

# Recombinant Human Protein Kinase C, Beta, 2-673aa, His-tagged

Cat. No. PRKCB-60H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human protein kinase C, beta produced in Sf9 is a glycosylated, polypeptide chain containing amino acids 2-673 and having a molecular mass of 80 KD. This protein is the full-length form of the protein with an amino terminal poly His-tag. PKC- $\beta$ is purified by proprietary chromatographic techniques.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Protein Length</b>	2-673 a.a.
<b>Description</b>	Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and 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.
<b>Unit Definition</b>	The Unit Definition is 780 units/mg. One unit of PKC $\beta$ II activity transfers 1 nmole of phosphate to a PKC substrate peptide (myelin basic protein 4-14) per minute at 30°C. Recombinant human active PKC $\beta$ II also phosphorylates full length myelin basic protein, histone, HIV Tat-1, GSK-3 $\beta$ and cdk7. Activity requires incubation with lipid

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activators, and may vary depending on the substrate and reaction conditions.

**Purity** Greater than 95% as determined by SDS-PAGE.

**Formulation** PKC-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** [PRKCB protein kinase C, beta \[ Homo sapiens \]](#)

**Synonyms** PRKCB; protein kinase C, beta;PKCB; PRKCB1; PRKCB2; MGC41878; PKC-beta;Protein kinase C beta type;EC2.7.11.13; PKC-B; protein kinase C, beta 1; protein kinase C, beta 1 polypeptide

**Gene ID** [5579](#)

**mRNA Refseq** [NM\\_002738](#)

**Protein Refseq** [NP\\_002729](#)

**UniProt ID** [P05771](#)

**Chromosome Location** 16p12

**MIM** [176970](#)

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**Pathway**

B cell receptor signaling pathway; Calcium signaling pathway; Chemokine signaling pathway; ErbB signaling pathway; Fc epsilon RI signaling pathway; Fc gamma R-mediated phagocytosis; Focal adhesion; Glioma; GnRH signaling pathway; Leukocyte transendothelial migration; Long-term depression; Long-term potentiation; Non-small cell lung cancer; Pathways in cancer; Phosphatidylinositol signaling system; Tight junction; VEGF signaling pathway; Vascular smooth muscle contraction; Vibrio cholerae infection; Wnt signaling pathway; Hemostasis; Synaptic Transmission

**Function**

ATP binding; calcium ion binding; nucleotide binding; protein binding; protein kinase C activity; transferase activity; zinc ion binding

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