

Phospho-PDPK1-S241 Rabbit Polyclonal Antibody

CABP0426



Product Information

Size:

50uL, 100uL, 200uL

Observed MW:

63kDa

Calculated MW:

48kDa/50kDa/58kDa/60kDa/
63kDa

Applications:

WB IHC IF

Reactivity:

Human, Mouse, Rat

Antibody Information

Recommended dilutions:

WB 1:500 - 1:2000 IHC 1:50
- 1:100 IF 1:100 - 1:200

Source:

Rabbit

Isotype:

IgG

Purification:

Affinity purification

Protein Background

Serine/threonine kinase which acts as a master kinase, phosphorylating and activating a subgroup of the AGC family of protein kinases. Its targets include: protein kinase B (PKB/AKT1, PKB/AKT2, PKB/AKT3), p70 ribosomal protein S6 kinase (RPS6KB1), p90 ribosomal protein S6 kinase (RPS6KA1, RPS6KA2 and RPS6KA3), cyclic AMP-dependent protein kinase (PRKACA), protein kinase C (PRKCD and PRKCZ), serum and glucocorticoid-inducible kinase (SGK1, SGK2 and SGK3), p21-activated kinase-1 (PAK1), protein kinase PKN (PKN1 and PKN2). Plays a central role in the transduction of signals from insulin by providing the activating phosphorylation to PKB/AKT1, thus propagating the signal to downstream targets controlling cell proliferation and survival, as well as glucose and amino acid uptake and storage. Negatively regulates the TGF-beta-induced signaling by: modulating the association of SMAD3 and SMAD7 with TGF-beta receptor, phosphorylating SMAD2, SMAD3, SMAD4 and SMAD7, preventing the nuclear translocation of SMAD3 and SMAD4 and the translocation of SMAD7 from the nucleus to the cytoplasm in response to TGF-beta. Activates PPARG transcriptional activity and promotes adipocyte differentiation. Activates the NF-kappa-B pathway via phosphorylation of IKKB. The tyrosine phosphorylated form is crucial for the regulation of focal adhesions by angiotensin II. Controls proliferation, survival, and growth of developing pancreatic cells. Participates in the regulation of Ca(2+) entry and Ca(2+)-activated K(+) channels of mast cells. Essential for the motility of vascular endothelial cells (ECs) and is involved in the regulation of their chemotaxis. Plays a critical role in cardiac homeostasis by serving as a dual effector for cell survival and beta-adrenergic response. Plays an important role during thymocyte development by regulating the expression of key nutrient receptors on the surface of pre-T cells and mediating Notch-induced cell growth and proliferative responses. Provides negative feedback inhibition to toll-like receptor-mediated NF-kappa-B activation in macrophages. Isoform 3 is catalytically inactive.

Immunogen information

Gene ID:

5170

Uniprot

O15530

Synonyms:

PDPK1; PDK1; PDPK2; PDPK2P; PRO0461

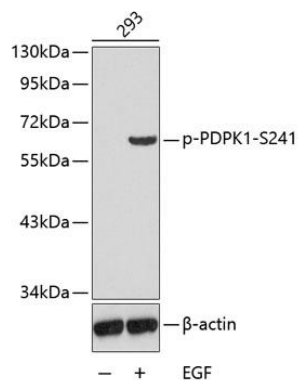
Immunogen:

A phospho specific peptide corresponding to residues surrounding S241 of human PDPK1

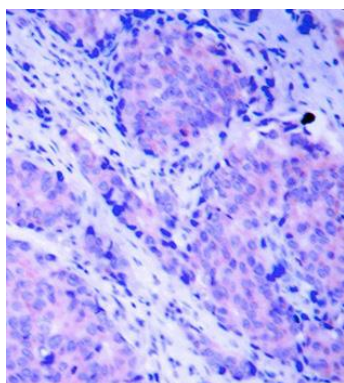
Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

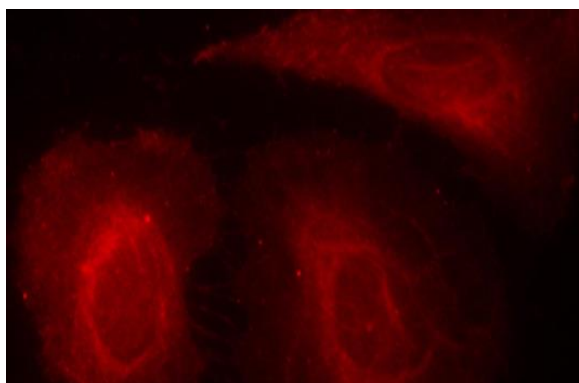
Product Images



Western blot analysis of extracts from 293 cells, using Phospho-PDPK1-S241 antibody (CABP0426). Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% BSA.



Immunohistochemistry of paraffin-embedded human breast carcinoma tissue, using Phospho-PDPK1-S241 antibody (CABP0426).



Immunofluorescence analysis of methanol-fixed HeLa cells using Phospho-PDPK1-S241 antibody (CABP0426).