



# KPCI Monoclonal Antibody

Catalog No	YP-mAb-06744
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PRKCI DXS1179E
Protein Name	Protein kinase C iota type (EC 2.7.11.13) (Atypical protein kinase C-lambda/iota) (PRKC-lambda/iota) (aPKC-lambda/iota) (nPKC-iota)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	KPCI Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 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	
Observed Band	65kD
Cell Pathway	Cytoplasm . Membrane . Endosome . Nucleus . Transported into the endosome through interaction with SQSTM1/p62. After phosphorylation by SRC, transported into the nucleus through interaction with KPNB1. Colocalizes with CDK7 in the cytoplasm and nucleus. Transported to vesicular tubular clusters (VTCs) through interaction with RAB2A. .
Tissue Specificity	Predominantly expressed in lung and brain, but also expressed at lower levels in many tissues including pancreatic islets. Highly expressed in non-small cell lung cancers.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The C1 domain does not bind diacylglycerol (DAG).,domain:The OPR domain mediates interaction with SQSTM1.,enzyme regulation:Might be a target for novel lipid activators that are elevated during nutrient-stimulated insulin secretion. Two specific sites, Thr-412 (activation loop of the kinase domain) and Thr-564 (turn motif), need to be phosphorylated for its full activation (By similarity). Atypical PCKs are not regulated by diacylglycerol, phorbol esters nor calcium ions.,function:Calcium-independent, phospholipid-dependent, serine- and threonine-specific kinase. May play a role in the secretory response to nutrients. Involved in cell polarization processes and the formation of epithelial tight junctions. Implicated in the activation of several signaling pathways including Ras,



## c-Src and NF-kappa-B pathways. Functions in

**Background**

This gene encodes a member of the protein kinase C (PKC) family of serine/threonine protein kinases. The PKC family comprises at least eight members, which are differentially expressed and are involved in a wide variety of cellular processes. This protein kinase is calcium-independent and phospholipid-dependent. It is not activated by phorbol esters or diacylglycerol. This kinase can be recruited to vesicle tubular clusters (VTCs) by direct interaction with the small GTPase RAB2, where this kinase phosphorylates glyceraldehyde-3-phosphate dehydrogenase (GAPD/GAPDH) and plays a role in microtubule dynamics in the early secretory pathway. This kinase is found to be necessary for BCL-ABL-mediated resistance to drug-induced apoptosis and therefore protects leukemia cells against drug-induced apoptosis. There is a single exon pseudogene mapped on chromosome X. [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**