

PRK1 (Phospho Thr774)/PRK2 (Phospho Thr816) rabbit pAb

Catalog No: YP1451

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA;IHC

Target: PRK1

Fields: >>PI3K-Akt signaling pathway;>>NOD-like receptor signaling

pathway;>>Salmonella infection;>>Yersinia infection

Protein Name: PRK1 (Thr774)/PRK2 (Thr816)

Q16512

P70268

Human Gene Id: 5585

Human Swiss Prot

No:

Mouse Gene ld: 320795

Mouse Swiss Prot

No:

Rat Gene ld: 29355

Rat Swiss Prot No: Q63433

Immunogen : Synthesized phosho peptide around human PRK1 (Thr774) and PRK2 (Thr816)

Specificity: This antibody detects endogenous levels of Human Mouse Rat PRK1 (phospho-

Thr774) or PRK2 (phospho-Thr816)

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000

Purification: The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 103kD

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],

Function: 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 (

Subcellular Location:

Cytoplasm . Nucleus . Endosome . Cell membrane ; Peripheral membrane protein . Cleavage furrow . Midbody . Associates with chromatin in a ligand-dependent manner. Localization to endosomes is mediated via its interaction with

RHOB. Association to the cell membrane is dependent on Ser-377

phosphorylation. Accumulates during telophase at the cleavage furrow and finally

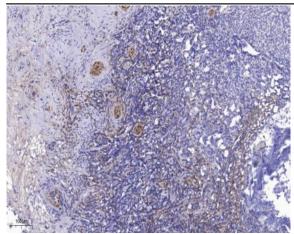
concentrates around the midbody in cytokinesis. .

Expression: Found ubiquitously. Expressed in heart, brain, placenta, lung, skeletal muscle,

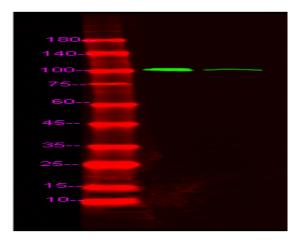
kidney and pancreas. Expressed in numerous tumor cell lines, especially in breast

tumor cells.

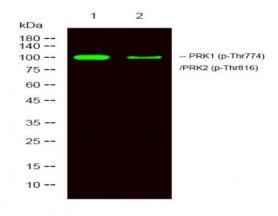
Products Images



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).



Western Blot analysis of Hela treated or untreated by LPS lysis, using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000



Western Blot analysis of 1 NIH/3T3 treated with LPS, 2 NIH/3T3 ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000