PDPK1 (Phospho Ser241) (PT0869R) PT™ Rabbit mAb

CatalogNo: YM8638 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,ICC/IF,IP,ELISA

MW
- 63kD (Calculated)

63kD (Observed)

Isotype
- IgG, Kappa

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Recommended Dilution Ratios

WB 1:2000-1:10000
ICC/IF 1:200-1:1000
ELISA 1:5000-1:20000
IP 1:50-1:200

Basic Information

Clonality	Monoclonal
Clone Number	PT0869R

Immunogen Information

Immunogen	The specific immunogen used to produce this antibody is proprietary information.

Specificity Phospho-PDK1 (S241) Antibody detects endogenous levels of PDK1 protein only when phosphorylated at S241.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):ANsFV

Target Information

Gene name PDPK1

Protein Name 3-phosphoinositide-dependent protein kinase 1

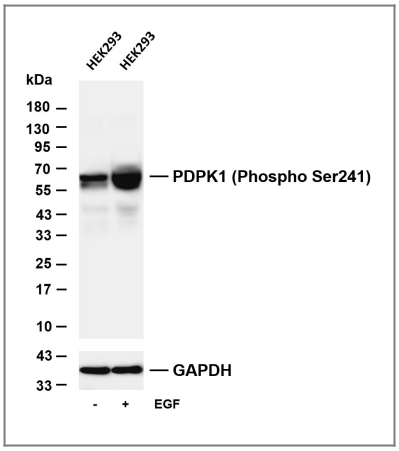
Organism	Gene ID	UniProt ID
Human	5170;	O15530;
Mouse	18607;	Q9Z2A0;
Rat	81745;	O55173;

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 binding to GRB14 and INSR. SRC and HSP90 promote its localization to the cell membrane. Its nuclear localization is dependent on its association with PTPN6 and its phosphorylation at Ser-396. Restricted to the nucleus in neuronal cells while in non-neuronal cells it is found in the cytoplasm. The Ser-241 phosphorylated form is distributed along the perinuclear region in neuronal cells while in non-neuronal cells it is found in both the nucleus and the cytoplasm. IGF1 transiently increases phosphorylation at Ser-241 of neuronal PDPK1 , resulting in its translocation to other cellular compartments. The tyrosine-phosphorylated form colocalizes with PTK2B in focal adhesions after angiotensin II stimulation.

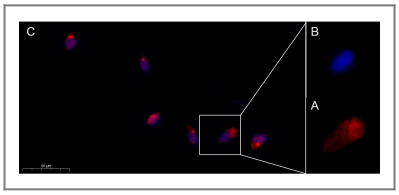
Tissue specificity Appears to be expressed ubiquitously. The Tyr-9 phosphorylated form is markedly increased in diseased tissue compared with normal tissue from lung , liver , colon and breast.

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. ,

Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PDPK1 (Phospho Ser241) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: HEK293 was treated with EGF (100ng/ml) for 20 minutes Predicted band size: 63kDa Observed band size: 63kDa



Immunofluorescence analysis of HeLa . Picture A: PDPK1 (Phospho Ser241) (PT0869R) Rabbit mAb (red). Picture B: DAPI (blue). Picture C: Merge of A+B

Contact information

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Please scan the QR code to access additional product information: **PDPK1 (Phospho Ser241) (PT0869R) PT™ Rabbit mAb**