

## Protein Kinase C, delta (PKC $\delta$ )

### Catalog number

P9103-19C5

### Supplier

United States Biological

The protein kinase C (PKC, EC 2.7.11.13) is a cyclic nucleotide-independent enzyme that phosphorylates serine and threonine residues in many target proteins. The PKC family has been divided into three groups, differing in the enzymes' cofactor requirements: conventional (c)PKC isoforms (comprising  $\alpha$ ,  $\beta$ I (also known as  $\beta$ 1),  $\beta$ II (also known as  $\beta$ 2) and  $\gamma$ ), that require diacylglycerol (DAG),  $\text{Ca}^{2+}$ , and phospholipid for activation; novel (n)PKC isoforms (comprising  $\delta$ ,  $\epsilon$ ,  $\eta$  (also known as PKC-L),  $\theta$  and  $\mu$  (the mouse homolog of human PKC $\mu$ , also known as PKD)) that require DAG but not  $\text{Ca}^{2+}$ ; and atypical (a)PKC isoforms, namely  $\zeta$ ,  $\iota$  and  $\lambda$  (the mouse homolog of human PKC $\iota$ ) that require neither  $\text{Ca}^{2+}$  nor DAG. A new PKC member has recently been discovered and is referred to as PKC $\nu$ .

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.

PKC $\delta$  (also known as PRKCD, PKC delta) is involved in B cell signaling and in the regulation of growth, apoptosis, and differentiation of a variety of cell types.

### Applications

Suitable for use in ELISA and Western Blot. Other applications not tested.

### Recommended Dilution

ELISA: 0.05-0.2 $\mu$ g/ml

Western Blot: 0.1-1 $\mu$ g/ml

Optimal dilutions to be determined by the researcher.

### Storage and Stability

For long-term storage, aliquot and store at  $-20^{\circ}\text{C}$ . Aliquots are stable for at least 12 months at  $-20^{\circ}\text{C}$ . For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

### Immunogen

Synthetic peptide (KLH). derived from human PKC $\delta$

### Formulation

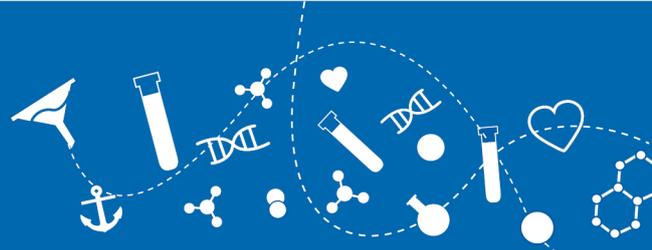
Supplied as a liquid in PBS, pH 7.4, 0.02% sodium azide, 30% glycerol.

### Purity

Purified by immunoaffinity chromatography.

### Specificity

Recognizes endogenous levels of total PKC $\delta$  protein.

**Product Type**

Pab

**Source**

human

**Isotype**

IgG

**Grade**

Affinity Purified

**Applications**

E WB

**Crossreactivity**

Hu

**Storage**

-20°C

**Reference**

1. Mellor H. et al. (1998) Biochem. J. 332: 281-292
2. Nishizuka Y. et al. (1995) FASEB J. 9 (7): 484-96
3. Way K.J. et al. (2000) Trends in Pharmacological Sciences. 21 (5): 181-187