Recombinant Human PKC nu / PRKD3 Protein (GST tag)

Cat.NO.: TP06572

3th Edition

Synonyms:EPK2;nPKC-NU;PKC-NU;PKD3;PRKCN

Description: Serine/threonine-protein kinase D3, also known as Protein kinase C nu type, Protein kinase EPK2, PRKD3, EPK2 and PRKCN, is a cytoplasm and membrane protein which belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family and PKD subfamily. PRKD3 / PRKCN contains one PH domain, two phorbol-ester/DAG-type zinc fingers and one protein kinase domain. 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. They 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. PRKD3 / PRKCN converts transient diacylglycerol (DAG) signals into prolonged physiological effects, downstream of PKC. It is involved in resistance to oxidative stress. PRKD3 / PRKCN is activated by DAG and phorbol esters. Phorbol-ester/DAG-type domains 1 and 2 bind both DAG and phorbol ester with high affinity and mediate translocation to the cell membrane. Autophosphorylation of Ser-735 and phosphorylation of Ser-731 by PKC relieves auto-inhibition by the PH domain. PRKD3 / PRKCN can be activated rapidly by the agonists of G protein-coupled receptors. It resides in both cytoplasm and nucleus, and its nuclear accumulation is found to be dramatically enhanced in response to its activation. PRKD3 / PRKCN can also be activated after B-cell antigen receptor (BCR) engagement, which requires intact phospholipase C gamma and the involvement of other PKC family members.

Form:PBS

Molecular Weight:126.7 kDa

Sequences: Met 1-Pro 890

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.