

## PDPK1 (229-556): sc-4550 WB

### BACKGROUND

PDPK1 (3-phosphoinositide dependent protein kinase 1), also known as PDK1, PDPK2, PDPK2P or PR00461, is 556 amino acid ubiquitously expressed protein that localizes to the cell membrane, cytoplasm and nucleus. Acting as a master kinase, PDPK1 phosphorylates and activates a subgroup of the AGC family of protein kinases. PDPK1 is involved in mediating signal transduction for controlling proliferation, survival, and growth of developing pancreatic beta cells, regulating  $\text{Ca}^{2+}$  uptake and  $\text{Ca}^{2+}$ -activated  $\text{K}^{+}$  channels of mast cells, regulation of chemotaxis and motility of vascular endothelial cells, cardiac homeostasis, and thymocyte development. Belonging to the protein kinase superfamily, PDPK1 contains a PH domain, which play an essential role in homodimerization, localization and nuclear import of PDPK1, and a protein kinase domain. PDPK1 exists as five alternatively spliced isoforms and is encoded by a gene located on human chromosome 16p13.3.

### REFERENCES

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### SOURCE

PDPK1 (229-556) is expressed in *E. coli* as a 63 kDa tagged fusion protein corresponding to amino acids 229-556 of PDPK1 of human origin.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PRODUCT

PDPK1 (229-556) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10  $\mu\text{g}$  in 0.1 ml SDS-PAGE loading buffer.

### APPLICATIONS

PDPK1 (229-556) is suitable as a Western blotting control for sc-7686, sc-7687, sc-9118, sc-17765 and sc-17766.

### STORAGE

Store at  $-20^{\circ}\text{C}$ ; stable for one year from the date of shipment.