

Immunotag™ PKC β (phospho Ser661) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0432
Product Description	Immunotag™ PKC β (phospho Ser661) 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 β (Ser661)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. 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 β (phospho Ser661)
Specificity	Phospho-PKC β (S661) Polyclonal Antibody detects endogenous levels of PKC β protein only when phosphorylated at S661.
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	PRKCB
Accession No.	P05771 P68404 P68403
Alternate Names	PRKCB; PKCB; PRKCB1; Protein kinase C beta type; PKC-B; PKC-beta

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Description	protein kinase C beta(PRKCB) Homo sapiens Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and 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 protein kinase has been reported to be involved in many different cellular functions, such as B cell activation, apoptosis induction, endothelial cell proliferation, and intestinal sugar absorption. Studies in mice also suggest that this kinase may also regulate neuronal functions and correlate fear-induced conflict behavior after stress
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, NF_kappaB, mTOR, AMPK
Protein Expression	Fetal brain,Hippocampus,Platelet,
Subcellular Localization	intracellular,nucleus,nucleoplasm,cytoplasm,cytosol,plasma membrane,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:This is a calcium-activated, phospholipid-dependent, serine- and threonine-specific enzyme. 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. May be considered as a novel component of the NF-kappa-B signaling axis responsible for the survival and activation of B-cells after BCR cross-linking.,PTM:Phosphorylation on Thr-500 of isoform beta-I, within the activation loop, renders it competent to autophosphorylate. Subsequent autophosphorylation of Thr-642 maintains catalytic competence, and autophosphorylation on Ser-661 appears to release the kinase into the cytosol. Similarly, isoform beta-II is autophosphorylated on 'Thr-640' and 'Ser-659', subsequent to phosphorylation on Thr-500. Autophosphorylated on other sites i.e. in the N-terminal and hinge regions have no effect on PKC activity.,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 PDK1 (By similarity). Interacts in vitro with PRKCBP1.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.