Best Tools for immunology Research

Phospho PKCB (S661) Cell-Based Colorimetric ELISA Kit

Catalog No :	KA1717C
Reactivity :	Human;Mouse;Rat
Applications :	ELISA
Gene Name :	PRKCB
Human Gene Id :	5579
Human Swiss Prot No :	P05771
Mouse Swiss Prot No :	P68404
Rat Swiss Prot No :	P68403
Storage Stability :	2-8°C/6 months
Detection Method :	Colorimetric

Background : 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.,

Function :	protein amino acid phosphorylation, phosphorus metabolic process, phosphate metabolic process, ion transport,cation transport, calcium ion transport, cellular ion homeostasis, cellular calcium ion homeostasis, cellular metal ion homeostasis, intracellular signaling cascade, protein localization, protein transport, di-, tri-valent inorganic cation transport, phosphorylation, cellular homeostasis, metal ion transport, cellular cation homeostasis, cellular di-, tri-valent inorganic cation homeostasis, homeostatic process, lipoprotein transport, establishment of protein localization,chemical homeostasis, ion homeostasis, metal ion homeostasis, di-, tri-valent inorganic cation homeostasis, calcium ion homeostasis, cation homeostasis, cellular chemical homeostasis,
Subcellular Location :	Cytoplasm . Nucleus . Membrane ; Peripheral membrane protein .
Sort :	12498
No4 :	1
Modifications :	Phospho

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