



# PKD1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14939
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	PRKD1
<b>Protein Name</b>	Serine/threonine-protein kinase D1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PKD1/PKC mu. AA range:171-220
<b>Specificity</b>	PKD1 Polyclonal Antibody detects endogenous levels of PKD1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PRKD1; PKD; PKD1; PRKCM; Serine/threonine-protein kinase D1; Protein kinase C mu type; Protein kinase D; nPKC-D1; nPKC-mu
<b>Observed Band</b>	101kD
<b>Cell Pathway</b>	Cytoplasm . Cell membrane . Golgi apparatus, trans-Golgi network . Translocation to the cell membrane is required for kinase activation.
<b>Tissue Specificity</b>	Placenta,Testis,
<b>Function</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Activated by diacylglycerol and phorbol esters.,function:Calcium-independent, phospholipid-dependent, serine- and threonine-specific kinase involved in resistance to oxidative stress.,PTM:Phosphorylation of Ser-738 and/or Ser-742 in activated PKD is mediated by transphosphorylation (By similarity). Phosphorylation of Tyr-463 mediated by the Src/Abl pathway in response to oxidative stress activates the kinase.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. PKD subfamily.,similarity:Contains 1 PH domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 phorbol-ester/DAG-type zinc fingers.,subunit:Interacts (via N-terminus) with ADAP1/CENTA1. Interacts with Src.,

**Background**

PRKD1 is a serine/threonine kinase that regulates a variety of cellular functions, including membrane receptor signaling, transport at the Golgi, protection from oxidative stress at the mitochondria, gene transcription, and regulation of cell shape, motility, and adhesion (summary by Eiseler et al., 2009 [PubMed 19329994]).[supplied by OMIM, Nov 2010],

**matters needing attention**

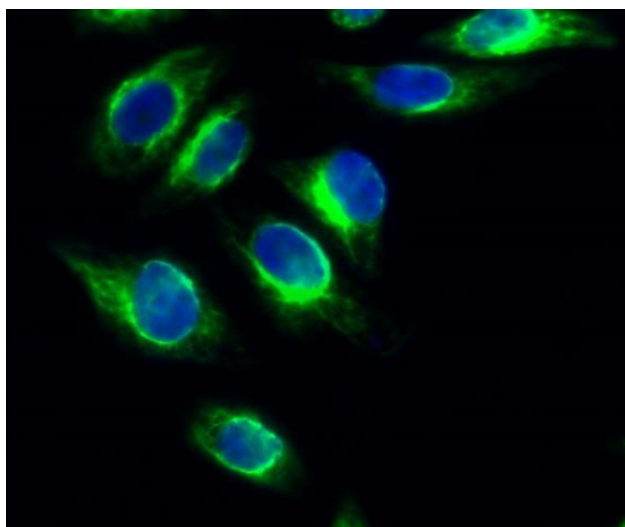
Avoid repeated freezing and thawing!

**Usage suggestions**

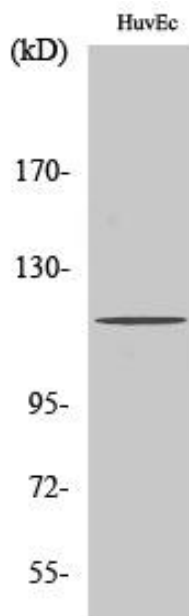
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



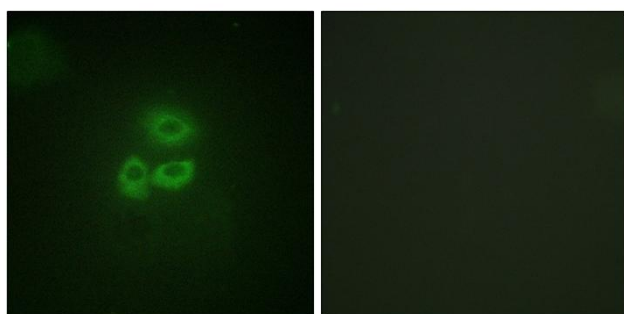
## Products Images



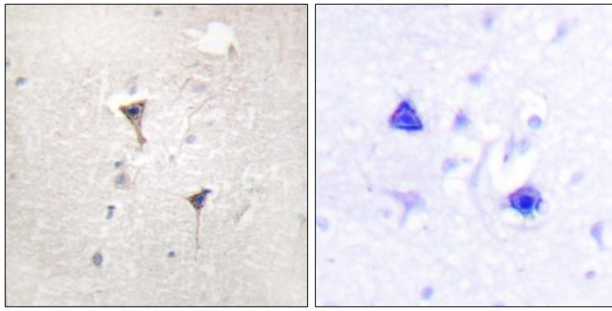
Immunofluorescence analysis of HeLa cell. 1,PKD1 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



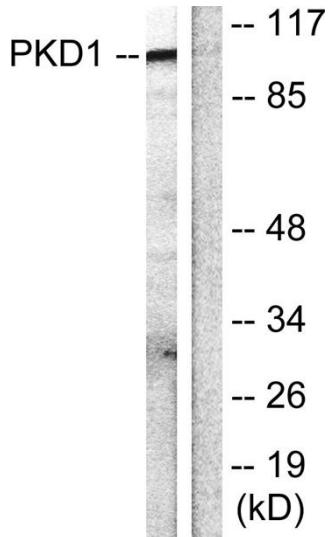
Western Blot analysis of HuvEc cells using PKD1 Polyclonal Antibody



Immunofluorescence analysis of A549 cells, using PKD1/PKC mu Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PKD1/PKC mu Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HUVEC cells, treated with PMA 125ng/ml 30', using PKD1/PKC mu Antibody. The lane on the right is blocked with the synthesized peptide.