Creative Enzymes®

Protein Kinase Cδ isozyme from human, Recombinant

Cat. No. NATE-0623

Lot. No. (See product label)

Introduction

Description	Protein Kinase C (PKC) is a serine/threonine kinase that is activated intracellularly by signal transduction pathways that produce DAG from phosphatidylinositol diphosphate (PIP2) and phosphatidylcholine (PC) through the action of various activated phospholipases. Phorbol esters also stimulate PKC. At least 11 PKC isozymes have been identified that differ in primary structure, tissue distribution, subcellular localization, response to extracellular signals, and substrate specificity. The isozymes can be grouped into three subfamilies. Members of the first family require Ca2+ and phospholipid and include PKCα, βI, βII, and γ. Members of the second family are phospholipid-dependent but Ca2+-independent, and include PKCδ, ε, η, and θ. Members of the third family are not activated by either DAG or phorbol esters and include PKCξ, μ, and ι.
Synonyms	PRKCD; protein kinase C, delta; protein kinase C delta type; ALPS3; CVID9; MAY1; PKCD; nPKC-delta; EC 2.7.1.37

Product Information

Species	Human
Source	Baculovirus infected insect cells
Form	buffered aqueous glycerol solution; Solution in 20 mM HEPES, pH 7.4; 2 mM EDTA, 2 mM EGTA, 5 mM DTT, 100 mM NaCl, 0.05% Triton X-100, and 50% glycerol.
EC Number	EC 2.7.1.37
Molecular Weight	mol wt 74-79 kDa by SDS-PAGE
Purity	>95% (SDS-PAGE)
Pathway	Alpha-synuclein signaling, organism-specific biosystem; Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Apoptosis, organism-specific biosystem; Apoptotic cleavage of cellular proteins, organism-specific biosystem; Apoptotic executionphase, organism-specific biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; Ca-dependent events, organism-specific biosystem
Function	ATP binding; calcium-independent protein kinase C activity; enzyme activator activity; enzyme binding; insulin receptor substrate binding; metal ion binding; non-membrane spanning protein tyrosine kinase activity; nucleotide binding; protein C-terminus binding; protein binding; protein kinase activity; protein serine/threonine kinase activity
Unit Definition	One unit will transfer 1 nmol of phosphate to PKC epsilon substrate peptide in 1 min at pH 7.4 at 30°C.

Storage and Shipping Information

Storage	−70°C