

# Summary

Production Name	PKC (phospho Thr497) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IF,IHC,WB
Reactivity	Human,Mouse,Rat

#### Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

Gene Name	PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ	
	PRKCA; PKCA; PRKACA; Protein kinase C alpha type; PKC-A; PKC-alpha; PRKCB; PKCB;	
Alternative Names	PRKCB1; Protein kinase C beta type; PKC-B; PKC-beta; PRKCD; Protein kinase C delta	
	type; Tyrosine-protein kinase PRKCD; nPKC-delta; PRKCE; PKCE; Protein kinase	
Gene ID	5578/5579/5580/5581/5582/5583/5588/5590	
	P17252/P05771/Q05655/Q02156/P05129/P24723/Q04759/Q05513.The antiserum	
SwissProt ID	was produced against synthesized peptide derived from human PKC-pan around the	
	phosphorylation site of Thr497. AA range:623-672	

# Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in



other applications.

**Molecular Weight** 

83kD

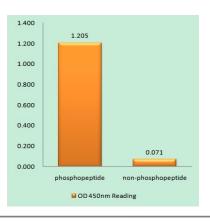
### Background

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This kinase has been reported to play roles in many different cellular processes, such as cell adhesion, cell transformation, cell cycle checkpoint, and cell volume control. Knockout studies in mice suggest that this kinase may be a fundamental regulator of cardiac contractility and Ca(2+) handling in myocytes. [provided by RefSeq, Jul 2catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Binds 3 calcium ions per subunit. The ions are bound to the C2 domain., function: PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters., function: This is a calcium-activated, phospholipid-dependent, serine- and threonine-specific enzyme. May play a role in cell motility by phosphorylating CSPG4., similarity: Belongs to the protein kinase superfamily., similarity: Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily., similarity: Contains 1 AGC-kinase Cterminal domain.,similarity:Contains 1 C2 domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 phorbol-ester/DAG-type zinc fingers., subunit: Interacts with ADAP1/CENTA1, CSPG4 and PRKCABP. Binds to SDPR in the presence of phosphatidylserine.,

### **Research Area**

Regulation Microtubule; Regulation of Actin Dynamics; Stem cell pathway; Insulin Receptor; ErbB/HER; MAPK ERK Growth;MAPK G Protein; WNT;WNT-T CELL;β-Catenin; B Cell Receptor; PI3K/Akt; mTOR; AMPK

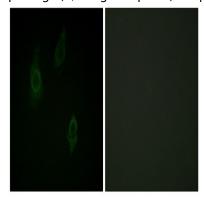
# **Image Data**



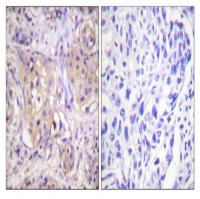


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKC-pan (Phospho-Thr497) Antibody

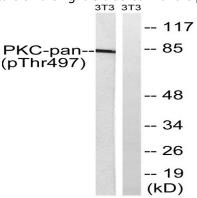
Antibody



Immunofluorescence analysis of HepG2 cells, using PKC-pan (Phospho-Thr497) Antibody. The picture on the right is blocked with the phospho peptide.

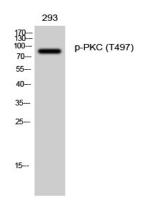


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PKC-pan (Phospho-Thr497)



Antibody. The picture on the right is blocked with the phospho peptide.

Western blot analysis of lysates from NIH/3T3 cells treated with PMA 250ng/ml 15 ', using PKC-pan (Phospho-Thr497) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of 293 cells using Phospho-PKC (T497) Polyclonal Antibody diluted at 1: 500

#### Note

For research use only.