

Recombinant Human PRKCI

Cat. No. PRKCI-28942TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length protein,(amino acids 2-587) of Human PKC iota/lambda, with an N terminal tag.Expressed in a Baculovirus infected Sf9 cell expression system.
Species	Human
ProteinLength	2-587 a.a.
Description	This gene encodes a member of the protein kinase C (PKC) family of serine/threonine protein kinases. The PKC family comprises at least eight members, which are differentially expressed and are involved in a wide variety of cellular processes. This protein kinase is calcium-independent and phospholipid-dependent. It is not activated by phorbol esters or diacylglycerol. This kinase can be recruited to vesicle tubular clusters (VTCs) by direct interaction with the small GTPase RAB2, where this kinase phosphorylates glyceraldehyde-3-phosphate dehydrogenase (GAPD/GAPDH) and plays a role in microtubule dynamics in the early secretory pathway. This kinase is found to be necessary for BCL-ABL-mediated resistance to drug-induced apoptosis and therefore protects leukemia cells against drug-induced apoptosis. There is a single exon pseudogene mapped on chromosome X.
Tissue specificity	Predominantly expressed in lung and brain, but also expressed at lower levels in many tissues including pancreatic islets. Highly expressed in non-small cell lung cancers.
Biological activity	35 U/ug. One unit is defined as the amount of enzyme that will phosphorylate 1 pmol

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of Ser/Thr 7 peptide substrate per minute at pH 7.4 and 30°C.

Form	Liquid
Purity	>95% by SDS-PAGE
Storage buffer	Preservative: None Constituents: 50% Glycerol, 0.05% Tween 20, 3mM DTT, 25mM Tris HCl, 100mM Sodium chloride, 10mM reduced Glutathione, pH 8.0
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Sequence Similarities	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 OPR domain. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 protein kinase domain.
Full Length	Full L.

GENE INFORMATION

Gene Name	PRKCI protein kinase C, iota [Homo sapiens]
Official Symbol	PRKCI
Synonyms	PRKCI; protein kinase C, iota; DXS1179E; protein kinase C iota type; PKCI;
Gene ID	5584
mRNA Refseq	NM_002740
Protein Refseq	NP_002731

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MIM	600539
Uniprot ID	P41743
Chromosome Location	3q26.3
Pathway	Cell junction organization, organism-specific biosystem; Cell-Cell communication, organism-specific biosystem; Cell-cell junction organization, organism-specific biosystem; EGFR1 Signaling Pathway, organism-specific biosystem; Endocytosis, organism-specific biosystem;
Function	ATP binding; metal ion binding; nucleotide binding; phospholipid binding; protein binding;

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