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AGPAT3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50839

Product Information

Application	WB
Primary Accession	Q9NRZ7
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℃

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.

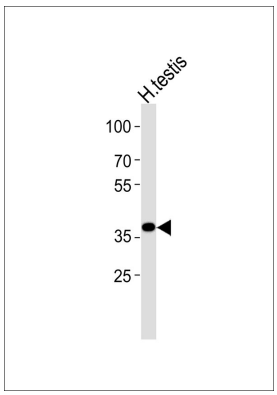
Background

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.