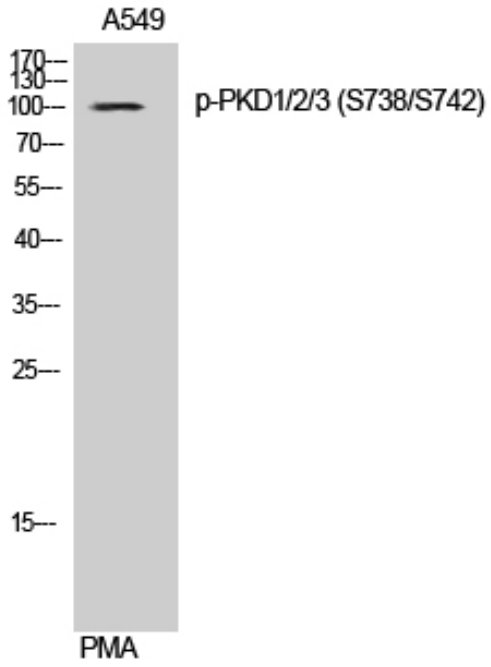
PKD1/2/3 (phospho Ser738/S742) Polyclonal Antibody

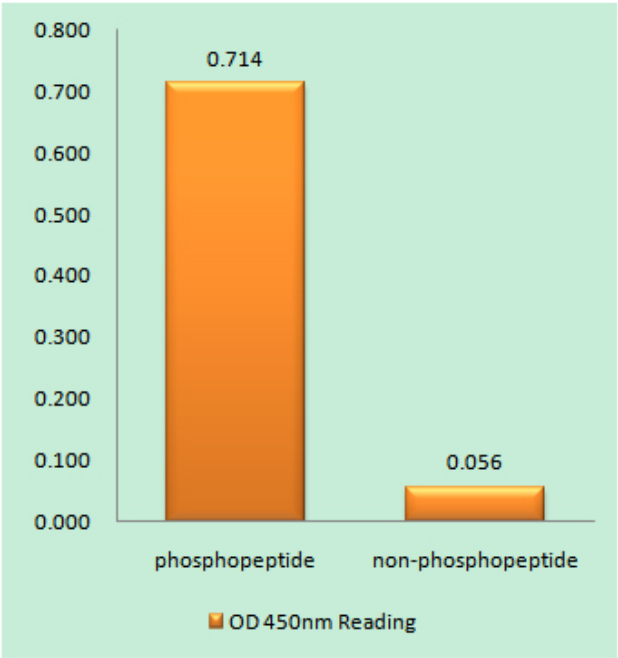
Catalog No	YP-Ab-14467
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	KPCD1/KPCD2/KPCD3
Protein Name	Serine/threonine-protein kinase D1/2/3
Immunogen	The antiserum was produced against synthesized peptide derived from human PKD1/2/3/PKC mu around the phosphorylation site of Ser738 and Ser742. AA range:706-755
Specificity	Phospho-PKD1/2/3 (S738/S742) Polyclonal Antibody detects endogenous levels of PKD1/2/3 protein only when phosphorylated at S738/S742.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PRKD1; PKD; PKD1; PRKCM; Serine/threonine-protein kinase D1; Protein kinase C mu type; Protein kinase D; nPKC-D1; nPKC-mu; PRKD2; PKD2; HSPC187; Serine/threonine-protein kinase D2; nPKC-D2; PRKD3; EPK2; PRKCN; Serine/threonine-protein kinas
Observed Band	101kD
Cell Pathway	Cytoplasm . Cell membrane . Golgi apparatus, trans-Golgi network . Translocation to the cell membrane is required for kinase activation.
Tissue Specificity	Placenta,Testis,
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.,
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.

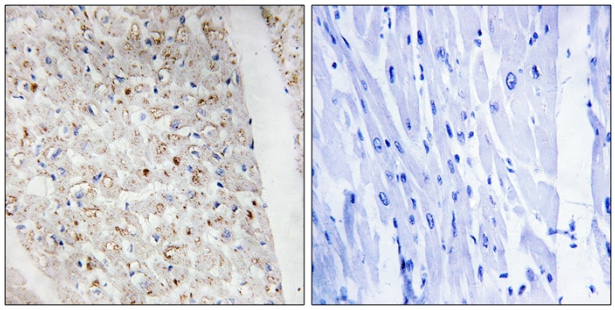
Products Images



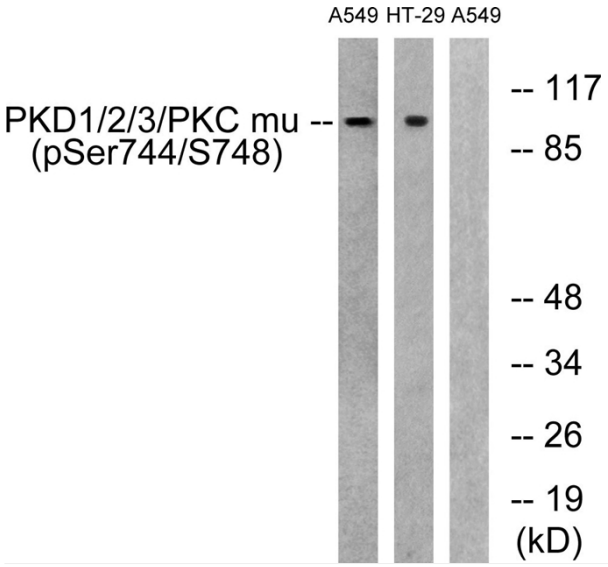
Western Blot analysis of A549 cells using Phospho-PKD1/2/3 (S738/S742) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKD1/2/3/PKC mu (Phospho-Ser738+Ser742) Antibody



Immunohistochemistry analysis of paraffin-embedded human heart, using PKD1/2/3/PKC mu (Phospho-Ser738+Ser742) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from A549 cells treated with PMA 125ng/ml 30' and HT29 cells treated with serum 20% 15', using PKD1/2/3/PKC mu (Phospho-Ser738+Ser742) Antibody. The lane on the right is blocked with the phospho peptide.