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| <b>Product name:</b>     | PRK1 (phospho-Thr774)/PRK2 (phospho-Thr816) Rabbit Polyclonal Antibody                       |
| <b>Cat number:</b>       | ABN05308                                                                                     |
| <b>Conjugate:</b>        | Unconjugated                                                                                 |
| <b>Size:</b>             | 100µL                                                                                        |
| <b>Clone:</b>            | Polyclonal                                                                                   |
| <b>Concentration:</b>    | 1mg/ml                                                                                       |
| <b>Host:</b>             | Rabbit                                                                                       |
| <b>Isotype:</b>          | IgG                                                                                          |
| <b>Immunogen:</b>        | Synthesized phospho peptide around human PRK1 (Thr774) and PRK2 (Thr816)                     |
| <b>Reactivity:</b>       | Human, Mouse, Rat                                                                            |
| <b>Applications:</b>     | WB 1:500-1:2000, IHC 1:50-1:300, ELISA 1:2000-1:20000                                        |
| <b>Molecular Weight:</b> | 103kDa                                                                                       |
| <b>Purification:</b>     | Affinity purification                                                                        |
| <b>Form:</b>             | Liquid                                                                                       |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.           |
| <b>Storage:</b>          | 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.,