

PLA1A Polyclonal Antibody

Catalog # AP71966

Specification

PLA1A Polyclonal Antibody - Product Information

Application WB, IHC-P
Primary Accession
Reactivity Human
Host Rabbit
Clonality Polyclonal

PLA1A Polyclonal Antibody - Additional Information

Gene ID 51365

Other Names

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

Dilution

WB $\sim\sim$ Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

PLA1A Polyclonal Antibody - Protein Information

Name PLA1A (<u>HGNC:17661</u>)

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

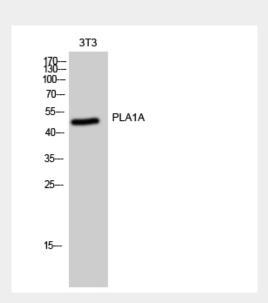
Widely expressed. Expressed in placenta, prostate and liver. Weakly or not expressed in skin, leukocytes, platelets, colon, spleen, lung, muscle and kidney.

PLA1A Polyclonal Antibody - Protocols

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

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

PLA1A Polyclonal Antibody - Images



Western Blot analysis of 3T3 cells using PLA1A Polyclonal Antibody

PLA1A Polyclonal Antibody - Background

Hydrolyzes the ester bond at the sn-1 position of glycerophospholipids and produces 2-acyl lysophospholipids. Hydrolyzes phosphatidylserine (PS) in the form of liposomes and 1- acyl-2 lysophosphatidylserine (lyso-PS), but not triolein, phosphatidylcholine (PC), phosphatidylethanolamine (PE), phosphatidic acid (PA) or phosphatidylinositol (PI). Isoform 2 hydrolyzes lyso-PS but not PS. Hydrolysis of lyso-PS in peritoneal mast cells activated by receptors for IgE leads to stimulate histamine production.