

PDHK1 (phospho Ser241) rabbit pAb**Cat#: orb769430 (Manual)**

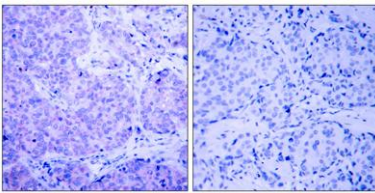
For research use only. Not intended for diagnostic use.

Product Name	PDHK1 (phospho Ser241) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human PDK1 around the phosphorylation site of Ser241. AA range:210-259
Specificity	Phospho-PDK1 (S241) Polyclonal Antibody detects endogenous levels of PDK1 protein only when phosphorylated at S241.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	3-phosphoinositide-dependent protein kinase 1
Gene Name	PDPK1
Cellular localization	Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Cell junction, focal adhesion. Tyrosine phosphorylation seems to occur only at the cell membrane. Translocates to the cell membrane following insulin stimulation by a mechanism that involves
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

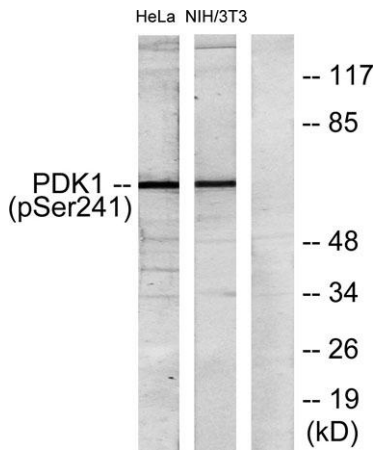
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	63kD
Human Gene ID	5170
Human Swiss-Prot Number	O15530
Alternative Names	PDPK1; PDK1; 3-phosphoinositide-dependent protein kinase 1; hPDK1

Background

catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Phosphorylates and activates not only PKB/AKT, but also PKA, PKC-zeta, RPS6KA1 and RPS6KB1. May play a general role in signaling processes and in development (By similarity). Isoform 3 is catalytically inactive.,PTM:Phosphorylated on tyrosine and serine/threonine. Phosphorylation on Ser-241 in the activation loop is required for full activity. PDK1 itself can autophosphorylate Ser-241, leading to its own activation.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PDK1 subfamily.,similarity:Contains 1 PH domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Membrane-associated after cell stimulation leading to its translocation. Tyrosine phosphorylation seems to occur only at the plasma membrane.,subunit:Interacts with TUSC4.,tissue specificity:Appears to be expressed ubiquitously.,



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PDK1 (Phospho-Ser241) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells and NIH/3T3 cells, using PDK1 (Phospho-Ser241) Antibody. The lane on the right is blocked with the phospho peptide.