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PLA1A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9548c

Product Information

Application	WB, E
Primary Accession	Q53H76
Reactivity	Mouse, Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24179
Calculated MW	49715
Antigen Region	329-358

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.

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.

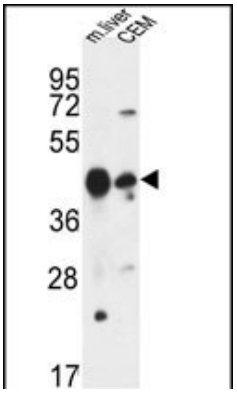
Background

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.

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)

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.