

#3831 Store at -20°C

## Phospho-PLD1 (Thr147) Antibody



**Cell Signaling**  
TECHNOLOGY®

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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

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	Phospho-PLD1 (Thr147) Antibody detects endogenous levels of PLD1 only when phosphorylated at threonine 147. This antibody does not cross-react with phosphorylated PLD2.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Thr147 of human PLD1. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	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 <sup>2+</sup> (1). PLD1 is phosphorylated at Ser2, Ser561, and Thr147 by PKC (2,3). Phosphorylation at Thr147 and Ser561 regulates PLD1 activity (3).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>Exton, J.H. (1999) <i>Biochim. Biophys. Acta.</i> 1439, 121-133.</li> <li>Kim, Y. et al. (1999) <i>Biochemistry</i> 38, 10344-51.</li> <li>Kim, Y. et al. (2000) <i>J. Biol. Chem.</i> 275, 13621-13627.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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