

PKD2 (phospho Ser876) Polyclonal Antibody

Catalog No: YP0341

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: PKD2

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

carcinogenesis - reactive oxygen species

Gene Name : PRKD2

Protein Name: Serine/threonine-protein kinase D2

Q9BZL6

Q8BZ03

Human Gene Id: 25865

Human Swiss Prot

No:

Mouse Gene Id: 101540

Mouse Swiss Prot

No:

Rat Gene Id: 292658

Rat Swiss Prot No: Q5XIS9

Immunogen : The antiserum was produced against synthesized peptide derived from human

PKD2 around the phosphorylation site of Ser876. AA range:829-878

Specificity: Phospho-PKD2 (S876) Polyclonal Antibody detects endogenous levels of PKD2

protein only when phosphorylated at S876.

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. ELISA: 1:40000.. IF 1:50-200

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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: 96kD

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

Insulin Receptor; B Cell Receptor; AMPK

Background: The protein encoded by this gene belongs to the protein kinase D (PKD) family

of serine/threonine protein kinases. This kinase can be activated by phorbol esters as well as by gastrin via the cholecystokinin B receptor (CCKBR) in gastric cancer cells. It can bind to diacylglycerol (DAG) in the trans-Golgi network (TGN) and may regulate basolateral membrane protein exit from TGN. Alternative splicing results in multiple transcript variants encoding different isoforms.

[provided by RefSeq, Jul 2008],

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 protein kinase.,PTM:Autophosphorylated. Phorbol esters stimulates autophosphorylation.

Phosphorylation of Ser-876 correlates with the activation status of 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.,tissue

specificity: Widely expressed.,

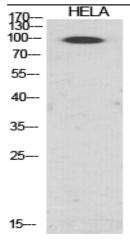
Subcellular Location:

Cytoplasm . Cell membrane . Nucleus . Golgi apparatus, trans-Golgi network . Translocation to the cell membrane is required for kinase activation. Accumulates in the nucleus upon CK1-mediated phosphorylation after activation of G-protein-coupled receptors. Nuclear accumulation is regulated by blocking nuclear export

of active PRKD2 rather than by increasing import. .

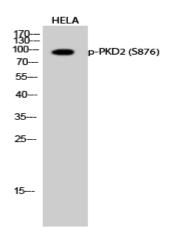
Expression: Widely expressed.

Products Images

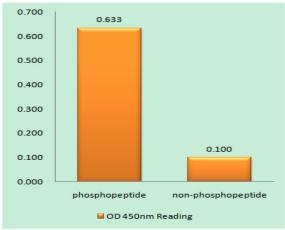


Phospho-PKD2 (S876)

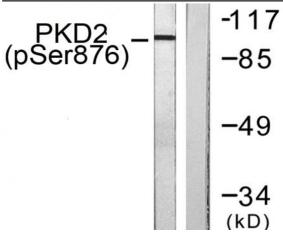
Western Blot analysis of various cells using Phospho-PKD2 (S876) Polyclonal Antibody diluted at 1:1000



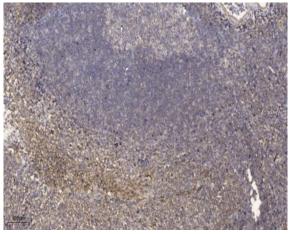
Western Blot analysis of HELA cells using Phospho-PKD2 (S876) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKD2 (Phospho-Ser876) Antibody



Western blot analysis of lysates from NIH/3T3 cells treated with PMA 250ng/ml 15', using PKD2 (Phospho-Ser876) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).