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PLA2G1B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4878b

Specification

PLA2G1B Antibody (C-term) - Product Information

Application	**WB, FC,E**
Primary Accession	P04054
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**16360**
Antigen Region	**116-145**

PLA2G1B Antibody (C-term) - Additional Information

Gene ID 5319

Other Names
Phospholipase A2, Group IB phospholipase A2, Phosphatidylcholine 2-acylhydrolase 1B, PLA2G1B, PLA2, PLA2A, PPLA2

Target/Specificity
This PLA2G1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 116-145 amino acids from the C-terminal region of human PLA2G1B.

Dilution
WB~~1:1000
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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
PLA2G1B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PLA2G1B Antibody (C-term) - Protein Information

Name PLA2G1B

Synonyms PLA2, PLA2A, PPLA2

Function Secretory calcium-dependent phospholipase A2 that primarily targets dietary phospholipids in the intestinal tract (PubMed:1420353, PubMed:10681567, PubMed:17603006). Hydrolyzes the ester bond of the fatty acyl group attached at sn-2 position of phospholipids (phospholipase A2 activity) with preference for phosphatidylethanolamines and phosphatidylglycerols over phosphatidylcholines (PubMed:1420353, PubMed:10681567, PubMed:17603006). May play a role in the biosynthesis of N-acyl ethanolamines that regulate energy metabolism and inflammation in the intestinal tract. Hydrolyzes N-acyl phosphatidylethanolamines to N-acyl lysophosphatidylethanolamines, which are further cleaved by a lysophospholipase D to release N-acyl ethanolamines (By similarity). May act in an autocrine and paracrine manner (PubMed:7721806, PubMed:25335547). Upon binding to the PLA2R1 receptor can regulate podocyte survival and glomerular homeostasis (PubMed:25335547). Has anti-helminth activity in a process regulated by gut microbiota. Upon helminth infection of intestinal epithelia, directly affects phosphatidylethanolamine contents in the membrane of helminth larvae, likely controlling an array of phospholipid-mediated cellular processes such as membrane fusion and cell division while providing for better immune recognition, ultimately reducing larvae integrity and infectivity (By similarity).

Cellular Location
Secreted. Note=Secreted from pancreatic acinar cells in its inactive form

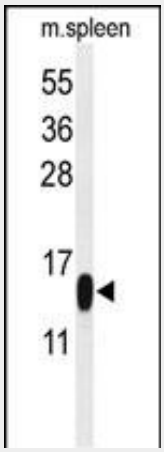
Tissue Location
Selectively expressed in pancreas, lung, liver and kidney. Also detected at lower levels in ovary and testis

PLA2G1B Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

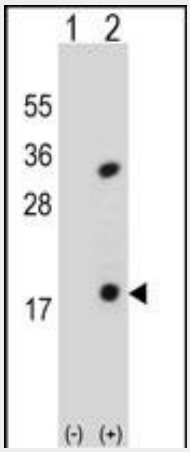
PLA2G1B Antibody (C-term) - Images



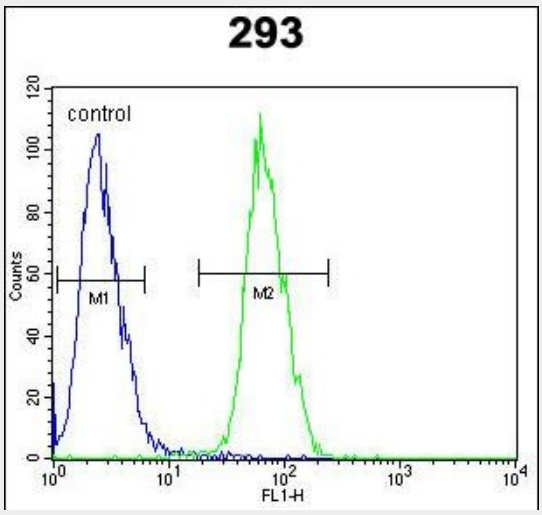
Western blot analysis of PLA2G1B Antibody (C-term) (Cat. #AP4878b) in mouse spleen tissue

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lysates (35ug/lane). PLA2G1B (arrow) was detected using the purified Pab.



Western blot analysis of PLA2G1B (arrow) using rabbit polyclonal PLA2G1B Antibody (C-term) (Cat. #AP4878b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PLA2G1B gene.



PLA2G1B Antibody (C-term) (Cat. #AP4878b) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PLA2G1B Antibody (C-term) - Background

PLA2G1B catalyzes the release of fatty acids from glycero-3-phosphocholines. The best known varieties are the digestive enzymes secreted as zymogens by the pancreas of mammals. Sequences of pancreatic PLA2 enzymes from a variety of mammals have been reported. One striking feature of these enzymes is their close homology to venom phospholipases of snakes. Other forms of PLA2 have been isolated from brain, liver, lung, spleen, intestine, macrophages, leukocytes, erythrocytes, inflammatory exudates, chondrocytes, and platelets

PLA2G1B Antibody (C-term) - References

Xu, W., et al. J. Biol. Chem. 284(24):16659-16666(2009)
Han, C., et al. J. Cell. Biochem. 105(2):534-545(2008)
Kao, W.T., et al. Lipids Health Dis 7, 20 (2008)