

Product Name: PDK1 (phospho Tyr9) Rabbit Polyclonal Antibody**Catalog #: APRab05235**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	IHC, ICC/IF, ELISA
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio IHC 1:100-1:300, ICC/IF 1:50-1:200, ELISA 1:20000-1:40000

Molecular Weight

Antigen Information

Gene Name	PDPK1
Alternative Names	PDPK1; PDK1; 3-phosphoinositide-dependent protein kinase 1; hPDK1
Gene ID	5170.0
SwissProt ID	O15530
Immunogen	The antiserum was produced against synthesized peptide derived from human PDK1 around the phosphorylation site of Tyr9. AA range:1-50

Background

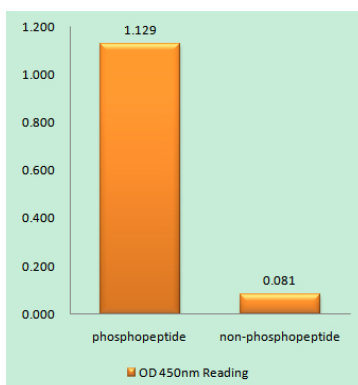
catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Phosphorylates and activates not only PKB/AKT, but also

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.,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.,

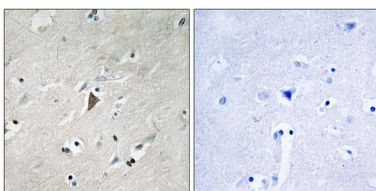
Research Area

Akt_PKB;PPAR;mTOR;Focal adhesion;Insulin_Receptor;Aldosterone-regulated sodium reabsorption;Endometrial cancer;Prostate cancer;Non-small cell lung cancer;

Image Data



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.