

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PLTP in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant mouse PLTP is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human PLTP isoform 1 Glu18-Val493 (Glu18Val) Accession # P55058
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

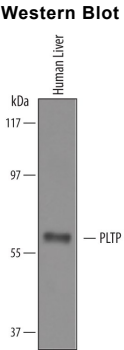
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Knockout Validated	PLTP is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in PLTP knockout HeLa cell line.	

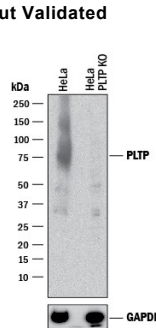
DATA

Western Blot



Detection of human PLTP by Western Blot. Western blot shows lysates of human liver tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human PLTP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5109) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PLTP at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Knockout Validated



Western Blot Shows Human PLTP Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and PLTP knockout HeLa cell line (KO). PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human PLTP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5109) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PLTP at approximately 75 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PLTP (phospholipid transfer protein) is a 75-81 kDa, secreted glycoprotein member of the BPI/LBP family of proteins. It is expressed by multiple cell types, circulates bound to HDL, and mediates the transfer of phospholipids and cholesterol from apoB-containing lipoproteins to HDL. Mature human PLTP is 476 amino acids (aa) in length. It contains an N-terminal lipid transfer domain and a C-terminal HDL-binding domain; there is one essential intrachain disulfide bond (Cys146-Cys185). There are four potential PLTP splice variants. Two show alternate start sites at Met21 and Met89. Two others demonstrate aa substitutions; one shows a one aa (Lys) substitution for aa 110-162, and a second shows a four aa substitution for the N-terminal 35 amino acids. Over aa 18-493, human PLTP shares 92% and 83% aa identity with porcine and mouse PLTP, respectively.