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## Phospho-(Ser/Thr) PKD Substrate Antibody

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

Applications:	Reactivity:	Sensitivity:	Source/Isotype:
W, E-P	All	Endogenous	Rabbit
<b>Product Usage Information</b>	<b>Application</b>	<b>Dilution</b>	
	Western Blotting	1:1000	
	Peptide ELISA (DELFI A)	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-(Ser/Thr) PKD Substrates Antibody detects peptides and proteins containing a phospho-Ser/Thr residue with arginine at the -3 position and leucine at the -5 position, preferring proline at the -1 position within the motif. The antibody may cross-react with some peptides and proteins containing an arginine residue at -3 position and a hydrophobic or basic residue at the -5 position. (U.S. Patent No's.: 6,441,140; 6,982,318; 7,259,022; 7,344,714; U.S.S.N. 11,484,485; and all foreign equivalents.)		
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic phospho-PKD substrate peptide. Antibodies are purified by protein A and peptide affinity chromatography.		
<b>Background</b>	Protein kinase D1 (PKD1), also called PKC $\mu$ , is one member of the protein kinase D family. PKD members are serine/threonine protein kinases implicated in very diverse cellular functions including cell growth and survival, Golgi organization and immune response (1). The information about the natural substrates of PKD is limited (2,3). The enzyme recognizes and phosphorylates the following consensus sequence: LXRXXS/T. Phospho-(Ser/Thr) PKD Substrate Antibody recognizes phosphorylated PKD substrates at their consensus motif, providing a powerful new tool for PKD target discovery and characterization as well as HTS drug screening for potential kinase regulators.		
<b>Background References</b>	<ol style="list-style-type: none"> <li>Rykx, A. et al. (2003) <i>FEBS Lett</i> 546, 81-6.</li> <li>Nishikawa, K. et al. (1997) <i>J Biol Chem</i> 272, 952-60.</li> <li>Iglesias, T. et al. (2000) <i>J Biol Chem</i> 275, 40048-56.</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>	<b>IMPORTANT:</b> 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>W:</b> Western Blotting <b>E-P:</b> Peptide ELISA (DELFI A)
<b>Cross-Reactivity Key</b>	<b>All:</b> All Species Expected
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