



# PKD1 (phospho Ser205) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14474
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	PRKD1
<b>Protein Name</b>	Serine/threonine-protein kinase D1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PKD1/PKC mu around the phosphorylation site of Ser205. AA range:171-220
<b>Specificity</b>	Phospho-PKD1 (S205) Polyclonal Antibody detects endogenous levels of PKD1 protein only when phosphorylated at S205.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PRKD1; PKD; PKD1; PRKCM; Serine/threonine-protein kinase D1; Protein kinase C mu type; Protein kinase D; nPKC-D1; nPKC-mu
<b>Observed Band</b>	110kD
<b>Cell Pathway</b>	Cytoplasm . Cell membrane . Golgi apparatus, trans-Golgi network . Translocation to the cell membrane is required for kinase activation.
<b>Tissue Specificity</b>	Placenta,Testis,
<b>Function</b>	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**

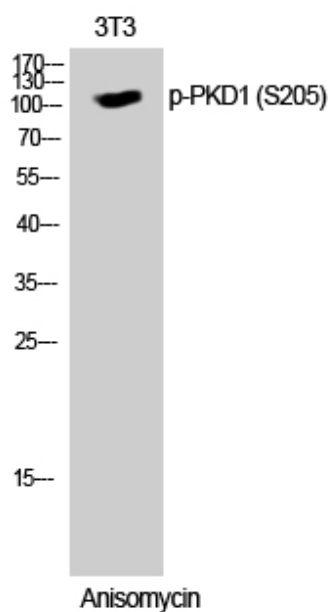
Avoid repeated freezing and thawing!

**Usage suggestions**

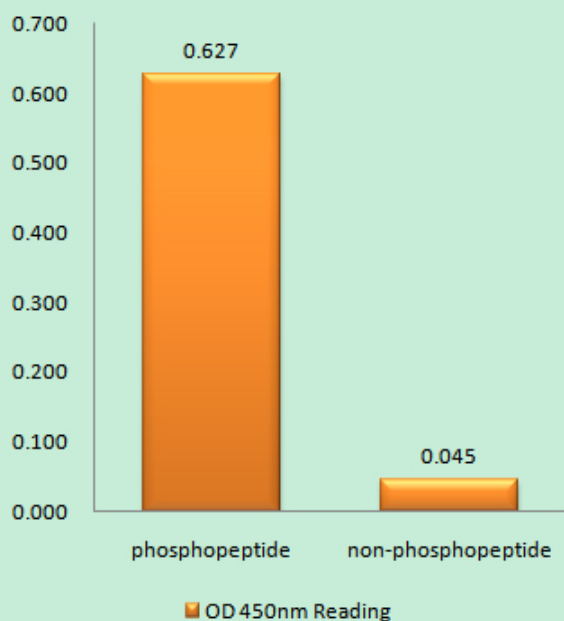
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



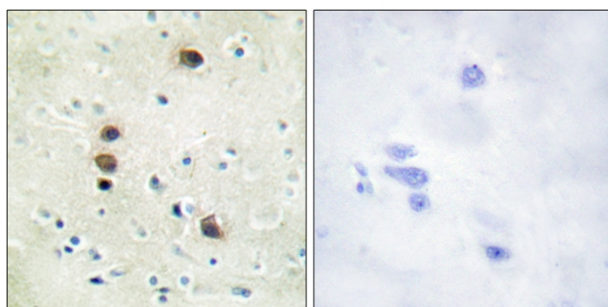
## Products Images



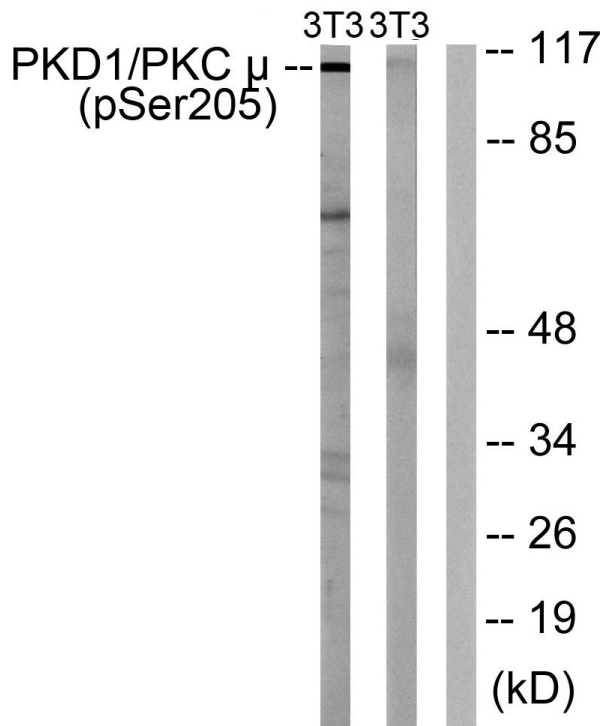
Western Blot analysis of 3T3 cells using  
Phospho-PKD1 (S205) Polyclonal Antibody



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.