

Phospho-PDK1 (Ser241) Antibody



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	58-68	Rabbit	#O15530	5170

Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:100
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-PDK1 (Ser241) Antibody detects PDK1 only when phosphorylated at Ser241.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser241 of human PDK1. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Phosphoinositide-dependent protein kinase 1 (PDK1) plays a central role in many signal transduction pathways (1,2) including the activation of Akt and the PKC isoenzymes p70 S6 kinase and RSK (3). Through its effects on these kinases, PDK1 is involved in the regulation of a wide variety of processes, including cell proliferation, differentiation and apoptosis. Several serine sites (Ser25, Ser241, Ser393/396 and Ser410) are phosphorylated on PDK1 in unstimulated human embryo kidney 293 cells, as well as IGF-1 stimulated cells (4). Phosphorylation on the activation loop Ser241 by autophosphorylation is necessary for PDK1 activity (4).	
Background References	<ol style="list-style-type: none"> 1. Belham, C. et al. (1999) <i>Curr. Biol.</i> 9, R93-R96. 2. Toker, A. and Newton, A.C. (2000) <i>Cell</i> 103, 185-188. 3. Williams, M.R. et al. (2000) <i>Curr. Biol.</i> 10, 439-448. 4. Casamayor, A. et al. (1999) <i>Biochem J</i> 342 (Pt 2), 287-92. 	

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	W: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: Human M: Mouse R: Rat
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