PKN Monoclonal Antibody

Catalog No	BYmab-14942
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PKN1
Protein Name	Serine/threonine-protein kinase N1
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 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PKN1; PAK1; PKN; PRK1; PRKCL1; Serine/threonine-protein kinase N1; Protease-activated kinase 1; PAK-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
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.

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