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AGPAT5 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50840

Product Information

Application	WB
Primary Accession	Q9NUQ2
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Calculated MW	42072

Additional Information

Gene ID	55326
Other Names	1-acyl-sn-glycerol-3-phosphate acyltransferase epsilon, 1-acylglycerol-3-phosphate O-acyltransferase 5, 1-AGP acyltransferase 5, 1-AGPAT 5, Lysophosphatidic acid acyltransferase epsilon, LPAAT-epsilon, AGPAT5
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℃

Protein Information

Name	AGPAT5
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 C15:0-C20:4 at the sn-1 position using C18:1-CoA as the acyl donor (PubMed:21173190). Also acts on lysophosphatidylethanolamine using oleoyl-CoA, but not arachidonoyl- CoA, and lysophosphatidylinositol using arachidonoyl-CoA, but not oleoyl-CoA (PubMed:21173190). Activity toward lysophosphatidylglycerol not detectable (PubMed:21173190).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Nucleus envelope Mitochondrion
Tissue Location	Widely expressed.

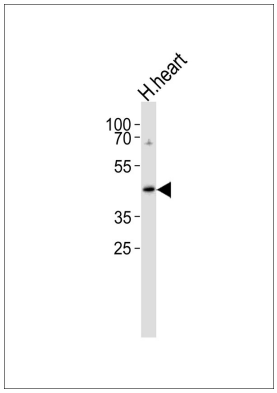
Background

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 C15:0-C20:4 at the sn-1 position using C18:1-CoA as the acyl donor. Also acts on lysophosphatidylethanolamine using oleoyl-CoA, but not arachidonoyl-CoA, and lysophosphatidylinositol using arachidonoyl-CoA, but not oleoyl-CoA. Activity toward lysophosphatidylglycerol not detectable.

References

Leung D.W.,et al.Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
Wiemann S.,et al.Genome Res. 11:422-435(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Agarwal A.K.,et al.Arch. Biochem. Biophys. 449:64-76(2006).
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).

Images



Western blot analysis of lysate from human heart tissue lysate,using AGPAT5 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.