

PRKG1 Rabbit Polyclonal Antibody



CAB2565

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

65kDa

Calculated MW:

44kDa/76kDa/77kDa

Applications:

WB IHC

Reactivity:

Human, Mouse

Antibody Information

Recommended dilutions:

WB 1:500 - 1:2000 IHC 1:50
- 1:200

Source:

Rabbit

Isotype:

IgG

Purification:

Affinity purification

Protein Background

Mammals have three different isoforms of cyclic GMP-dependent protein kinase (Ialpha, Ibeta, and II). These PRKG isoforms act as key mediators of the nitric oxide/cGMP signaling pathway and are important components of many signal transduction processes in diverse cell types. This PRKG1 gene on human chromosome 10 encodes the soluble Ialpha and Ibeta isoforms of PRKG by alternative transcript splicing. A separate gene on human chromosome 4, PRKG2, encodes the membrane-bound PRKG isoform II. The PRKG1 proteins play a central role in regulating cardiovascular and neuronal functions in addition to relaxing smooth muscle tone, preventing platelet aggregation, and modulating cell growth. This gene is most strongly expressed in all types of smooth muscle, platelets, cerebellar Purkinje cells, hippocampal neurons, and the lateral amygdala. Isoforms Ialpha and Ibeta have identical cGMP-binding and catalytic domains but differ in their leucine/isoleucine zipper and autoinhibitory sequences and therefore differ in their dimerization substrates and kinase enzyme activity.

Immunogen information

Gene ID:

5592

Uniprot

Q13976

Synonyms:

PRKG1; AAT8; PKG; PRKG1B; PRKGR1B; cGK; cGK 1; cGK1; cGKI;
cGKI-BETA; cGKI-alpha

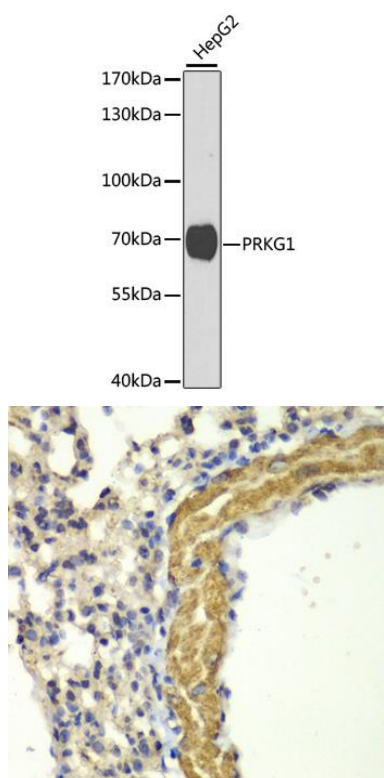
Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human PRKG1 (NP_006249.1).

Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Product Images



Western blot analysis of extracts of HepG2 cells, using PRKG1 antibody (CAB2565) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020).

Immunohistochemistry of paraffin-embedded mouse lung using PRKG1 antibody (CAB2565) at dilution of 1:100 (40x lens).