



PKD1 Polyclonal Antibody

Catalog No	YP-Ab-14939
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	PRKD1
Protein Name	Serine/threonine-protein kinase D1
Immunogen	The antiserum was produced against synthesized peptide derived from human PKD1/PKC mu. AA range:171-220
Specificity	PKD1 Polyclonal Antibody detects endogenous levels of PKD1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	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.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PRKD1; PKD; PKD1; PRKCM; Serine/threonine-protein kinase D1; Protein kinase C mu type; Protein kinase D; nPKC-D1; nPKC-mu
Observed Band	101kD
Cell Pathway	Cytoplasm . Cell membrane . Golgi apparatus, trans-Golgi network . Translocation to the cell membrane is required for kinase activation.
Tissue Specificity	Placenta,Testis,
Function	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

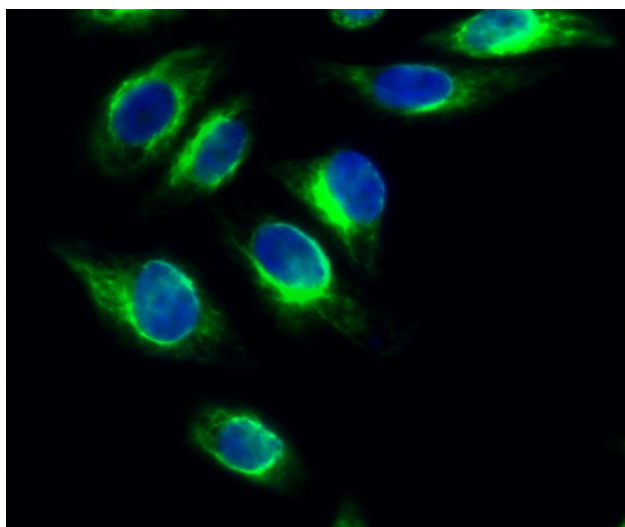
Avoid repeated freezing and thawing!

Usage suggestions

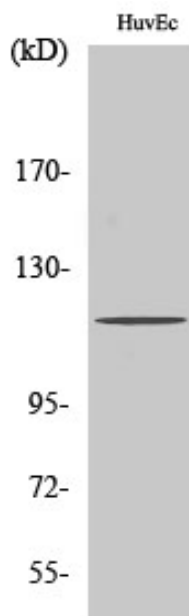
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



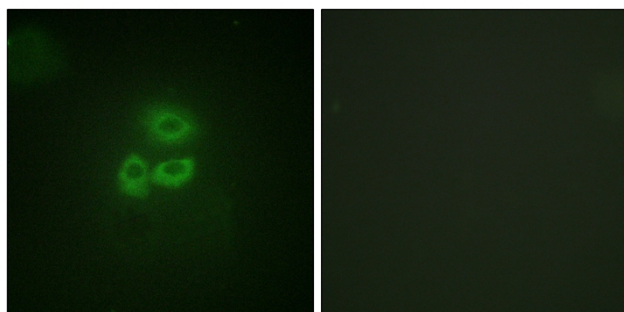
Products Images



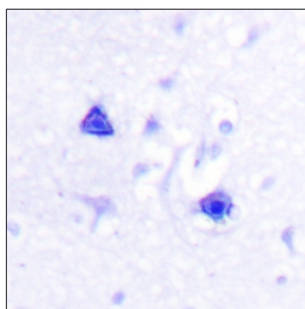
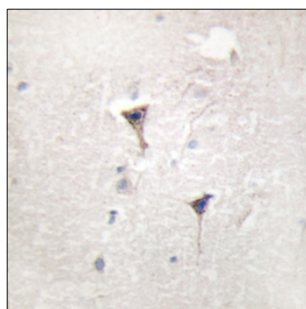
Immunofluorescence analysis of Hela cell. 1, PKD1 Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



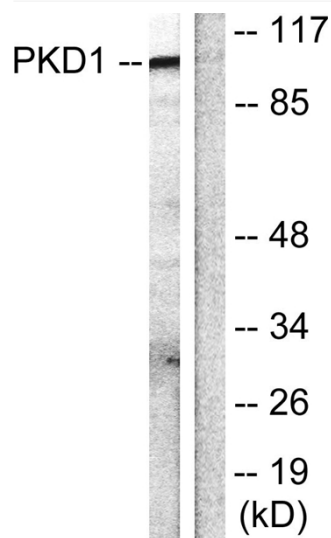
Western Blot analysis of HuvEc cells using PKD1 Polyclonal Antibody



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.