

#### DESCRIPTION

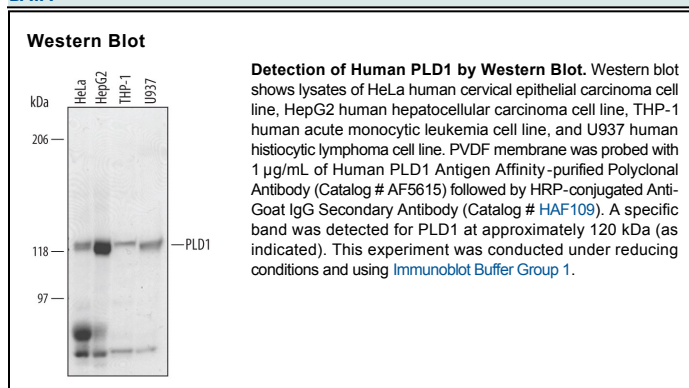
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects endogenous human PLD1 in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PLD1 Met1-Pro140 Accession # Q13393
<b>Formulation</b>	Lyophilized 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below

#### DATA



#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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.