BioVision

Active PKC delta

CATALOG #: 7739-5

SOURCE: Sf 9 cells

PURITY: 1 µg of PKC delta protein was subjected to SDS-PAGE and

Coomassie blue staining. The scan of the gel showed >80% purity of the PKC delta product, and the band was at ~104

kDa.

SPECIFIC ACTIVITY: 302 nmol/min/mg

MOLECULAR WEIGHT: ~104 kDa.

FORMULATION: 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).

STORAGE CONDITIONS: Store product frozen at or below -70°C. Stable for 1 year at -

70°C as undiluted stock. Aliquot to avoid repeated thawing and

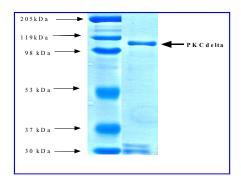
freezing.

BACKGROUND DESCRIPTION: Protein kinase C delta (PKC delta) is a member of the protein kinase C (PKC) family of serine-threonine kinases. It is a 79 kd protein kinase that shows strict dependence on the presence of phospholipids, but shows no activation by Ca2+. Phosphatidylinositol is the most potent activator of PKC delta. Apparent kinetic constants for synthetic oligopeptides (MBP4-14, EGFR peptide and epsilon-peptide) are quite different between PKC delta and other PKCs. Northern blot analysis indicated that PKC delta is widely distributed in almost all the tissues and is a major isoform of PKC expressed in hemopoietic cells. PKC delta is involved in fundamental cellular functions regulated by diacylglycerols and mimicked by phorbol esters. PKC delta is partially associated with the insoluble fraction in cells even in the absence of phorbol 12-myristate 13-acetate (PMA). Upon PMA stimulation, both translocate to the insoluble fraction of cell homogenates. Overexpression of PKC-delta induces significant changes in morphology and causes the cells to grow more slowly and to a decreased cell density in confluent cultures. These changes are accentuated by treatment with PMA. None of the PKC-delta overexpressers grow in soft agar with or without PMA.

ACTIVITY: 302 nmol phosphate incorporated into CREBtide substrate per

minute per mg protein at 30°C for 15 minutes using a final

concentration of 50 µM ATP (0.83 µCi/assay).



PKC delta Protein

RELATED PRODUCTS:

- Active PKC iota (Cat. No. 7705-5)
- Active PKC epsilon (Cat. No. 7753-5)
- Active PKC eta (Cat. No. 7731-5)
- Active PKC mu (Cat. No. 7745-5)
- Active PKC a (Cat. No. 7714-5)
- Active PKC zeta (Cat. No. 7718-5)
- Active PKC gamma (Cat. No. 7764-5)
- Active PKC βII (Cat. No. 7704-5)

FOR RESEARCH USE ONLY! Not to be used in humans.

