

Immunotag™ PKC (phospho Thr497) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0227
Product Description	Immunotag™ PKC (phospho Thr497) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PKC (Thr497)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human PKC (phospho Thr497)
Specificity	Phospho-PKC (T497) Polyclonal Antibody detects endogenous levels of PKC protein only when phosphorylated at T497.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ
Accession No.	P17252/P05771/Q05655/Q02156/P05129/P24723/Q04759/Q05513 P05696/P68403/P09215/P09216
Alternate Names	PRKCA; PKCA; PRKACA; Protein kinase C alpha type; PKC-A; PKC-alpha; PRKCB; PKCB; 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

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Description	protein kinase C alpha(PRKCA) Homo sapiens 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 2
Cell Pathway/ Category	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
Protein Expression	Blood,Brain,Epithelium,Lung,Platelet,
Subcellular Localization	intracellular,nucleoplasm,cytoplasm,mitochondrion,endoplasmic reticulum,cytosol,plasma membrane,mitochondrial membrane,perinuclear region of cytoplasm,extracellular exosome,
Protein Function	catalytic 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 C-terminal 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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.