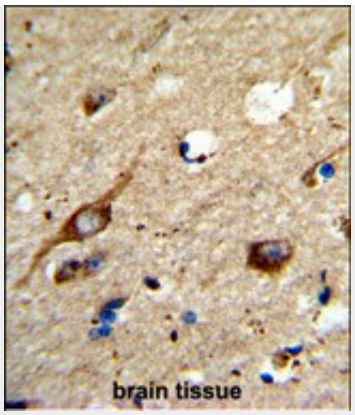
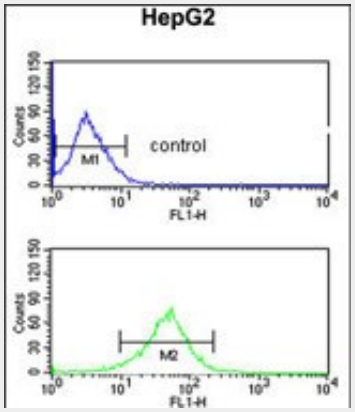


Formalin-fixed and paraffin-embedded human brain tissue reacted with AGPAT3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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)