

**PKCnu, Active recombinant protein**  
**PKC, Protein kinase C nu**  
**Catalog # PBV11321r****Specification**

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**PKCnu, Active recombinant protein - Product info**

Primary Accession	<a href="#">O94806</a>
Concentration	<b>0.1</b>
Calculated MW	<b>142.0 kDa KDa</b>

**PKCnu, Active recombinant protein - Additional Info**

Gene ID	<b>23683</b>
Gene Symbol	<b>PRKD3</b>
<b>Other Names</b>	
PKC, Protein kinase C nu	

Source	<b>Baculovirus (Sf9 insect cells)</b>
Assay&Purity	<b>SDS-PAGE; ≥80%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
<b>Format</b>	
Liquid	

**Storage**

-80°C; Recombinant proteins in storage buffer (50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1 mM PMSF, 25% glycerol).

**PKCnu, Active recombinant protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PKCnu, Active recombinant protein - Images****PKCnu, Active recombinant protein - Background**

PKCnu, also known as PKD3, is a members of the protein kinase C (PKC) family of serine/threonine kinases that play critical roles in the regulation of cellular differentiation and proliferation in many cell types. PKCnu is composed of 890 amino acid residues and the protein has 77.3% similarity to human PKC mu (PKCmu) and 77.4% similarity to mouse PKD (the mouse homolog of PKCmu) (1).

The PKCnu mRNA is ubiquitously expressed in various tissues and the gene is located between markers WI-9798 and D2S177 on chromosome 2p21 region. PKCnu has two putative diacylglycerol binding C1 domains, suggesting that it may participate in a novel diacylglycerol-mediated signaling pathway (2). PKCnu is trans-located to the plasma membrane and activated by the diacylglycerol mimic phorbol 12-myristate 13-acetate. PKCnu is an important physiologic target of the B-cell receptor (BCR) and exhibits robust activation after BCR engagement (2). GPCR agonists induced a rapid activation of PKCnu by a protein kinase C (PKC)-dependent pathway that leads to the phosphorylation of the activation loop of PKCnu. PKCnu is present both in the nucleus and cytoplasm and this distribution of PKCnu results from its continuous shuttling between both compartments by a mechanism that requires a nuclear import receptor and a competent CRM1-nuclear export pathway (3). Cell stimulation with the GPCR agonist neurotensin induced a rapid and reversible plasma membrane translocation of PKCnu that is PKC-dependent.