

Human PRKD2 / PKD2 Protein (His & GST Tag)

Catalog Number: 11671-H20B



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Biological Solution Specialist

General Information

Gene Name Synonym:

HSPC187; nPKC-D2; PKD2; AI325941; PKD2

Protein Construction:

A DNA sequence encoding the amino acid sequence (Met 1-Leu 878) of human PRKD2 (NP_057541.2) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 82 % as determined by SDS-PAGE

Bio Activity:

The specific activity was determined to be 86 nmol/min/mg using synthetic CREBtide peptide (KRREILSRPSYR) as substrate.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human PRKD2/GST chimera consists of 1115 amino acids and has a calculated molecular mass of 124 kDa. It migrates as an approximately 120 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Supplied as sterile 50mM Tris, 500mM NaCl, 0.5mM PMSF, 10% glycerol, pH 8.0

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

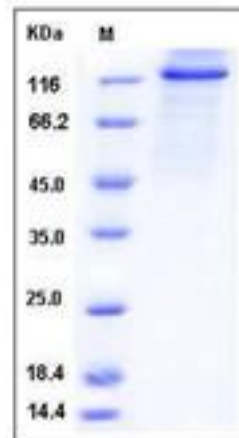
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Serine/threonine-protein kinase D2, also known as PRKD2 and PKD2, is a cytoplasm and membrane protein which belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family and PKD subfamily. PRKD2 / PKD2 is widely expressed. It contains one PH domain, two phorbol-ester/DAG-type zinc fingers and one protein kinase domain. PRKD2 / PKD2 is activated by DAG and phorbol esters. Phorbol-ester/DAG-type domains bind DAG, mediating translocation to membranes. Autophosphorylation of Ser-710 and phosphorylation of Ser-706 by PKC relieves auto-inhibition by the PH domain. PRKD2 / PKD2 converts transient diacylglycerol (DAG) signals into prolonged physiological effects, downstream of PKC. Involved in resistance to oxidative stress.

References

- 1.Zhang QH, et al., 2000, Genome Res 10 (10): 1546-60.
- 2.Di Bernardo MC, et al.,2008, Nature genetics. 40 (10) :1204-10.
- 3.Zhang L, et al., 2009, American journal of nephrology. 30 (6) :505-13.

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