

# AGPAT3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50839

## **Product Information**

Application	WB
Primary Accession	<u>Q9NRZ7</u>
Reactivity	Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	43381

### **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
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

## **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). 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.

## Background

Converts lysophosphatidic acid (LPA) into phosphatidic acid by incorporating an acyl moiety at the sn-2 position of the glycerol backbone. 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. Also acts on lysophosphatidylcholine, lysophosphatidylinositol and lysophosphatidylserine using C18:1 or C20:4-CoA.

### References

Leung D.W.,et al.Front. Biosci. 6:D944-D953(2001). Nagamine K.,et al.Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases. Clark H.F.,et al.Genome Res. 13:2265-2270(2003). Hattori M.,et al.Nature 405:311-319(2000). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

#### Images



Western blot analysis of lysate from human testis tissue lysate,using AGPAT3 Antibody, was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

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