## For Research Use Only

## PRKG1 Recombinant antibody

Catalog Number:85983-1-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

**Purification Method:** 85983-1-RR BC 127090 Protein A purification

GeneID (NCBI): CloneNo.: 100ul , Concentration: 1000  $\mu g/ml$  by 5592 250348B5

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Q13976 WB: 1:2000-1:10000

Rabbit Full Name:

Isotype: protein kinase, cGMP-dependent, type

IgG

Immunogen Catalog Number: Calculated MW: 686 aa, 78 kDa AG16333

> Observed MW: 65-78 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Species Specificity: human, mouse, rat

Positive Controls:

WB: mouse kidney tissue, mouse lung tissue, rat lung

tissue, mouse brain tissue

## **Background Information**

PRKG1(cGMP-dependent protein kinase 1) is also named as cGK1, PRKG1B, PRKGR1A, PRKGR1B and belongs to the cGMP subfamily. It serves as an integral component of second messenger signaling in a number of biological contexts including cell differentiation, memory, and vasodilation (PMID:21893290). Its activity prevents pathological-level nitric oxide-induced apoptosis and promotes DNA synthesis/cell proliferation in vascular smooth muscle cells (PMID:20060325). PRKG1 has 2 isoforms produced by alternative splicing with the molecular weight of 76 kDa and 78 kDa. The autophosphorylation can increase the kinase activity and it can form a monomer with the  $molecular\ weight\ of\ 65\ kDa\ that\ is\ produced\ by\ proteolytic\ cleavage.\ SDS-P\Bar{AGE}\ revealed\ that\ proteolysis\ generated$ two different monomers with molecular masses of 70 and 68 kDa of CGK1-beta(PMID:8702828).

Storage

Storage:

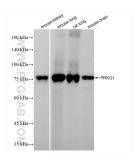
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 85983-1-RR (PRKG1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.