

Immunotag™ Phospho-PDK1 (Ser241) Antibody

Antibody Specification	
Catalog No.	ITA0790
Product Description	Immunotag™ Phospho-PDK1 (Ser241) Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Phospho-PDK1 (Ser241)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,ELISA
Recommended Dilution	WB 1:500-1:2000 IHC 1:50-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human PDK1 around the phosphorylation site of Serine 241
Specificity	Phospho-PDK1 (Ser241) Antibody detects endogenous levels of PDK1 only when phosphorylated at Serine 241
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	PDPK1
Accession No.	O15530

Antibody Specification

Alternate Names	3 phosphoinositide dependent protein kinase 1; 3-phosphoinositide-dependent protein kinase 1; hPDK 1; hPDK1; MGC20087; MGC35290; OTTHUMP00000159109; OTTHUMP00000159110; OTTHUMP00000174525; PDK1; Pdpk1; PDPK1_HUMAN; PDPK2; PDPK2P; PkB kinase; PkB kinase like gene 1; PkB like 1; PRO0461; Protein kinase;
Description	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.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	63kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.