

Recombinant Human Protein Kinase C, Epsilon, His-tagged

Cat. No. PRKCE-62H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Protein Kinase C, Epsilon produced in Sf9 is a glycosylated, polypeptide chain containing amino acids 2-737 and having a molecular mass of 87 KD. This protein is the full-length form of the protein with an amino terminal poly His-tag. PKC-ε is purified by proprietary chromatographic techniques.
Species	Human
Source	Sf9 Cells
ProteinLength	2-737 a.a.
Description	Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This kinase has been shown to be involved in many different cellular functions, such as neuron channel activation, apoptosis, cardioprotection from ischemia, heat shock response, as well as insulin exocytosis.
Physical Appearance	Sterile Filtered clear solution.
Unit Definition	The Unit Definition is 3250 units/mg. One unit of PKC

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ε activity transfers 1 nmole of phosphate to a PKCε substrate peptide per minute at 30°C. Recombinant human active PKCε also phosphorylates full length myelin basic protein, MARKS, GAP-34, and raf-1 kinase. Activity requires incubation with lipid activators, and may vary depending on the substrate and reaction conditions. The optimal concentration should be determined for each specific application.

Purity Greater than 90% as determined by SDS-PAGE.

Formulation PKC-ε is supplied at a of 0.1mg/ml in 10mM Tris, pH 7.4, 0.1M NaCl, 20% glycerol, 1mM DTT, 0.1mM EDTA, 0.2mM PMSF and 0.03% Brij-35.

Storage Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles.

GENE INFORMATION

Gene Name PRKCE protein kinase C, epsilon [Homo sapiens]

Synonyms PRKCE; protein kinase C, epsilon; PKCE; MGC125656; MGC125657; nPKC-epsilon;Protein kinase C epsilon type;EC2.7.11.13

Gene ID 5581

mRNA Refseq NM_005400

Protein Refseq NP_005391

UniProt ID Q02156

MIM 176975

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Chromosome Location	2p21
Pathway	Fc epsilon RI signaling pathway; Fc gamma R-mediated phagocytosis; Tight junction; Type II diabetes mellitus; Vascular smooth muscle contraction; Signalling by NGF
Function	ATP binding; calcium-independent protein kinase C activity; enzyme binding; metal ion binding; signal transducer activity; nucleotide binding; transferase activity; zinc ion binding
PDB rendering based on 1gmi.	