
Product name:	PRK1 (phospho-Thr774)/PRK2 (phospho-Thr816) Rabbit Polyclonal Antibody
Cat number:	ABN05308
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized phospho peptide around human PRK1 (Thr774) and PRK2 (Thr816)
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:500-1:2000, IHC 1:50-1:300, ELISA 1:2000-1:20000
Molecular Weight:	103kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

protein kinase N1(PKN1) Homo sapiens The protein encoded by this gene belongs to the protein kinase C superfamily. This kinase is activated by Rho family of small G proteins and may mediate the Rho-dependent signaling pathway. This kinase can be activated by phospholipids and by limited proteolysis. The 3-phosphoinositide dependent protein kinase-1 (PDPK1/PDK1) is reported to phosphorylate this kinase, which may mediate insulin signals to the actin cytoskeleton. The proteolytic activation of this kinase by caspase-3 or related proteases during apoptosis suggests its role in signal transduction related to apoptosis. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The C1 domain does not bind the diacylglycerol (DAG).,enzyme regulation:Activated by lipids, particularly cardiolipin and to a lesser extent by other acidic phospholipids. Two specific sites, Thr-774 (activation loop of the kinase domain) and Ser-916 (turn motif), need to be phosphorylated for its full activation.,function:Can phosphorylate ribosomal protein S6. Mediates GTPase Rho dependent intracellular signaling.,PTM:Activated by limited proteolysis with trypsin.,PTM:Autophosphorylated; preferably on serine.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 C2 domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 3 REM (Hr1) repeats.,subunit:Interacts with ZA20D3 (By similarity). Interacts with RhoA and Rac1.,tissue specificity:Found ubiquitously. Expressed in heart, brain, placenta, lung, skeletal muscle, kidney and pancreas.,