SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

# Rabbit Anti-Phospho-PDPK1 (Ser393) antibody

SL5537R

| | |
|---|---|
| **Product Name:** | Phospho-PDPK1 (Ser393) |
| **Chinese Name:** | 磷酸化3磷酸肌醇依赖性蛋白激酶1抗体 |
| **Alias:** | PDPK1(phospho Ser393); PDPK1(phospho S393); 3 phosphoinositide dependent protein kinase 1; hPDK 1; hPDK1; MGC20087 MGC35290; PDK 1; PDPK 1; PDPK1; PkB kinase; PkB kinase like gene 1; PkB like 1; PkB like; PRO0461; PDPK1_HUMAN. |
| | |
| **Organism Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **React Species:** | Human,Mouse,Rat, |
| **Applications:** | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Molecular weight:** | 61kDa |
| **Cellular localization:** | cytoplasmicThe cell membrane |
| **Form:** | Lyophilized or Liquid |
| **Concentration:** | 1mg/ml |
| **immunogen:** | KLH conjugated Synthesised phosphopeptide derived from human PDPK1 around the phosphorylation site of Ser393:SS(p-S)SH |
| **Lsotype:** | IgG |
| **Purification:** | affinity purified by Protein A |
| **Storage Buffer:** | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| **Storage:** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| **PubMed:** | PubMed |
| **Product Detail:** | PDK1 (3 Phosphoinositide Dependent Protein Kinase 1) phosphorylates AGC kinases. PDK1 activates conventional PKC and PKC zeta through phosphorylation of critical |

threonine residues in the activation loop. PDK1 also phosphorylates Protein Kinase B (PKB) at threonine 308 in the presence of phosphatidylinositol-3,4,5-trisphosphate. Active Akt inactivates Glycogen Synthase Kinase 3 (GSK3), eventually leading to the dephosphorylation and activation of glycogen synthase and the stimulation of glycogen synthesis. Because of the role that PDK plays in insulin-induced glycogen synthesis and PKC activation it is a potentially important target for metabolic drug research. There are three named isoforms.

**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.

**Subunit:**
Interacts with NPRL2.

**Subcellular Location:**
Cytoplasm. Cell junction, focal adhesion.

**Tissue Specificity:**
Appears to be expressed ubiquitously.

**Post-translational modifications:**
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. STE Ser/Thr protein kinase family. STE20 subfamily.
Contains 1 CRIB domain.
Contains 1 protein kinase domain.

**SWISS:**
O15530

**Gene ID:**
5170

**Database links:**

Entrez Gene: 5170Human

Entrez Gene: 18607Mouse

Entrez Gene: 81745Rat

| | |
|---|---|
| | Omim: 605213Human<br><br>SwissProt: O15530Human<br><br>SwissProt: Q9Z2A0Mouse<br><br>SwissProt: O55173Rat<br><br>Unigene: 459691Human<br><br>Unigene: 10504Mouse<br><br>Unigene: 10905Rat<br><br>**Important Note:**<br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.<br><br>PDK1是蛋白激酶B(PKB)的上游激酶,通过与3,4,5三磷酸磷脂酰肌醇作用激活相邻的PKB分子.PDK1能够激活包含PKB在内的一系列的AGC激酶家族成员.从而调节细胞代谢,生长,扩散,生存,抗凋亡等诸多生理过程. |