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PLA2G2D Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11151B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9UNK4
Other Accession	NP_036532.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28534
Calculated MW	16546
Antigen Region	105-131

Additional Information

Gene ID	26279
Other Names	Group IID secretory phospholipase A2, GIID sPLA2, sPLA2-IID, PLA2IID, Phosphatidylcholine 2-acylhydrolase 2D, Secretory-type PLA, stroma-associated homolog, PLA2G2D, SPLASH
Target/Specificity	This PLA2G2D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 105-131 amino acids from the C-terminal region of human PLA2G2D.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	PLA2G2D Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLA2G2D
Synonyms	SPLASH

Function	Secretory calcium-dependent phospholipase A2 that primarily targets extracellular lipids, exerting anti-inflammatory and immunosuppressive functions (PubMed:10455175, PubMed:10681567). Hydrolyzes the ester bond of the fatty acyl group attached at sn-2 position of phospholipids (phospholipase A2 activity) with preference for phosphatidylethanolamines and phosphatidylglycerols over phosphatidylcholines (PubMed:10455175). In draining lymph nodes, selectively hydrolyzes diacyl and alkenyl forms of phosphatidylethanolamines, releasing omega-3 polyunsaturated fatty acids (PUFAs) such as eicosapentaenoate and docosahexaenoate that are precursors of the anti-inflammatory lipid mediators, resolvins (By similarity). During the resolution phase of acute inflammation drives docosahexaenoate-derived resolvin D1 synthesis, which suppresses dendritic cell activation and T-helper 1 immune response (By similarity). May act in an autocrine and paracrine manner (By similarity). Via a mechanism independent of its catalytic activity, promotes differentiation of regulatory T cells (Tregs) and participates in the maintenance of immune tolerance (By similarity). May contribute to lipid remodeling of cellular membranes and generation of lipid mediators involved in pathogen clearance. Displays bactericidal activity against Gram-positive bacteria by directly hydrolyzing phospholipids of the bacterial membrane (By similarity).
Cellular Location	Secreted.
Tissue Location	Highly expressed in pancreas and spleen and less abundantly in colon, thymus, placenta, small intestine, and prostate

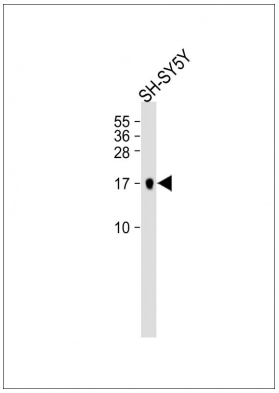
Background

Transposase-derived protein that may have nuclease activity (Potential). Does not have transposase activity.

References

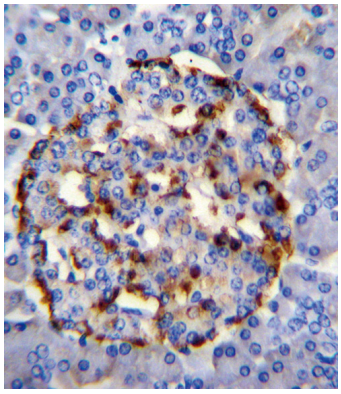
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Segat, L., et al. Vaccine 28(10):2201-2206(2010)
Igarashi, A., et al. Respiration 78(3):312-321(2009)
Lessig, J., et al. Asian J. Androl. 10(6):829-836(2008)
Lindbom, J., et al. Inflammation 29 (2-3), 108-117 (2005) :

Images

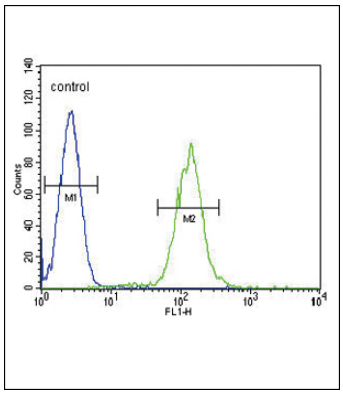


All lanes : Anti-PLA2G2D Antibody (C-term)at 1:2000 dilution Lane1: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size :17 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

PLA2G2D Antibody (C-term) (Cat. #AP11151b)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancrease tissue



followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PLA2G2D Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



PLA2G2D Antibody (C-term) (Cat. #AP11151b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.