



PKN Monoclonal Antibody

Catalog No	YP-mAb-14942
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PKN1
Immunogen	Synthesized peptide derived from the Internal region of human PKN.
Specificity	PKN Monoclonal Antibody detects endogenous levels of PKN protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DBK;PKN;PAK1;PRK1;PAK-1;PRKCL1;PKN-ALPHA;PKN1;Serine/threonine-protein kinase N1;Protease-activated kinase 1;Protein kinase C-like 1;Protein kinase C-like PKN;Protein kinase PKN-alpha;Protein-kinase C-related kinase 1; Serine-threonine protein
Observed Band	105kD
Calculated Molecular Weight	105kD
Cell Pathway	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. .
Tissue Specificity	Found ubiquitously. Expressed in heart, brain, placenta, lung, skeletal muscle, kidney and pancreas. Expressed in numerous tumor cell lines, especially in breast tumor cells.
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 (

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],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images