



# Recombinant Protein Technical Manual

## Recombinant Human PRKD2/PKD2 Protein (His & GST Tag)(Active)

RPES2662

### Product Data:

**Product SKU:** RPES2662

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** NP\_057541.2

### Protein Information:

**Molecular Mass:** 124 kDa

**AP Molecular Mass:** 120 kDa

**Tag:** N-His & GST

**Bio-activity:** The specific activity was determined to be  $> 30$  nmol/min/mg using synthetic CREBtide peptide (KRREILSRRPSYR) as substrate.

**Purity:**  $> 82$  % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0$  EU per µg as determined by the LAL method.

**Storage:** Store at  $< -20^{\circ}\text{C}$ , stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at  $< -20^{\circ}\text{C}$ .

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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** HSPC187;nPKC-D2;PKD2

## Immunogen Information:

**Sequence:** Met 1-Leu 878

## Background:

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.