

Anti-PRKG1 Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P105768

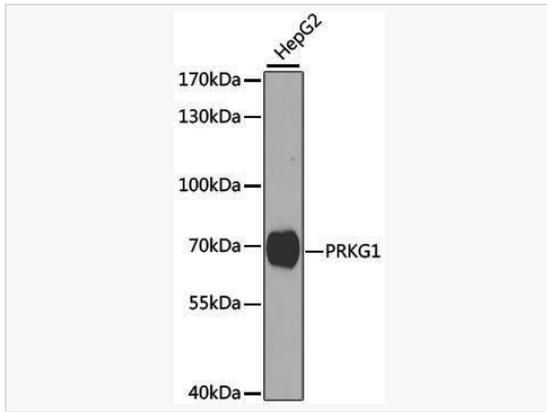
Product Information

Application	WB, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:500~1:2,000
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human PRKG1 (NP_006249.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PRKG1 Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	PKG; cGK; AAT8; PKG1; cGK1; cGKI; cGK 1; PRKG1B; PRKGR1B; cGKI-BETA; cGKI-alpha; PRKG1.
Calculated MW	Calculated MW: 76 kDa; Observed MW: 65 kDa
Uniprot ID	Q13976
Gene ID	5592
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.

Validation Images



Western blot analysis of lysates from HepG2 cells, using PRKG1 Rabbit pAb (P105768) at 1:1,000 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Kit (SQ201).