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Anti-LPCAT2 Antibody

Catalog # AP60891

Product Information

Application	WB, IHC
Primary Accession	Q7L5N7
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60208

Additional Information

Gene ID	54947
Other Names	AGPAT11; AYTL1; Lysophosphatidylcholine acyltransferase 2; LPC acyltransferase 2; LPCAT-2; LysoPC acyltransferase 2; 1-acylglycerol-3-phosphate O-acyltransferase 11; 1-AGP acyltransferase 11; 1-AGPAT 11; 1-acylglycerophosphocholine O-acyltransferase; 1-alkylglycerophosphocholine O-acetyltransferase; Acetyl-CoA:lyso-platelet-activating factor acetyltransferase; Acetyl-CoA:lyso-PAF acetyltransferase; Lyso-PAF acetyltransferase; LysoPAFAT; Acyltransferase-like 1; Lysophosphatidic acid acyltransferase alpha; LPAAT-alpha
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human LPCAT2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

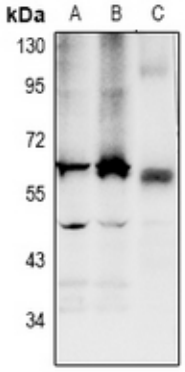
Name	LPCAT2
Synonyms	AGPAT11, AYTL1
Function	Exhibits both acyltransferase and acetyltransferase activities (PubMed:17182612, PubMed:20363836, PubMed:21498505). Catalyzes the conversion of lysophosphatidylcholine (1-acyl-sn-glycero- 3-phosphocholine or LPC) into phosphatidylcholine (1,2-diacyl-sn- glycero-3-phosphocholine or PC) (PubMed:21498505). Catalyzes the conversion 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:20363836). Involved in platelet-activating factor (PAF) biosynthesis by catalyzing the conversion of the PAF precursor, 1-O-alkyl-sn-glycero-3-phosphocholine (lyso-PAF) into 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine (PAF) (PubMed:17182612). Also converts lyso-PAF to 1-O-alkyl-2-acyl-sn-glycero-3-phosphocholine (PC), a major component of cell membranes and a PAF precursor (By similarity). Under resting conditions, acyltransferase activity is preferred (By similarity). Upon acute inflammatory stimulus, acetyltransferase activity is enhanced and PAF synthesis increases (By similarity). Involved in the regulation of lipid droplet number and size (PubMed:25491198).

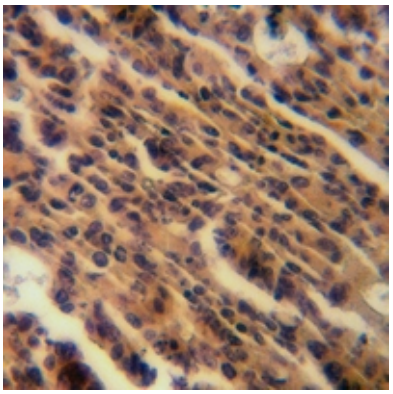
Cellular Location

Endoplasmic reticulum membrane; Single-pass type II membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q8BYI6}; Single-pass type II membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q8BYI6}; Single-pass type II membrane protein. Lipid droplet

Images



Western blot analysis of LPCAT2 expression in HCT116 (A), DLD (B), mouse colon (C) whole cell lysates. (Predicted band size: 60 kD; Observed band size: 60 kD)



Immunohistochemical analysis of LPCAT2 staining in human colorectal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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