

PLA1A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9548c

Specification

PLA1A Antibody (Center) - Product Information

Application WB,E
Primary Accession Q53H76

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 49715
Antigen Region 329-358

PLA1A Antibody (Center) - Additional Information

Gene ID 51365

Other Names

Phospholipase A1 member A, 311-, Phosphatidylserine-specific phospholipase A1, PS-PLA1, PLA1A, NMD, PSPLA1

Target/Specificity

This PLA1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 329-358 amino acids from the Central region of human PLA1A.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

PLA1A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PLA1A Antibody (Center) - Protein Information

Name PLA1A (HGNC:17661)

Synonyms NMD, PSPLA1



Function Hydrolyzes the ester bond of the acyl group attached at the sn-1 position of phosphatidylserines (phospholipase A1 activity) and 1- acyl-2-lysophosphatidylserines (lysophospholipase activity) in the pathway of phosphatidylserines acyl chain remodeling (PubMed:10196188). Cleaves phosphatidylserines exposed on the outer leaflet of the plasma membrane of apoptotic cells producing 2-acyl-1-lysophosphatidylserines, which in turn enhance mast cell activation and histamine production (By similarity). Has no activity toward other glycerophospholipids including phosphatidylcholines, phosphatidylethanolamines, phosphatidic acids or phosphatidylinositols, or glycerolipids such as triolein (By similarity).

Cellular Location

Secreted {ECO:0000250|UniProtKB:P97535}.

Tissue Location

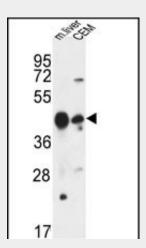
Widely expressed. Expressed in placenta, prostate and liver. Weakly or not expressed in skin, leukocytes, platelets, colon, spleen, lung, muscle and kidney.

PLA1A Antibody (Center) - Protocols

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

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

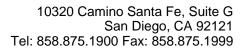
PLA1A Antibody (Center) - Images



PLA1A Antibody (Center) (Cat. #AP9548c) western blot analysis in mouse liver tissue and CEM cell line lysates (35ug/lane). This demonstrates the PLA1A antibody detected the PLA1A protein (arrow).

PLA1A Antibody (Center) - Background

Phosphatidylserine-specific phospholipase A1-alpha (PLA1A) acts specifically on phosphatidylserine (PS) and 1-acyl-2-lysophosphatidylserine (lyso-PS) to hydrolyze fatty acids at the sn-1 position of these phospholipids.





PLA1A Antibody (Center) - References

?Morikawa, R.K., et al. J. Biol. Chem. 284(39):26620-26630(2009) ?Aoki, J., et al. Biochim. Biophys. Acta 1582 (1-3), 26-32 (2002) : ?Wang, J., et al. J. Hum. Genet. 47(11):611-613(2002) ?Nagai, Y., et al. J. Biol. Chem. 274(16):11053-11059(1999) ?van Groningen, J.J., et al. FEBS Lett. 404(1):82-86(1997)