10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LPGAT1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22020c

Specification

LPGAT1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q92604
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**43089**

LPGAT1 Antibody (Center) - Additional Information

Gene ID 9926

Other Names
Acyl-CoA:lysophosphatidylglycerol acyltransferase 1, 2.3.1.-, LPGAT1, FAM34A, KIAA0205

Target/Specificity
This LPGAT1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 144-177 amino acids from the Central region of human LPGAT1.

Dilution
WB~~1:2000
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
LPGAT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

LPGAT1 Antibody (Center) - Protein Information

Name LPGAT1 (HGNC:28985)

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

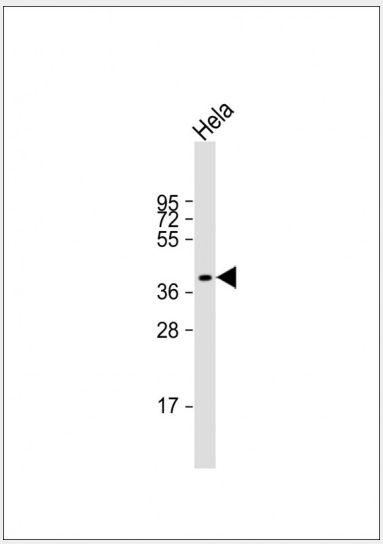
Tissue Location
Highly expressed in liver and placenta. Also expressed in peripheral blood, lung, kidney and brain. Detected at lower levels in colon. High expression is detected in brain and testis

LPGAT1 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

LPGAT1 Antibody (Center) - Images



Anti-LPGAT1 Antibody (Center) at 1:2000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 43 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

LPGAT1 Antibody (Center) - Background

Lysophoshatidylglycerol (LPG) specific acyltransferase that recognizes various acyl-CoAs and LPGs as substrates but demonstrates a clear preference for long chain saturated fatty acyl-CoAs and oleoyl-CoA as acyl donors. Prefers oleoyl-LPG over palmitoyl-LPG as an acyl receptor and oleoyl-CoA over lauroyl-CoA as an acyl donor.

LPGAT1 Antibody (Center) - References

Yang Y.,et al.J. Biol. Chem. 279:55866-55874(2004).
Ji D.,et al.Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
Nagase T.,et al.DNA Res. 3:321-329(1996).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.