

PSPLA1 / Phospholipase A1 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS16052**Specification**

PSPLA1 / Phospholipase A1 Antibody (C-Terminus) - Product Information

Application	IF, IHC
Primary Accession	Q53H76
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50kDa KDa

PSPLA1 / Phospholipase A1 Antibody (C-Terminus) - Additional Information**Gene ID** 51365**Other Names**

Phospholipase A1 member A, 3.1.1.-, Phosphatidylserine-specific phospholipase A1, PS-PLA1, PLA1A, NMD, PSPLA1

Target/Specificity

Human PLA1A. At least three isoforms of PLA1A are known to exist; this antibody will detect all three isoforms.

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

PSPLA1 / Phospholipase A1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PSPLA1 / Phospholipase A1 Antibody (C-Terminus) - 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}.

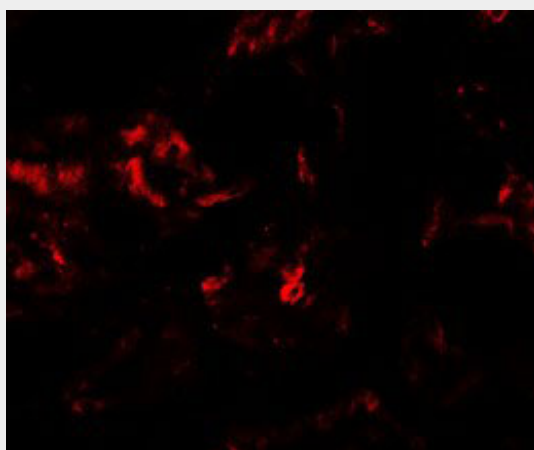
Tissue Location

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

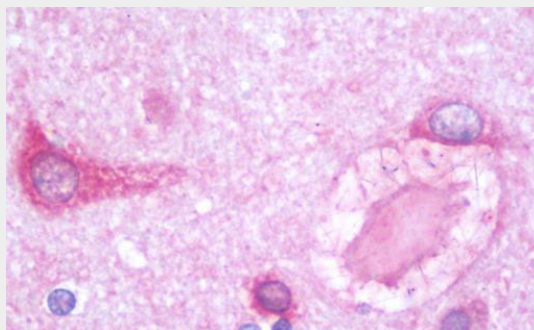
PSPLA1 / Phospholipase A1 Antibody (C-Terminus) - Protocols

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

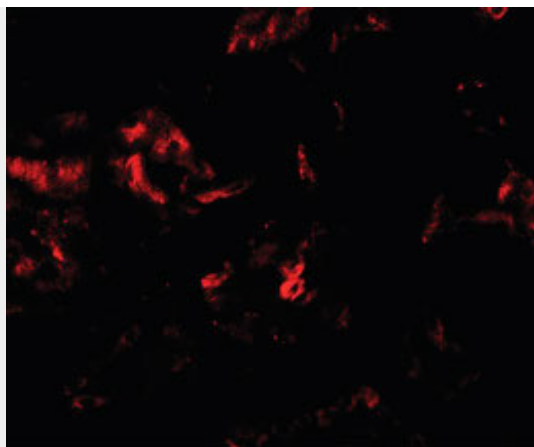
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PSPLA1 / Phospholipase A1 Antibody (C-Terminus) - Images

Immunofluorescence of PLA1A in human kidney tissue with PLA1A antibody at 20 µg/mL.



Anti-PSPLA1 / PLA1A antibody IHC staining of human brain, cortex.



Immunofluorescence of PLA1A in human kidney tissue with PLA1A antibody at 20 ug/ml.

PSPLA1 / Phospholipase A1 Antibody (C-Terminus) - 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.

PSPLA1 / Phospholipase A1 Antibody (C-Terminus) - References

van Groningen J.J.M.,et al.FEBS Lett. 404:82-86(1997).
Nagai Y.,et al.J. Biol. Chem. 274:11053-11059(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
Muzny D.M.,et al.Nature 440:1194-1198(2006).