



# PKD2 (phospho Ser876) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14375
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	PRKD2
<b>Protein Name</b>	Serine/threonine-protein kinase D2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PKD2 around the phosphorylation site of Ser876. AA range:829-878
<b>Specificity</b>	Phospho-PKD2 (S876) Polyclonal Antibody detects endogenous levels of PKD2 protein only when phosphorylated at S876.
<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>	PRKD2; PKD2; HSPC187; Serine/threonine-protein kinase D2; nPKC-D2
<b>Observed Band</b>	96kD
<b>Cell Pathway</b>	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. .
<b>Tissue Specificity</b>	Widely expressed.
<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 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.,



## 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],

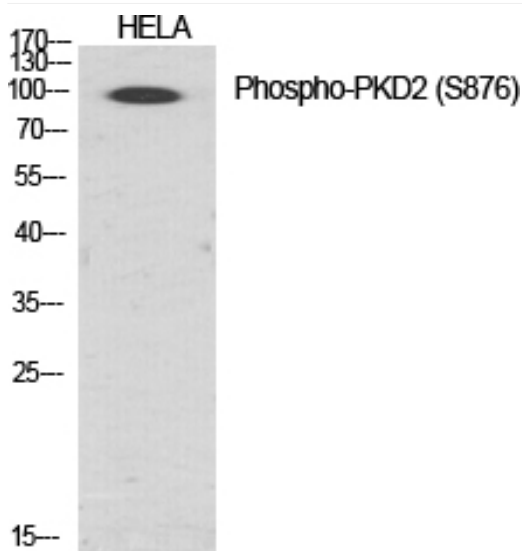
## matters needing attention

Avoid repeated freezing and thawing!

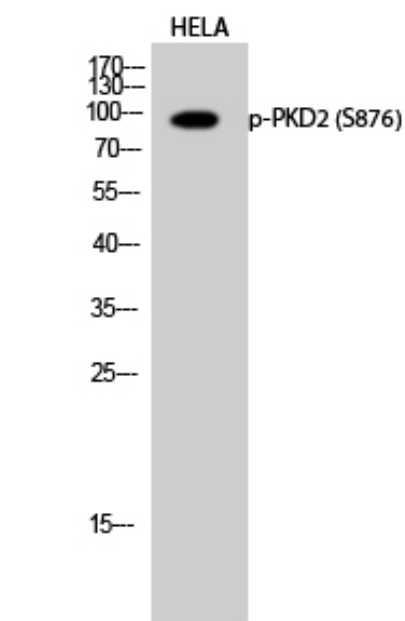
## Usage suggestions

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

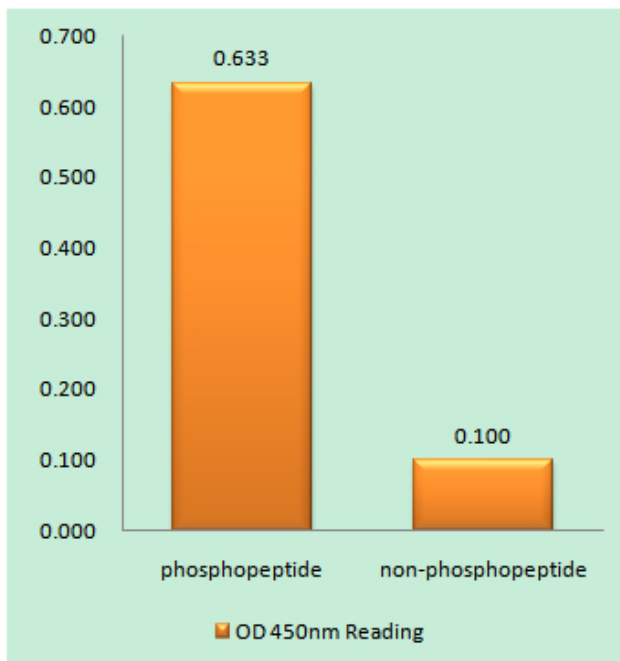
## Products Images



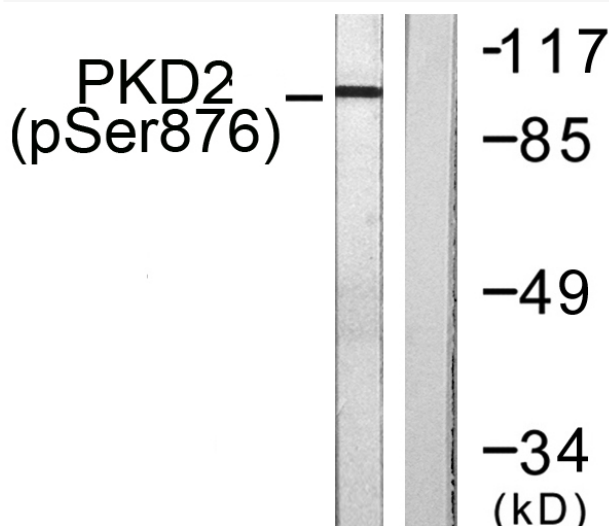
Western Blot analysis of various cells using Phospho-PKD2 (S876) Polyclonal Antibody diluted at 1:1000



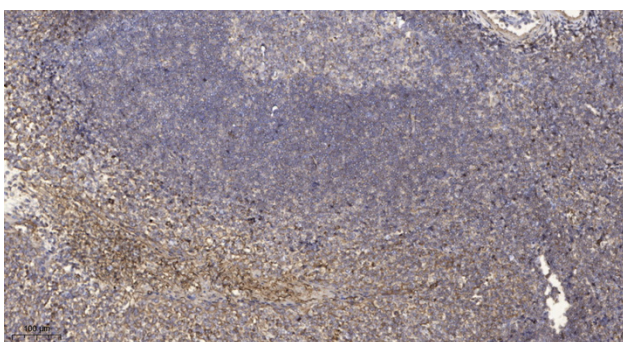
Western Blot analysis of HELA cells using Phospho-PKD2 (S876) Polyclonal Antibody diluted at 1:1000



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).