Datasheet for ABIN7317099
PRKD3 Protein (GST tag)
1 Image


## Overview

| Quantity: | $50 \mu \mathrm{~g}$ |
| :--- | :--- |
| Target: | PRKD3 |
| Origin: | Human |
| Source: | Baculovirus infected Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This PRKD3 protein is labelled with GST tag. |

Product Details

| Purpose: | Recombinant Human PKC nu/PRKD3 Protein (GST Tag) |
| :--- | :--- |
| Sequence: | Met 1-Pro 890 |
| Characteristics: | A DNA sequence encoding the full length of human PRKD3 (NP_005804.1) (Met 1-Pro 890) was |
|  | expressed with the GST tag at the N-terminus. |
| Purity: | $>85 \%$ as determined by reducing SDS-PAGE. |
| Endotoxin Level: | $<1.0$ EU per $\mu \mathrm{g}$ as determined by the LAL method. |

Target Details

| Target: | PRKD3 |
| :--- | :--- |
| Alternative Name: | PKC nu/PRKD3 (PRKD3 Products) |
| Background: | Packground: Serine/threonine-protein kinase D3, also known as Protein kinase C nu type, <br>  <br>  <br>  |


|  | 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. |
|  | Synonym: EPK2;nPKC-NU;PKC-NU;PKD3;PRKCN |
| Molecular Weight: | 126.7 kDa |
| NCBI Accession: | NP_005804 |
| Application Details |  |
| Restrictions: | For Research Use only |
| Handling |  |
| Format: | Frozen, Liquid |
| Buffer: | Supplied as sterile 20 mM Tris, $500 \mathrm{mM} \mathrm{NaCl}, 10 \mathrm{mM}$ Reduced Glutathione, pH 7.4 |
| Storage: | $-20^{\circ} \mathrm{C}$ |
| Storage Comment: | Store at $<-20^{\circ} \mathrm{C}$, stable for 6 months. Please minimize freeze-thaw cycles. |



