

Mouse PDK1 Monoclonal Antibody | anti-PDK1 antibody

PDK1 (C-terminal region) Antibody

CATALOG # AAA71682	HOST Mouse	REACTIVITY Human, Rat, Mouse	APPLICATIONS Immunocytochemistry, ELISA, Western Blot
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PRODUCT SYNONYMS

PDK1; Monoclonal Antibody; PDK1 (C-terminal region) Antibody; PDK1 (C-terminal region); PDK1 002; anti-PDK1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Rat, Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	M146
Specificity	The purified antibody detects a 65kDa* protein corresponding to the apparent molecular mass of PDK1 on SDS-PAGE immunoblots of human A431 cells and mouse brain.
Purity/Purification	Protein A chromatography
Form/Format	Mouse monoclonal antibody purified with protein A chromatography is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-PDK1 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Clone M146 was generated from a recombinant protein containing amino acid residues in the C-terminal region of human PDK1. This sequence is highly conserved in rat and mouse PDK1
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of PDK1 phosphorylation in control and pervanadate-treated A431 cells. The cells were labeled with mouse monoclonal PDK1 (C-terminal Region) (PM1461), rabbit polyclonal PDK1 (Tyr-9) (PP1431), and PDK1 (N-terminus) (PP1411) antibodies. These antibodies were detected using appropriate secondary antibody conjugated to DyLight 594.



WB (Western Blot)

Western blot image of mouse brain (lane 1) and human A431 cells (lane 2). The blot was probed with anti-PDK1 (C-terminal region) (PM1461).

ADDITIONAL INFORMATION

Related Product Information for anti-PDK1 antibody	3-Phosphoinositide-dependent kinase 1 (PDK1), also known as PKB kinase, was identified as the activator of the survival kinase Akt/PKB. Several important substrates of PDK1 include p70S6 kinase, PKAs, PKCs, SGKs, RSKs, and PAKs. PDK1 is a member of the AGC superfamily of serine/threonine kinases. Through the phosphorylation of downstream kinases, like Akt, PDK1 has been shown to be involved in several different cell functions, such as protein synthesis, cell survival, glucose metabolism, and cell adhesion and migration. The regulation of PDK1 occurs through lipid second messengers and phosphorylation. Multiple serine sites are phosphorylated on PDK1. Serine 241 phosphorylation is required for PDK1 activity, while serine 396 has been implicated in PDK1 nuclear translocation. Tyrosine phosphorylation may also regulate PDK1 activity. Tyrosines 9 and 373/376 are phosphorylated by c-Src in vitro. Tyr-373/Tyr-376 are important for PDK1 activity, while Tyr-9 phosphorylation permits Tyr-373/Tyr-376 phosphorylation by c-Src. In addition, Tyr-9 may be important during angiotensin-II-induced focal adhesion formation.
References	Scheid, M.P. et al. (2005) Mol. Cell. Biol. 25(6):2347. Taniyama, Y. et al. (2003) Mol Cell. Biol. 23(22):8019. Park, J. et al. (2001) J Biol. Chem. 276(40):37459.

NCBI AND UNIPROT INFORMATION

NCBI GI #	387849239
NCBI GeneID	5170
NCBI Accession #	NP_001248745.1
NCBI GenBank Nucleotide #	NM_001261816.1
UniProt Accession #	O15530; Q59EH6; Q6FI20; Q8IV52; Q9BRD5; H0Y4Z0; Q6A1A2
Molecular Weight	63,152 Da
NCBI Official Full Name	3-phosphoinositide-dependent protein kinase 1 isoform 3
NCBI Official Synonym Full Names	3-phosphoinositide dependent protein kinase-1
NCBI Official Symbol	PDPK1
NCBI Official Synonym Symbols	PDK1; PDPK2; PRO0461
NCBI Protein Information	3-phosphoinositide-dependent protein kinase 1; PkB-like 1; PkB kinase like gene 1
UniProt Protein Name	3-phosphoinositide-dependent protein kinase 1
UniProt Gene Name	PDPK1
UniProt Synonym Gene Names	PDK1; hPDK1
UniProt Entry Name	PDPK1_HUMAN

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