

**PDHK1 (phospho Tyr9) rabbit pAb****Cat#: orb769431 (Manual)**

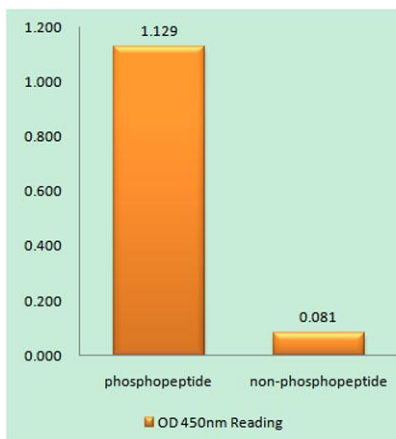
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<b>Product Name</b>	PDHK1 (phospho Tyr9) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PDK1 around the phosphorylation site of Tyr9. AA range: 1-50
<b>Specificity</b>	Phospho-PDK1 (Y9) Polyclonal Antibody detects endogenous levels of PDK1 protein only when phosphorylated at Y9.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	3-phosphoinositide-dependent protein kinase 1
<b>Gene Name</b>	PDPK1
<b>Cellular localization</b>	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
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

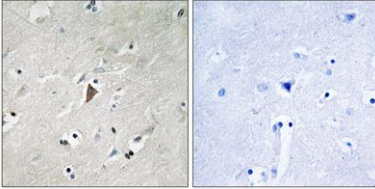
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	
<b>Human Gene ID</b>	5170
<b>Human Swiss-Prot Number</b>	O15530
<b>Alternative Names</b>	PDPK1; PDK1; 3-phosphoinositide-dependent protein kinase 1; hPDK1

### 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.,



**Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PDK1 (Phospho-Tyr9) Antibody**



**Immunohistochemistry analysis of paraffin-embedded human brain, using PDK1 (Phospho-Tyr9) Antibody. The picture on the right is blocked with the phospho peptide.**