

Rabbit PRKCI Polyclonal Antibody | anti-PRKCI antibody

PRKCI Antibody

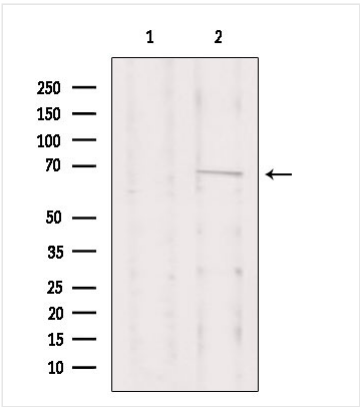
CATALOG # AAA323531	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

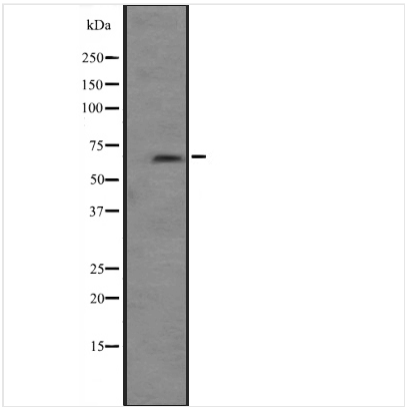
PRKCI; Polyclonal Antibody; PRKCI Antibody; aPKC lambda/iota; aPKC-lambda/iota; Atypical protein kinase C lambda/iota; Atypical protein kinase C-lambda/iota; DXS1179E; KPCI_HUMAN; MGC26534; nPKC iota; nPKC-iota; nPKCiota; PKC lambda; PKC lambda/iota; PKCI; PKCiota; PKClambda; PRKC iota; PRKC lambda/iota; PRKC-lambda/iota; Protein kinase C iota; Protein kinase C iota type; anti-PRKCI antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PRKCI antibody detects endogenous levels of total PRKCI
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	596
Applicable Applications for anti-PRKCI antibody	ELISA, WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasm. Membrane. Endosome. Nucleus. Transported into the endosome through interaction with SQSTM1/p62. After phosphorylation by cSrc, transported into the nucleus through interaction with KPNB1. Colocalizes with CDK7 in the cytoplasm and nucleus. Vesicular tubular clusters. Transported to 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.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated



WB (Western Blot)
Western blot analysis of extracts from HeLa, using PRKCI Antibody. Lane 1 was treated with the blocking peptide.



WB (Western Blot)
Western blot analysis of PRKCI expression in Jurkat whole cell lysate, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PRKCI antibody

Function: Calcium-and diacylglycerol-independent serine/threonine-protein kinase that plays a general protective role against apoptotic stimuli, is involved in NF-kappa-B activation, cell survival, differentiation and polarity, and contributes to the regulation of microtubule dynamics in the early secretory pathway. Is necessary for BCR-ABL oncogene-mediated resistance to apoptotic drug in leukemia cells, protecting leukemia cells against drug-induced apoptosis. In cultured neurons, prevents amyloid beta protein-induced apoptosis by interrupting cell death process at a very early step. In glioblastoma cells, may function downstream of phosphatidylinositol 3-kinase (PI3K) and PDPK1 in the promotion of cell survival by phosphorylating and inhibiting the pro-apoptotic factor BAD. Can form a protein complex in non-small cell lung cancer (NSCLC) cells with PARD6A and ECT2 and regulate ECT2 oncogenic activity by phosphorylation, which in turn promotes transformed growth and invasion. In response to nerve growth factor (NGF), acts downstream of SRC to phosphorylate and activate IRAK1, allowing the subsequent activation of NF-kappa-B and neuronal cell survival. Functions in the organization of the apical domain in epithelial cells by phosphorylating EZR. This step is crucial for activation and normal distribution of EZR at the early stages of intestinal epithelial cell differentiation. Forms a protein complex with LLGL1 and PARD6B independently of PARD3 to regulate epithelial cell polarity. Plays a role in microtubule dynamics in the early secretory pathway through interaction with RAB2A and GAPDH and recruitment to vesicular tubular clusters (VTCs). In human coronary artery endothelial cells (HCAEC), is activated by saturated fatty acids and mediates lipid-induced apoptosis.

Subunit Structure: Forms a complex with SQSTM1 and MP2K5 (By similarity). Interacts directly with SQSTM1 (Probable). Interacts with IKBKB. Interacts with PARD6A, PARD6B and PARD6G. Part of a quaternary complex containing aPKC, PARD3, a PARD6 protein (PARD6A, PARD6B or PARD6G) and a GTPase protein (CDC42 or RAC1). Part of a complex with LLGL1 and PARD6B. Interacts with ADAP1/CENTA1. Interaction with SMG1, through the ZN-finger domain, activates the kinase activity. Interacts with CDK7. Forms a complex with RAB2A and GAPDH involved in recruitment onto the membrane of vesicular tubular clusters (VTCs). Interacts with ECT2 ('Thr-359' phosphorylated form). Interacts with VAMP2 (PubMed:17313651). Interacts with WDFY2 (via WD repeats 1-3) (PubMed:16792529).

Post-translational Modifications: Phosphorylation at Thr-412 in the activation loop is not mandatory for activation (By similarity). Upon neuronal growth factor (NGF) stimulation, phosphorylated by SRC at Tyr-265, Tyr-280 and Tyr-334. Phosphorylation at Tyr-265 facilitates binding to KPNB1/importin-beta regulating entry of PRKCI into the nucleus. Phosphorylation on Tyr-334 is important for NF-kappa-B stimulation.

Similarity: The PB1 domain mediates interaction with SQSTM1. The C1 zinc finger does not bind diacylglycerol (DAG). The pseudosubstrate motif resembles the sequence around sites phosphorylated on target proteins, except the presence of a non-phosphorylatable residue in place of Ser, it modulates activity by competing with substrates. Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	133908623
NCBI GeneID	5584
NCBI Accession #	NP_002731.4

NCBI GenBank Nucleotide #	NM_002740.5
UniProt Accession #	P41743 ; Q8WW06 ; D3DNQ4
Molecular Weight	Observed: 68 kDa Predicted: 69 kDa
NCBI Official Full Name	protein kinase C iota type
NCBI Official Synonym Full Names	protein kinase C iota
NCBI Official Symbol	PRKCI
NCBI Official Synonym Symbols	PKCI; DXS1179E; nPKC-iota
NCBI Protein Information	protein kinase C iota type
UniProt Protein Name	Protein kinase C iota type
UniProt Gene Name	PRKCI
UniProt Synonym Gene Names	DXS1179E; PRKC-lambda/iota; aPKC-lambda/iota

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/prkci-antibody-western-blot-elisa/323531>