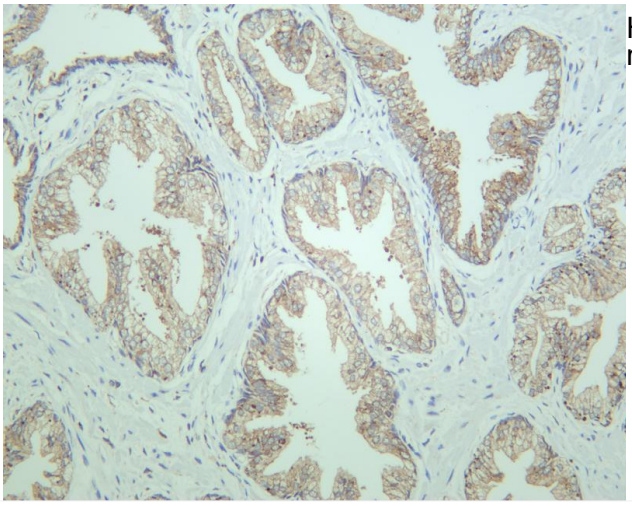
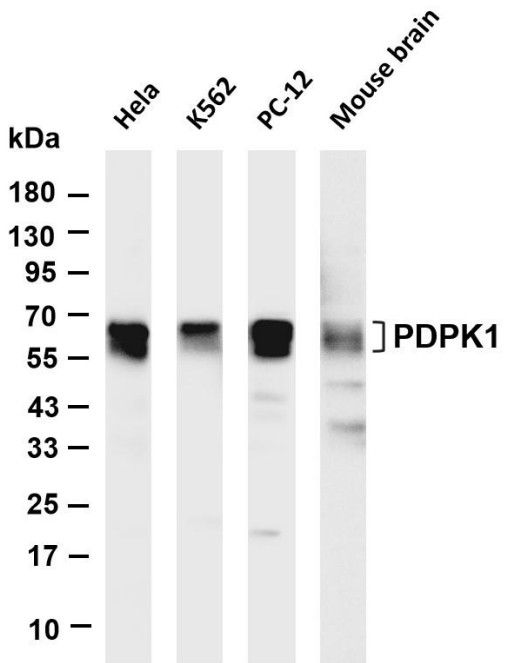
PDPK1 Rabbit mAb

Catalog No	YP-rAb-17578
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	PDPK1
Protein Name	3-phosphoinositide-dependent protein kinase 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	PDPK1 ; PDK1 ; 3-phosphoinositide-dependent protein kinase 1 ; hPDK1
Observed Band	58-68kD
Calculated Molecular Weight	63kD
Cell Pathway	Membrane, Cytoplasm
Tissue Specificity	Appears to be expressed ubiquitously. The Tyr-9 phosphorylated form is markedly increased in diseased tissue compared with normal tissue from lung, liver, colon and breast.
Function	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

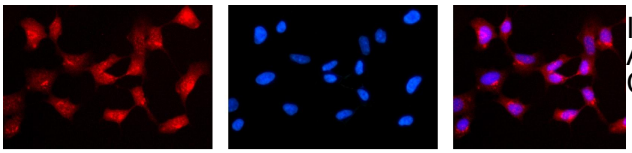
	membrane.,subunit:Interacts with TUSC4.,tissue specificity:Appears to be expressed ubiquitously.,
Background	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Phosphorylates and activates not only PKB/AKT, but also PKA, PKC-zeta, RPS6KA1 and RPS6KB1. May play a general role in signaling 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.,
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Human prostate carcinoma was stained with anti-PDPK1 rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PDPK1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: K562 Lane 3: PC-12 Lane 4: Mouse brain Predicted band size: 63kDa Observed band size: 58-68kDa



Immunofluorescence analysis of HEK293. Picture A:PDPK1 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B