

PLTP Antibody

Rabbit Polyclonal Antibody Catalog # ALS12259

Specification

PLTP Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC
P55058
Human, Mouse
Rabbit
Polyclonal
55kDa KDa

PLTP Antibody - Additional Information

Gene ID 5360

Other Names

Phospholipid transfer protein, Lipid transfer protein II, PLTP

Target/Specificity

The antibody recognizes 55 kD PLTP of human and mouse origins.

Reconstitution & Storage

Long term: -70°C; Short term: -20°C

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:9132017, PubMed:1013307, PubMed:1013307, PubMed:1013307, 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: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

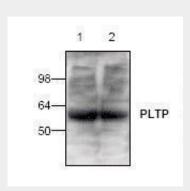
Widely expressed. Highest level of expression in the ovary, thymus and placenta, with moderate levels found in the pancreas, small intestine, testis, lung and prostrate. Low level expression in the kidney, liver and spleen, with very low levels found in the heart, colon, skeletal muscle, leukocytes and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

PLTP Antibody - Protocols

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

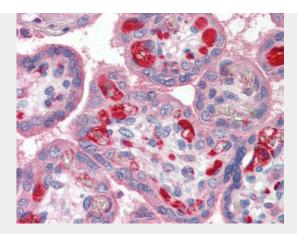
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PLTP Antibody - Images



Western blot of PLTP antibody ALS12259.





Anti-PLTP antibody IHC of human placenta.

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.