

## Summary

Production Name	PC-PLD1 (phospho Ser561) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IF,IHC
Reactivity	Human, Mouse, Rat

### Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

Gene Name	PLD1
Alternative Names	PLD1; Phospholipase D1; PLD 1; hPLD1; Choline phosphatase 1; Phosphatidylcholine-
	hydrolyzing phospholipase D1
Gene ID	5337.0
SwissProt ID	Q13393.The antiserum was produced against synthesized peptide derived from human
	PLD1 around the phosphorylation site of Ser561. AA range:527-576

# Application

Dilution Ratio	IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Molecular Weight	



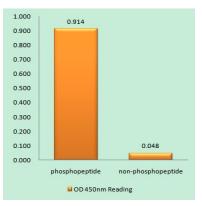
### Background

This gene encodes a phosphatidylcholine-specific phospholipase which catalyzes the hydrolysis of phosphatidylcholine in order to yield phosphatidic acid and choline. The enzyme may play a role in signal transduction and subcellular trafficking. Alternative splicing results in multiple transcript variants with both catalytic and regulatory properties. [provided by RefSeq, Sep 2011],catalytic activity: A phosphatidylcholine + H(2)O = choline + a phosphatidate.,enzyme regulation: Stimulated by phosphatidylinositol 4,5-bisphosphate and phosphatidylinositol 3,4,5-trisphosphate, activated by the phosphokinase C-alpha, by the ADP-ribosylation factor-1 (ARF-1), and to a lesser extent by GTP-binding proteins: RHO A, RAC-1 and CDC42. Inhibited by oleate.,function:Implicated as a critical step in numerous cellular pathways, including signal transduction, membrane trafficking, and the regulation of mitosis. May be involved in the regulation of perinuclear intravesicular membrane traffic.,online information:Phospholipase D entry,similarity:Belongs to the phospholipase D family.,similarity:Contains 1 PH domain.,similarity:Contains 1 PX (phox homology) domain.,similarity:Contains 2 PLD phosphodiesterase domains.,subunit:Interacts with PIP5K1A.,tissue specificity:Expressed abundantly in the pancreas and heart and at high levels in brain, placenta, spleen, uterus and small intestine.,

#### **Research Area**

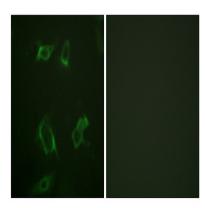
Glycerophospholipid metabolism;Ether lipid metabolism;Endocytosis;Fc gamma R-mediated phagocytosis;GnRH;Pathways in cancer;Pancreatic cancer;

### Image Data

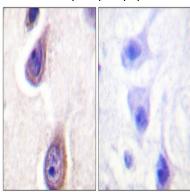


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PLD1 (Phospho-Ser561) Antibody





Immunofluorescence analysis of HepG2 cells, using PLD1 (Phospho-Ser561) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using PLD1 (Phospho-Ser561) Antibody. The picture on the right is blocked with the phospho peptide.

Note

For research use only.