

# PRKG1 Recombinant antibody

Catalog Number: 85983-1-RR

## Basic Information

**Catalog Number:**

85983-1-RR

**Concentration:**

1000 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG16333

**GenBank Accession Number:**

BC127090

**GeneID (NCBI):**

5592

**UNIPROT ID:**

Q13976

**Full Name:**

protein kinase, cGMP-dependent, type

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**Calculated MW:**

686 aa, 78 kDa

**Observed MW:**

65-78 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

250348B5

**Recommended Dilutions:**

WB: 1:2000-1:10000

## 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-PAGE revealed that proteolysis generated two different monomers with molecular masses of 70 and 68 kDa of CGK1-beta(PMID:8702828).

## Storage

**Storage:**

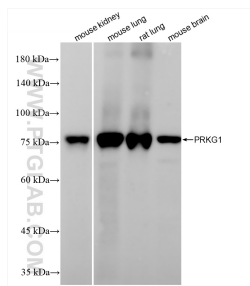
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

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

Aliquoting is unnecessary for -20°C storage

## 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.