

## PKD1 (phospho Ser205) Polyclonal Antibody

Catalog No: YP0720

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 around the phosphorylation site of Ser205. AA range:171-220

Specificity: Phospho-PKD1 (S205) Polyclonal Antibody detects endogenous levels of PKD1

protein only when phosphorylated at S205.

**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: 110kD

**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.,

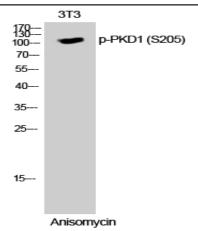
Subcellular Location:

Cytoplasm . Cell membrane . Golgi apparatus, trans-Golgi network .

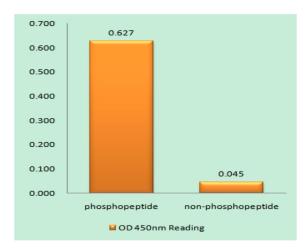
Translocation to the cell membrane is required for kinase activation.

**Expression :** Placenta, Testis,

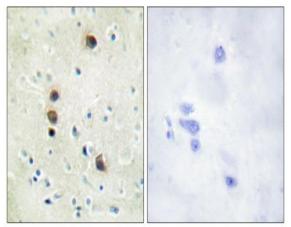
## **Products Images**



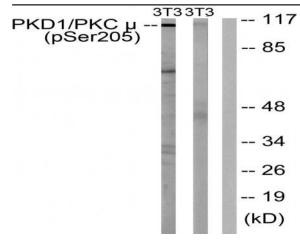
Western Blot analysis of 3T3 cells using Phospho-PKD1 (S205) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKD1/PKC mu (Phospho-Ser205) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using PKD1/PKC mu (Phospho-Ser205) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with Anisomycin 25ug/ml 30', using PKD1/PKC mu (Phospho-Ser205) Antibody. The lane on the right is blocked with the phospho peptide.

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