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PLA1A Polyclonal Antibody

Catalog # AP71966

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q53H76
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49715

Additional Information

Gene ID	51365
Other Names	PLA1A; NMD; PSPLA1; Phospholipase A1 member A; Phosphatidylserine-specific phospholipase A1; PS-PLA1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

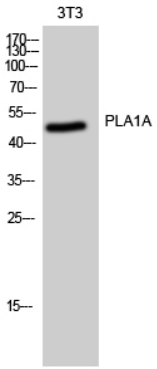
Name	PLA1A (HGNC:17661)
Synonyms	NMD, PSPLA1
Function	Hydrolyzes the ester bond of the acyl group attached at the sn-1 position of phosphatidylserines (phospholipase A1 activity) and 1-acyl-2-lysophosphatidylserines (lysophospholipase activity) in the pathway of phosphatidylserines acyl chain remodeling (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.

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.

Images



Western Blot analysis of 3T3 cells using PLA1A Polyclonal Antibody