

LPGAT1 Rabbit pAb

Catalog # AP97753

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q92604
Other Accession	Q92604
Predicted	Rat, Pig, Human, Mouse, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43089
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LPGAT1
Epitope Specificity	151-250/370
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the 1-acyl-sn-glycerol-3-phosphate acyltransferase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Acyl-CoA:lysophosphatidylglycerol (LPG) acyltransferase catalyzes the reacylation of LPG to phosphatidylglycerol, a membrane phospholipid that is an important precursor for the synthesis of cardiolipin (Yang et al., 2004 [PubMed 15485873]).[supplied by OMIM, Mar 2008]

Additional Information

Gene ID	9926
Other Names	FAM34A; FAM34A1; LPLAT7; NET8; LGAT1_HUMAN; LPGAT1; 2-acylglycerophosphocholine O-acyltransferase; Acyl-CoA:monoacylglycerol acyltransferase LPGAT1; Lysophospholipid acyltransferase 7 (LPLAT7); Stearoyl-CoA:1-lyso-2-acyl-PE acyltransferase; KIAA0205; LGAT1_MOUSE; lysophosphatidylglycerol acyltransferase 1; family with sequence similarity 34, member A; lysophospholipid acyltransferase 7
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	LPGAT1 (HGNC:28985)
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Function	Lysophospholipid acyltransferase involved in fatty acyl chain remodeling of glycerophospholipids in the endoplasmic reticulum membrane (By similarity). Selectively catalyzes the transfer and esterification of saturated long-chain fatty acids from acyl-CoA to the sn-1 position of 1-lyso-2-acyl phosphatidylethanolamines (1-lyso-PE, LPE), with a preference for stearoyl CoA over palmitoyl CoA as acyl donor (PubMed:36049524). Acts in concert with an unknown phospholipase A1 to convert palmitate phosphatidylethanolamine (PE) species into stearate ones. Provides substrates to the PE methylation pathway, controlling stearate/palmitate composition of PE and phosphatidylcholine (PC) species with an overall impact on de novo hepatic lipid synthesis, body fat content and life span (By similarity). Can acylate lysophosphatidylglycerols (LPG) using various saturated fatty acyl-CoAs as acyl donors (PubMed:15485873). Can also acylate monoacylglycerols with a preference for 2-monoacylglycerols over 1-monoacylglycerols (By similarity). Has no activity toward lysophosphatidic acids (LPA) (By similarity).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein
Tissue Location	Highly expressed in liver and placenta. Also expressed in peripheral blood, lung, kidney and brain. Detected at lower levels in colon. High expression is detected in brain and testis

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.