

LPCAT3 Mouse mAb[6802]

Cat NO. :A80668

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC	H,M	Q6P1A2	52kDa	Mouse	IgG	100ul,200ul

Applications detail:

Application	Dilution
WB	1:1000-2000
IHC	1:100
The optimal dilutions should be determined by the end user	

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide of human LPCAT3.

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at -20°C or -80°C.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

Tissue specificity:

Highly expressed in liver, pancreas and adipose tissue. Very low expression in skeletal muscle and heart. Detected in neutrophils..

Subcellular location:

Endoplasmic reticulum membrane,Multi-pass membrane protein.

Function:

Introduction: **WB:** Western Blot **IP:** Immunoprecipitation **IHC:** Immunohistochemistry **ChIP:** Chromatin Immunoprecipitation **ICC/IF:** Immunocytochemistry/Immunofluorescence **F:** Flow Cytometry

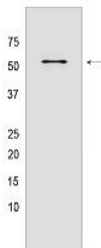
Cross Reactivity: **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Ml:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Hr:** horse

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Lysophospholipid O-acyltransferase (LPLAT) that catalyzes the reacylation step of the phospholipid remodeling process also known as the Lands cycle (PubMed:18782225, PubMed:18195019, PubMed:18772128). Catalyzes transfer of the fatty acyl chain from fatty acyl-CoA to 1-acyl lysophospholipid to form various classes of phospholipids. Converts 1-acyl lysophosphatidylcholine (LPC) into phosphatidylcholine (PC) (LPCAT activity), 1-acyl lysophosphatidylserine (LPS) into phosphatidylserine (PS) (LPSAT activity) and 1-acyl lysophosphatidylethanolamine (LPE) into phosphatidylethanolamine (PE) (LPEAT activity) (PubMed:18782225, PubMed:18195019, PubMed:18772128). Favors polyunsaturated fatty acyl-CoAs as acyl donors compared to saturated fatty acyl-CoAs (PubMed:18195019, PubMed:18772128). Has higher activity for LPC acyl acceptors compared to LPEs and LPSs. Can also transfer the fatty acyl chain from fatty acyl-CoA to 1-O-alkyl lysophospholipid or 1-O-alkenyl lysophospholipid with lower efficiency (By similarity). Acts as a major LPC O-acyltransferase in liver and intestine. As a component of the liver X receptor/NR1H3 or NR1H2 signaling pathway, mainly catalyzes the incorporation of arachidonate into PCs of endoplasmic reticulum (ER) membranes, increasing membrane dynamics and enabling triacylglycerols transfer to nascent very low-density lipoprotein (VLDL) particles. Promotes processing of sterol regulatory protein SREBF1 in hepatocytes, likely by facilitating the translocation of SREBF1-SCAP complex from ER to the Golgi apparatus (By similarity). Participates in mechanisms by which the liver X receptor/NR1H3 or NR1H2 signaling pathway counteracts lipid-induced ER stress response and inflammation. Down-regulates hepatic inflammation by limiting arachidonic acid availability for synthesis of inflammatory eicosanoids, such as prostaglandins (By similarity). In enterocytes, acts as a component of a gut-brain feedback loop that coordinates dietary lipid absorption and food intake. Regulates the abundance of PCs containing linoleate and arachidonate in enterocyte membranes, enabling passive diffusion of fatty acids and cholesterol across the membrane for efficient chylomicron assembly (By similarity). In the intestinal crypt, acts as a component of dietary-responsive phospholipid-cholesterol axis, regulating the biosynthesis of cholesterol and its mitogenic effects on intestinal stem cells (By similarity)..

Validation Data:

LPCAT3 Mouse mAb[6802] Images



Western blot (SDS PAGE) analysis of extracts from mouse stomach tissue. Using LPCAT3 Mouse mAb IgG [6802] at dilution of 1:1000 incubated at 4°C overnight.

View more information on <http://naturebios.com>

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.