

# Recombinant Human PKC zeta/PRKCZ Kinase

Catalog No.: RP03412LQ Recombinant

## **Sequence Information**

**Species** Gene ID **Swiss Prot** Human 5590 005513

**Tags** N-GST

**Synonyms** 

PRKCZ; PKC2; PKCz; nPKC-zeta; Protein kinase C zeta type; PKCζ

## **Product Information**

**Purification** Baculovirus-Insect ≥ 90 % as Cells determined by SDS-PAGE;≥ 90 % as determined by

Calculated MW Observed MW 94.2 kDa 85-100 kDa

HPLC.

#### **Endotoxin**

< 1 EU/µg of the protein by LAL method.

### **Formulation**

Supplied as a 0.22 µm filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 20% glycerol, 5 mM DTT, 0.1 M Trehalose. (pH 7.5). Contact us for customized product form or formulation.

#### Reconstitution

Please use running water to thaw it quickly.

### Contact

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## **Background**

Protein kinase C, zeta (PKCζ), also known as PRKCZ, is a protein in humans that is encoded by the PRKCZ gene. The PRKCZ gene encodes at least two alternative transcripts, the full-length PKCZ and an N-terminal truncated form PKMZ. PKMZ is thought to be responsible for maintaining long-term memories in the brain. PKC-zeta has an N-terminal regulatory domain, followed by a hinge region and a C-terminal catalytic domain. Second messengers stimulate PKCs by binding to the regulatory domain, translocating the enzyme from cytosol to membrane, and producing a conformational change that removes auto-inhibition of the PKC catalytic protein kinase activity. PKM-zeta, a brain-specific isoform of PKC-zeta generated from an alternative transcript, lacks the regulatory region of full-length PKC-zeta and is therefore constitutively active.

## **Basic Information**

#### Description

Recombinant Human PKC zeta/PRKCZ Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Pro2-Val592) of Human PRKCZ (Accession #Q05513) fused with a N-GST tag.

### **Bio-Activity**

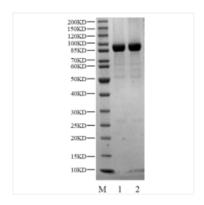
The activity of PRKCZ is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

#### Storage

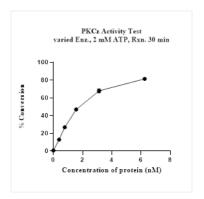
Store at -70°C. This product is stable at  $\leq$  -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10 µL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

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Recombinant Human PKC zeta/PRKCZ Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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