

Active Recombinant Human Protein Kinase C, Delta, His-tagged

Cat. No. PRKCD-61H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human Protein Kinase C, Delta produced in Sf9 is a glycosylated, polypeptide chain containing amino acids 2-676 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- δ is purified by proprietary chromatographic techniques.

Species Human

Source Sf9 Cells

Protein Length 2-676 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 distinct roles in cells. The protein encoded by this gene is one of the PKC family members. Studies both in human and mice demonstrate that this kinase is involved in B cell signaling and in the regulation of growth, apoptosis, and differentiation of a variety of cell types. Alternatively spliced transcript variants encoding the same protein have been observed.

 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

| | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical Appearance | Sterile Filtered clear solution. |
| Unit Definition | The Unit Definition is 1160 units/mg. One unit of PKC δ activity transfers 1 nmole of phosphate to a MARCKS protein per minute at 30°C. Recombinant human active PKC δ also phosphorylates full length myelin basic protein, histone, Rad9, MUC1, SRF, eEF-1 α Stat3, hsp-27, and PKC α and PKC ϵ pseudosubstrates. Activity requires incubation with lipid activators but not calcium, and may vary depending on the substrate and reaction conditions. The optimal concentration should be determined for each specific application. PKC δ is involved in B-cell signaling, and in the regulation of growth, apoptosis, and redox responses. PKC δ can be phosphorylated by src tyrosine kinases. |
| Purity | Greater than 90% as determined by SDS-PAGE. |
| Formulation | PKC- δ 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 | PRKCD protein kinase C, delta [Homo sapiens] |
| Synonyms | PRKCD; protein kinase C, delta; MAY1; PKCD; MGC49908; nPKC-delta;Protein kinase C delta type;EC2.7.11.13; protein kinase C delta VIII |
| Gene ID | 5580 |
| mRNA Refseq | NM_006254 |

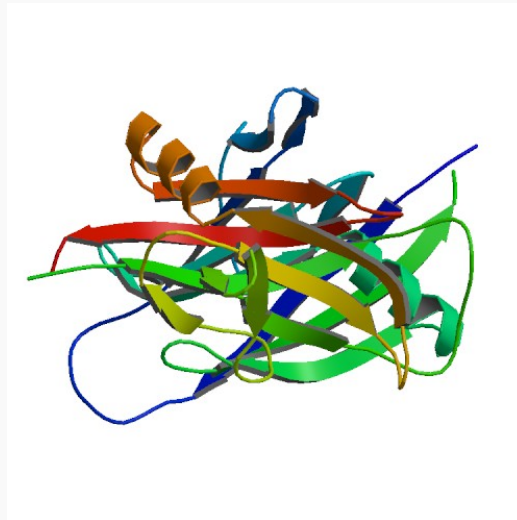
 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protein Refseq | NP_006245 |
| UniProt ID | Q05655 |
| Chromosome Location | 3p21.31 |
| MIM | 176977 |
| Pathway | Chemokine signaling pathway; Fc epsilon RI signaling pathway; Fc gamma R-mediated phagocytosis; GnRH signaling pathway; Neurotrophin signaling pathway; Tight junction; Type II diabetes mellitus; Vascular smooth muscle contraction; Apoptosis; Signalling by NGF |
| Function | ATP binding; calcium-independent protein kinase C activity; enzyme activator activity; enzyme binding; insulin receptor substrate binding; metal ion binding; nucleotide binding; protein C-terminus binding; transferase activity; zinc ion binding |

PDB rendering based on 1bdy.



 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