

Product datasheet for **TA379778**

PDPK1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB,1:500 - 1:2000 IF,1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Modifications:	Phospho S241
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic phosphorylated peptide around S241 of human PDK1/PDPK1 (NP_002604.1).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	48kDa/50kDa/58kDa/60kDa/63kDa
Gene Name:	3-phosphoinositide dependent protein kinase 1
Database Link:	Entrez Gene 5170 Human O15530



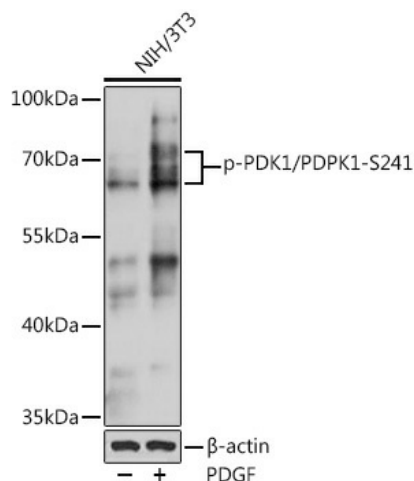
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Background:

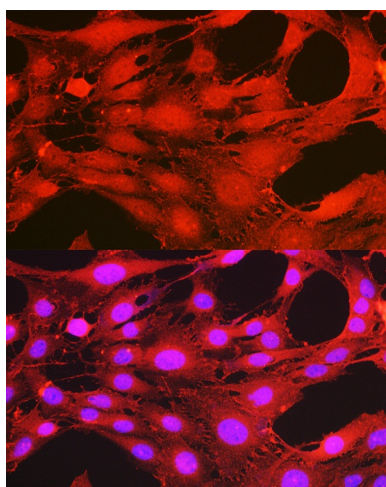
Serine/threonine kinase which acts as a master kinase, phosphorylating and activating a subgroup of the AGC family of protein kinases. Plays a central role in the transduction of signals from insulin by providing the activating phosphorylation to PKB/AKT1, thus propagating the signal to downstream targets controlling cell proliferation and survival, as well as glucose and amino acid uptake and storage. Negatively regulates the TGF-beta-induced signaling. 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.

Synonyms:

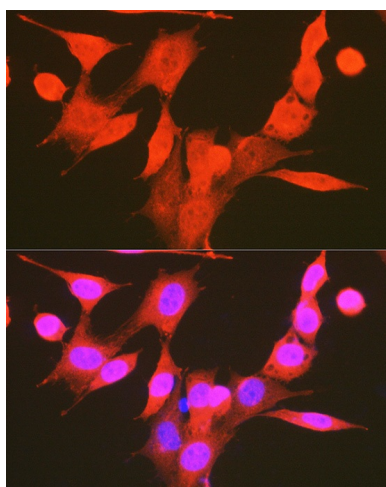
hPDK1; MGC20087; MGC35290; PDK1; PRO0461

Product images:

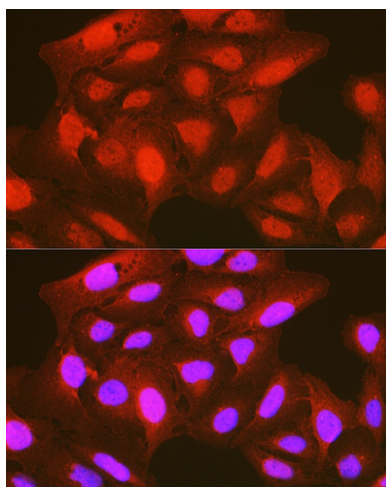
Western blot analysis of extracts of NIH/3T3 cells, using Phospho-PDK1/PDPK1-S241 pAb (TA379778) at 1:1000 dilution. NIH/3T3 cells were treated by PDGF (100 ng/mL) at 37°C for 30 minutes after serum-starvation overnight. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% BSA. | Detection: ECL Basic Kit. | Exposure time: 60s.



Immunofluorescence analysis of C6 cells using Phospho-PDK1/PDPK1-S241 Rabbit pAb (TA379778) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH-3T3 cells using Phospho-PDK1/PDPK1-S241 Rabbit pAb (TA379778) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using Phospho-PDK1/PDPK1-S241 Rabbit pAb (TA379778) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.