

Product datasheet for **TA389182**

PDPK1 Mouse Antibody [Clone ID: M146]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M146
Applications:	ICC, WB
Recommended Dilution:	WB: 1:250 ICC: 1:50
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
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
Specificity:	The antibody detects a 65 kDa* protein corresponding to the apparent molecular mass of PDK1 on SDS-PAGE immunoblots of human A431 cells and mouse brain.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	65
Database Link:	O15530



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Background:

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.

Note:

Protein G purified tissue culture supernatant.