

Active Recombinant Human Protein Kinase C, Iota, 2-587 aa

Cat. No. PRKCI-1304H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human PRKCI expressed in a Baculovirus infected Sf9 cell expression system.
Species	Human
Source	Sf9 Cells
ProteinLength	2-587 a.a.
Description	The PKCfamily of serine/threonine kinases, including PRKCI, is activatedintracellularly by signal transduction pathways. In humans, at least 12different PKC polypeptides have been identified. These isoforms differ inprimary structure, tissue distribution, subcellular localization, mode ofaction in vitro, response to extracellular signals, and substratespecificity. PKC alpha, beta I, beta II and gamma form the conventional family;their activities are Ca ²⁺ and phospholipiddependent. No specialmeasures were taken to activate this kinase.
Form	25 mMTris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, 3 mM DTT.
Purity	Greaterthan 95% by SDS-PAGE
Applications	Usefulfor the study of enzyme kinetics, screening inhibitors and selectivity profiling.
Specific Activity	35 U/μg.One unit is defined as the amount of enzyme that will phosphorylate 1 pmol ofSer/Thr 1 peptide substrate per minute at pH 7.4 and 30°C. Assay buffer: 50mM HEPES, pH 7.4, 3 mM MgCl ₂ , 3 mM MnCl ₂ , 1 mM DTT, 3μM Na-orthovanadate, 0.5

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	mM ATP, 4 μ M PKC substrate, lipid activator and 0.2 μ g PKC.	
Storage	6 months at -80°C.	
Official Symbol	PRKCI	
nullValue_other	Function	ATP binding; nucleotide binding; protein binding; protein kinase activity; protein serine/threonine kinase activity; zinc ion binding; metal ion binding; histone kinase activity (H3-T6 specific); phospholipid binding
GENE INFORMATION		
Gene Name	PRKCI protein kinase C, iota [<i>Homo sapiens</i>]	
Synonyms	PRKCI; protein kinase C, iota; PKCI; DXS1179E; MGC26534; nPKC-iota; OTTHUMP00000196630; Protein kinase C iota type; Atypical protein kinase C-lambda/iota; PRKC-lambda/iota; aPKC-iota; EC 2.7.11.13	
Gene ID	5584	
mRNA Refseq	NM_002740	
Protein Refseq	NP_002741	
MIM	600539	
UniProt ID	P41743	
Chromosome Location	3q26.3	

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Pathway

Celljunction organization; EGFR1 Signaling Pathway; Endocytosis; G ProteinSignaling Pathways; IL-4 signaling Pathway; IL1-mediated signaling events; Insulin-mediatedglucose transport; Neurotrophic factor-mediated Trk receptor signaling;Signal Transduction; Signalling by NGF; TNF receptor signaling pathway; Tightjunction; Wnt Signaling Pathway; p75 NTR receptor-mediated signalling

**Rendering based
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