PLD1 Antibody

For Research Use Only. Not For Use In Diagnostic Procedures.

**Applications**

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**Background:** Phosphatidylcholine-specific phospholipase D (PLD) hydrolyzes phosphatidylcholine (PC) to produce choline and phosphatidic acid (PA). PA is the precursor of the second messenger, diacylglycerol (DAG). Two isoforms of PLD (PLD1 and PLD2) have been identified so far. Both are regulated by protein kinases, small GTPases and Ca2+ (1). PLD1 is phosphorylated at Ser2, Ser561 and Thr147 by PKC (2,3). Phosphorylation at Thr147 and Ser561 regulates PLD1 activity (3).

**Specificity/Sensitivity:** PLD1 Antibody detects endogenous levels of total PLD1 protein. This antibody does not cross-react with PLD2.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy terminal residues of human PLD1. Antibodies are purified by protein A and peptide affinity chromatography.

**Recommended Antibody Dilutions:**
- Western Blotting: 1:1000
- Immunoprecipitation: 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

**Entrez-Gene ID:** #5337
**Swiss-Prot Acc.:** #Q13393

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

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- Western Blotting: 1:1000
- Immunoprecipitation: 1:50

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**Background References:**

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% v/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

**Applications Key:**
- W—Western
- IP—Immunoprecipitation
- IHC—Immunohistochemistry
- ChIP—Chromatin Immunoprecipitation
- IF—Immunofluorescence
- F—Flow cytometry
- E-P—ELISA-Peptide

**Species Cross-Reactivity Key:**
- H—human
- M—mouse
- R—rat
- Hm—hamster
- Mk—monkey
- Mm—mink
- C—chicken
- Dm—D. melanogaster
- X—Xenopus
- Z—zebrafish
- B—bovine
- Dg—dog
- Pg—pig
- Sc—S. cerevisiae
- Ce—C. elegans
- Hr—horse
- All—all species expected

Species enclosed in parentheses are predicted to react based on 100% homology.