

PLTP Antibody

Rabbit Polyclonal Antibody Catalog # ALS17158

Specification

PLTP Antibody - Product Information

Application IHC-P **Primary Accession** P55058 Other Accession 5360 Reactivity Human Host Rabbit Clonality **Polyclonal** Isotype **IgG** Calculated MW 54739

PLTP Antibody - Additional Information

Gene ID 5360

Other Names

PLTP, BPI fold containing family E, BPIFE, Phospholipid transfer protein, Lipid transfer protein II, HDLCO9

Target/Specificity

Human PLTP

Reconstitution & Storage

PBS, pH 7.4, 0.03% Proclin 300, 50% glycerol. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

PLTP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PLTP Antibody - 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:7654777, PubMed:9132017, PubMed:11013307, PubMed:19321130, PubMed:21515415, PubMed:29883800). 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:<a href="http://www.uniprot.org/citations/29883800"

target="_blank">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:<a href="http://www.uniprot.org/citations/21736953"

target="_blank">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

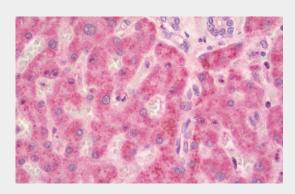
Widely expressed. Highest level of expression in the ovary, thymus and placenta, with moderate levels found in the pancreas, small intestine, testis, lung and prostrate. Low level expression in the kidney, liver and spleen, with very low levels found in the heart, colon, skeletal muscle, leukocytes and brain. Expressed in the cortical neurons.

PLTP Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

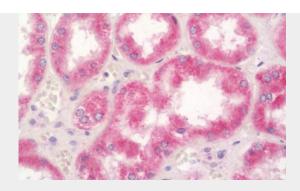
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PLTP Antibody - Images



Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)





Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)

PLTP Antibody - Background

Facilitates the transfer of a spectrum of different lipid molecules, including diacylglycerol, phosphatidic acid, sphingomyelin, phosphatidylcholine, phosphatidylglycerol, cerebroside and phosphatidyl ethanolamine. Essential for the transfer of excess surface lipids from triglyceride-rich lipoproteins to HDL, thereby facilitating the formation of smaller lipoprotein remnants, contributing to the formation of LDL, and assisting in the maturation of HDL particles. PLTP 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. Two distinct forms of PLTP exist in plasma: an active form that can transfer PC from phospholipid vesicles to high-density lipoproteins (HDL), and an inactive form that lacks this capability.

PLTP Antibody - References

Day J.R., et al.J. Biol. Chem. 269:9388-9391(1994). Kobayashi Y., et al.Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases. Ota T., et al.Nat. Genet. 36:40-45(2004). Deloukas P., et al.Nature 414:865-871(2001). Mural R.J., et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.