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 Ca2+ 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 MgCl2, 3 mM MnCl2, 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 μM PKC substrate, lipid activator and0.2μg PKC.
Storage	6 monthsat -80°C.
OfficialSymbol	PRKCI
nullValue_other	Function: ATP binding; nucleotide binding;protein binding; protein kinase activity; protein serine/threonine kinaseactivity; zinc ion binding; metal ion binding; histone kinase activity (H3-T6specific); phospholopid binding

GENE INFORMATION

Gene Name	PRKCI protein kinase C, iota [Homosapiens]
Synonyms	PRKCI; proteinkinase C, iota; PKCI; DXS1179E; MGC26534; nPKC-iota; OTTHUMP00000196630;Proteinkinase 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 onPDB 1vd2.	

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