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PLTP Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7620b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P55058
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18573
Calculated MW	54739
Antigen Region	451-479

Additional Information

Gene ID	5360
Other Names	Phospholipid transfer protein, Lipid transfer protein II, PLTP
Target/Specificity	This PLTP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 451-479 amino acids from the C-terminal region of human PLTP.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	PLTP Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLTP
Function	Mediates the transfer of phospholipids and free cholesterol from triglyceride-rich lipoproteins (low density lipoproteins or LDL and very low density lipoproteins or VLDL) into high-density lipoproteins (HDL) as well as the exchange of phospholipids between triglyceride-rich lipoproteins

	themselves (PubMed:11013307, PubMed:19321130, PubMed:21515415, PubMed:29883800, PubMed:7654777, PubMed:9132017). Facilitates the transfer of a spectrum of different lipid molecules, including diacylglycerol, phosphatidic acid, sphingomyelin, phosphatidylcholine, phosphatidylinositol, phosphatidylglycerol, cerebroside and phosphatidyl ethanolamine (PubMed:9132017). Plays an important role in HDL remodeling which involves modulating the size and composition of HDL (PubMed:29883800). Also plays a key role in the uptake of cholesterol from peripheral cells and tissues that is subsequently transported to the liver for degradation and excretion (PubMed:21736953). Two distinct forms of PLTP exist in plasma: an active form that can transfer phosphatidylcholine from phospholipid vesicles to HDL, and an inactive form that lacks this capability (PubMed:11013307).
Cellular Location	Secreted. Nucleus. Note=Nuclear export is XPO1/CRM1- dependent.
Tissue Location	Widely expressed. Highest level of expression in the ovary, thymus and placenta, with moderate levels found in the pancreas, small intestine, testis, lung and prostrate. Low level expression in the kidney, liver and spleen, with very low levels found in the heart, colon, skeletal muscle, leukocytes and brain. Expressed in the cortical neurons.

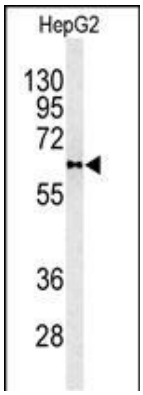
Background

PLTP is one of at least two lipid transfer proteins found in human plasma. The protein transfers phospholipids from triglyceride-rich lipoproteins to high density lipoprotein (HDL). In addition to regulating the size of HDL particles, this protein may be involved in cholesterol metabolism.

References

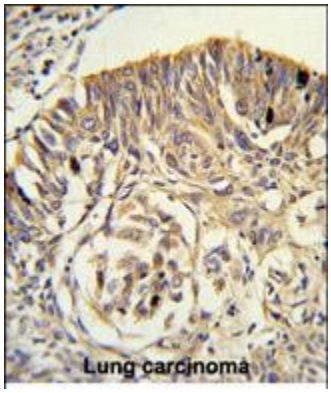
Moerland,M., Samyn,H. Arterioscler. Thromb. Vasc. Biol. 28 (7), 1277-1282 (2008)
Albers,J.J., Wolfbauer,G. Biochim. Biophys. Acta 1258 (1), 27-34 (1995)

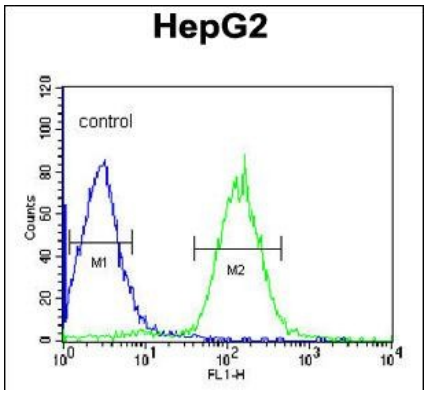
Images



Western blot analysis of PLTP antibody (C-term) (Cat.#AP7620b) in HepG2 cell line lysates (35ug/lane). PLTP (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human lung carcinoma reacted with PLTP Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





PLTP Antibody (C-term) (Cat. #AP7620b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.