

PKD1 Polyclonal Antibody

Catalog No: YT3771

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: PKD1

Fields: >>Rap1 signaling pathway;>>Aldosterone synthesis and secretion;>>Chemical

carcinogenesis - reactive oxygen species

Gene Name : PRKD1

Protein Name: Serine/threonine-protein kinase D1

Q15139

Q62101

Human Gene Id: 5587

Human Swiss Prot

No:

Mouse Gene Id: 18760

Mouse Swiss Prot

No:

Rat Gene Id: 85421

Rat Swiss Prot No: Q9WTQ1

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

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 101kD

Cell Pathway: Regulation_Microtubule; Regulation of Actin Dynamics; Stem cell pathway;

Insulin Receptor; B Cell Receptor; AMPK

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],

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.,

Subcellular Location:

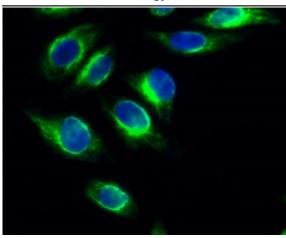
Expression:

Cytoplasm . Cell membrane . Golgi apparatus, trans-Golgi network . Translocation to the cell membrane is required for kinase activation.

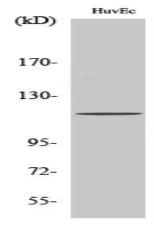
Placenta, Testis,

•

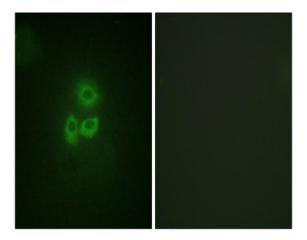
Products Images



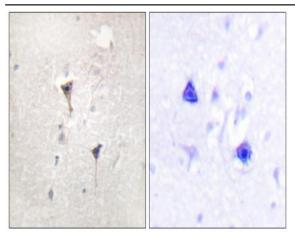
Immunofluorescence analysis of Hela cell. 1,PKD1 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



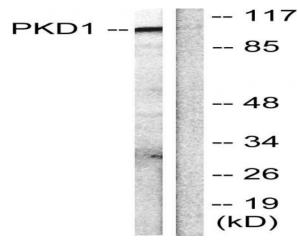
Western Blot analysis of HuvEc cells using PKD1 Polyclonal Antibody



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.