

## **PKD2 Polyclonal Antibody**

Catalog No: YT3773

**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. AA range:829-878

**Specificity:** PKD2 Polyclonal Antibody detects endogenous levels of PKD2 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. ELISA: 1:5000.. 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.,

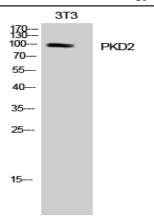
Subcellular Location:

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

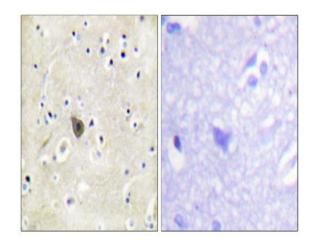
of active PRKD2 rather than by increasing import. .

**Expression:** Widely expressed.

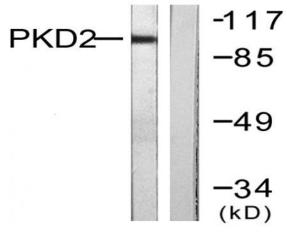
## **Products Images**



Western Blot analysis of NIH-3T3 cells using PKD2 Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PKD2 Antibody. The picture on the right is blocked with the synthesized peptide.



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