

#3834 Store at -20°C

Phospho-PLD1 (Ser561) Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	120	Rabbit	#Q13393	5337

Product Usage Information	Application Western Blotting	Dilution 1:1000
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.	
Specificity / Sensitivity	Phospho-PLD1 (Ser561) Antibody detects endogenous levels of PLD1 only when phosphorylated at serine 561. This antibody does not cross-react with phosphorylated PLD2.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser561 of human PLD1. Antibodies are purified by protein A and peptide affinity chromatography.	
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 Ca ²⁺ (1). PLD1 is phosphorylated at Ser2, Ser561, and Thr147 by PKC (2,3). Phosphorylation at Thr147 and Ser561 regulates PLD1 activity (3).	
Background References	<ol style="list-style-type: none"> Exton, J.H. (1999) <i>Biochim. Biophys. Acta.</i> 1439, 121-133. Kim, Y. et al. (1999) <i>Biochemistry</i> 38, 10344-51. Kim, Y. et al. (2000) <i>J. Biol. Chem.</i> 275, 13621-13627. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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