

Human PLD1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5615

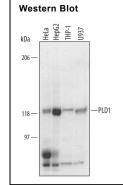
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects endogenous human PLD1 in Western blots.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human PLD1 Met1-Pro140 Accession # Q13393	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Detection of Human PLD1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, HepG2 human hepatocellular carcinoma cell line, THP-1 human acute monocytic leukemia cell line, and U937 human histiocytic lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Human PLD1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5615) followed by HRP-conjugated AntiGoat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for PLD1 at approximately 120 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.		
	*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 $^{\circ}$ C		
	"Small pack size (-SP) is snipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PLD1 (Phospholipase D1a) is a 110-120 kDa member of the phospholipase D family of enzymes. It is expressed in endothelial cells and select tissues. Following activation and association with Type Iα PIPkinase, PLD1 hydrolyzes the phosphodiester bond of membrane phosphatidylcholine, generating phosphatidic acid. Human PLD1 is 1074 amino acids in length). It contains one PX/phox homology domain (aa 84-206), a pleckstrin homology domain (aa 219-328), and two phosphodiesterase enzyme regions (aa 459-486 and 891-918). There are three splice variants. One shows a 10 aa substitution for aa 962-1074 (PLD1d), a second shows an 84 aa substitution for aa 514-1074 (PLD1c), and a third shows an Asn substitution for aa 585-623 (PLD1b). Caspase cleavage of PLD1a at Gln545-Ser546 generates a 62 kDa N-terminal, and a 61 kDa C-terminal fragment. Over aa 1-140, human PLD1a shares 91% aa identity with mouse PLD1a.



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