Product Datasheet

PLTP Antibody
NB400-106

Unit Size: 0.2 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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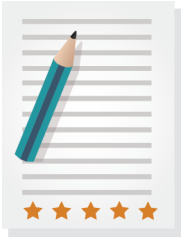
Updated 10/23/2024 v.20.1



NB400-106

PLTP Antibody

Product Information

Unit Size	0.2 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Unpurified
Buffer	Whole antisera
Target Molecular Weight	55 kDa

Product Description

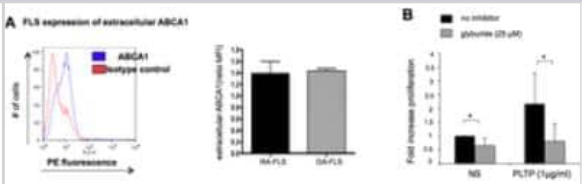
Host	Rabbit
Gene ID	5360
Gene Symbol	PLTP
Species	Human, Mouse
Immunogen	A partial peptide of human PLTP. [UniProt# P55058]

Product Application Details

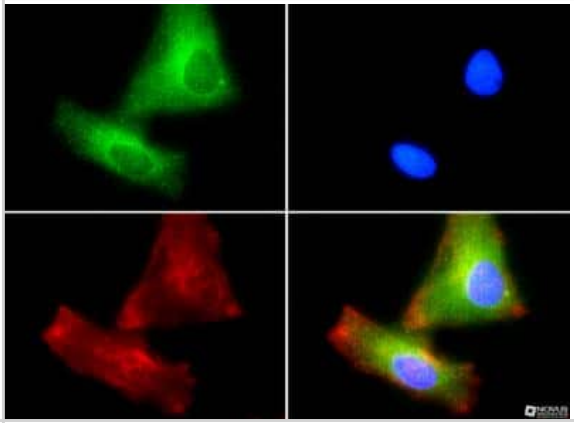
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:500, Immunohistochemistry 1:200, Immunocytochemistry/ Immunofluorescence 1:50-1:100, Immunohistochemistry-Paraffin 1:200
Application Notes	This PLTP antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded sections and Western Blot, where a band is seen at ~55kDa representing PLTP. It does not exhibit neutralizing activity. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

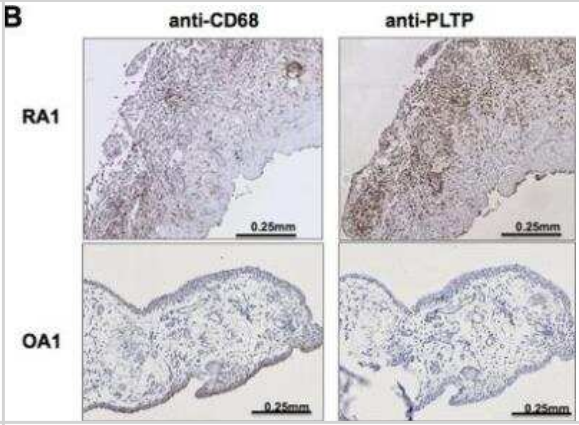
Western Blot: PLTP Antibody [NB400-106] - Activation of PLTP in STAT3 pathway. RA-FLS were stimulated for 24 hours with rhPLTP at the indicated concentrations. Western blot analyses analyzed cell lysates for phosphorylation of STAT3 (Tyr705). Band intensities were normalized to corresponding STAT3 band intensities. Representative Western blots are shown (n = 3). Citation: Audo R, Deckert V, Daien CI, Che H, Elhmioui J, Lemaire S, et al. (2018) PhospholIpid transfer protein (PLTP) exerts a direct pro-inflammatory effect on rheumatoid arthritis (RA) fibroblasts-like-synoviocytes (FLS) independently of its lipid transfer activity. PLoS ONE 13(3): e0193815.



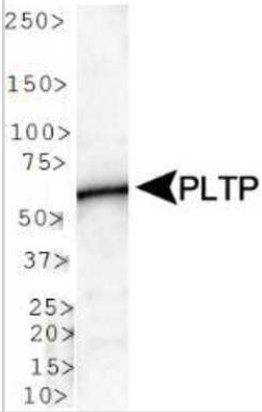
Immunocytochemistry/Immunofluorescence: PLTP Antibody [NB400-106] - PLTP antibody was tested in HeLa cells with FITC (green). Nuclei and alpha-tubulin were counterstained with Dapi (blue) and Dylight 550 (red).



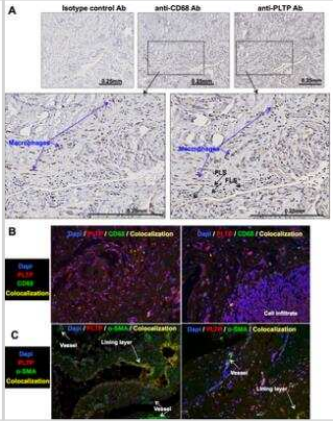
Immunohistochemistry: PLTP Antibody [NB400-106] - PLTP expression and activity in RA and OA joints and 3OH-myristate levels in synovial fluid of RA and OA patients. Immunohistological analysis of PLTP expression in synovial tissue from 5 RA and 6 OA patients stained for PLTP and macrophages (CD68+ cells); All RA synovial tissue showed positive stainings while only 2 out 6 OA tissues were positive for PLTP staining. Representative stainings are shown. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/29565987/) licensed under a CC-BY license.



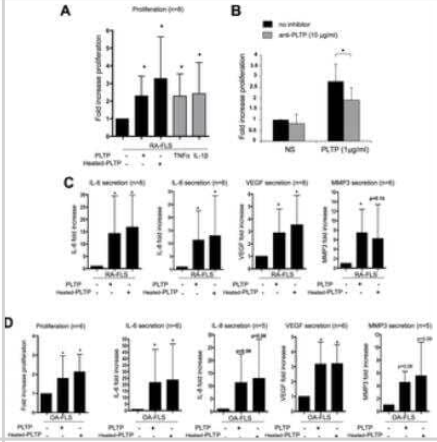
Western Blot: PLTP Antibody [NB400-106] - WB analysis of PLTP in human brain lysate.



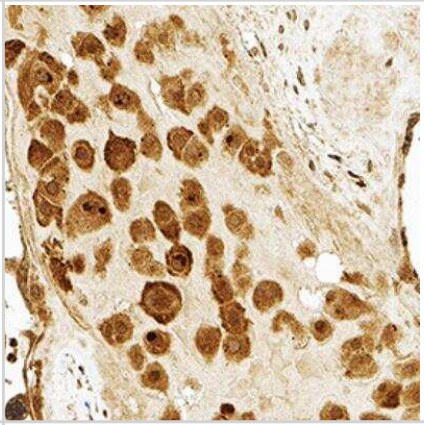
Immunohistochemistry: PLTP Antibody [NB400-106] - PLTP antibody expression in RA synovial tissues. (A) Immuno-histological analyses used RA patients synovial tissue sections (n=5). They were stained for PLTP or macrophages (CD68+ cells). Blue arrows indicate macrophages (non-exhaustive), determined as CD68+ cells. FLS are determined with CD68+ staining (black arrow; non-exhaustive) and morphological features. (B, C) Double staining displays localization (n = 3) of PLTP with macrophages (CD68+) in B or RA-FLS (alpha-SMA+) in C. Overlay is shown to visualize co-localization of PLTP. All magnification and fluorescence analysis at 20x. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/29565987/) licensed under a CC-BY license.



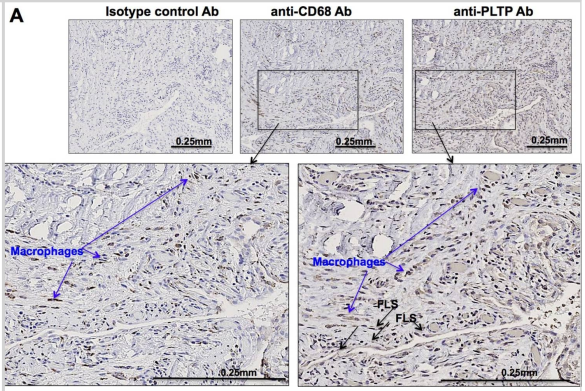
Immunohistochemistry: PLTP Antibody [NB400-106] - Recombinant PLTP antibody induced cytokine production and FLS proliferation, independent of its lipid transfer ability. (A) RA-FLS were stimulated for 48 hours with PLTP or heat inactivated-PLTP and proliferation was evaluated during the final day of stimulation using thymidine incorporation. (B) Blockade of PLTP decreased the effect of rhPLTP on FLS proliferation. (C) PLTP impact on RA-FLS cytokine production. (D) OA-FLS were treated with either native PLTP or heated-PLTP and analyzed for cytokine production and proliferation. Citation: Audo R, Deckert V, Daien CI, Che H, Elhmioui J, Lemaire S, et al. (2018) PhosphoLipid transfer protein (PLTP) exerts a direct pro-inflammatory effect on rheumatoid arthritis (RA) fibroblasts-like-synoviocytes (FLS) independently of its lipid transfer activity. PLoS ONE 13(3): e0193815.



Immunohistochemistry-Paraffin: PLTP Antibody [NB400-106] - PLTP was detected in immersion fixed paraffin-embedded sections of human placenta using Rabbit Anti-Human PLTP polyclonal Antibody (Catalog # NB400-106) at 1:300 for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm in decidual cells.



Immunohistochemistry: PLTP Antibody [NB400-106] - PLTP expression in RA synovial tissues.For immuno-histological analysis, (A) synovial tissue sections from RA patients (n = 5) were stained for PLTP or macrophages (CD68+ cells). Representative images obtained for immunohistological staining are shown. Blue arrows show macrophages (non-exhaustive), determined as CD68+ cells. FLS are determined with morphological features & CD68+ staining (black arrow; non-exhaustive). (B, C) Double staining was performed to visualize localization (n = 3) of PLTP with macrophages (CD68+) (B) or RA-FLS (α-SMA+) (C). Fluorescence was analyzed at 20x magnification. Overlay is shown to visualize co-localization of PLTP in macrophages (CD68+) (B) or RA-FLS (α-SMA+) (C) or PLTP expression in infiltrate. Original magnification: 20x. Separate images can be found in S1 Fig. Image collected & cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0193815), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Contreras-Duarte S, Chen P, Andia M et al. Attenuation of atherogenic apo B-48-dependent hyperlipidemia and high density lipoprotein remodeling induced by vitamin C and E combination and their beneficial effect on lethal ischemic heart disease in mice. Biol. Res. 2018-09-15 [PMID: 30219096] (WB, Mouse)

Ochieng P, Nath S, Macarulay R et al. Phospholipid transfer protein and alpha-1 antitrypsin regulate Hck kinase activity during neutrophil degranulation. Sci Rep. 2018-10-18 [PMID: 30337619] (WB, Human)

Audo R, Deckert V, Daien CI et al. PhosphoLipid transfer protein (PLTP) exerts a direct pro-inflammatory effect on rheumatoid arthritis (RA) fibroblasts-like-synoviocytes (FLS) independently of its lipid transfer activity. PLoS One 2018-03-22 [PMID: 29565987] (IHC-P, Human)

Smagris E, Gilyard S, BasuRay S et al. Inactivation of Tm6sf2, a Gene Defective in Fatty Liver Disease, Impairs Lipidation but Not Secretion of Very Low Density Lipoproteins. J Biol Chem 2016-05-13 [PMID: 27013658]

Pahl MV, Ni Z, Sepassi L et al. Plasma phospholipid transfer protein, cholesteryl ester transfer protein lecithin:cholesterol acyltransferase in end-stage renal disease (ESRD). Nephrol Dial Transplant;24(8):2541-2546. 2009-01-01 [PMID: 19297356]

He Y, Greene DJ, Kinter M et al. Control of cholesteryl ester transfer protein activity by sequestration of lipid transfer inhibitor protein in an inactive complex. J Lipid Res;49(7):1529-1537. 2008-01-01 [PMID: 18369235] (WB, Human)

Valenta, DT et al. Atheroprotective potential of macrophage-derived phospholiped transfer protein in low-density lipoprotein receptor-deficient mice is overcome by apolipoprotein AI overexpression. Arterioscler. Thromb. Vasc. Biol. 26:1572-1578. 2006-01-01 [PMID: 16675720] (IF/IHC, Mouse)

Desrumaux CM, Mak PA, Boisvert WA et al. Phospholipid transfer protein is present in human atherosclerotic lesions and is expressed by macrophages and foam cells. J Lipid Res;44(8):1453-61. 2003-08-01 [PMID: 1273030] (IHC-P, Human)

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Products Related to NB400-106

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NBP2-24891	Rabbit IgG Isotype Control

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