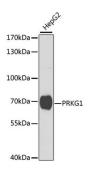


Protein Kinase, CGMP Dependent Type I (PRKG1) Antibody

Catalogue No.:abx002002



Western blot analysis of lysates from HepG2 cells, using PRKG1 Antibody at 1/1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1/10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST.

PRKG1 Antibody is a Rabbit Polyclonal antibody against PRKG1. Mammals have three different isoforms of cyclic GMP-dependent protein kinase (lalpha, lbeta, 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 lalpha and lbeta 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 lalpha and lbeta 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.

Target: Protein Kinase, CGMP Dependent Type I (PRKG1)

Clonality: Polyclonal

Reactivity: Human, Mouse

Tested Applications: ELISA, WB

Host: Rabbit

Recommended dilutions: ELISA: 1 µg/ml, WB: 1/500 - 1/2000. Optimal dilutions/concentrations should be determined by the

end user.

Conjugation: Unconjugated

Immunogen: Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human

PRKG1.

Isotype: IgG

Form: Liquid

Purification: Purified by affinity chromatography.

Datasheet

Version: 4.0.0 Revision date: 10 Sep 2025



Storage: Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

UniProt Primary AC: Q13976 (UniProt, ExPASy)

Gene Symbol: PRKG1

GeneID: <u>5592</u>

NCBI Accession: NP 006249.1

Molecular Weight: Calculated MW: 76 kDa

Observed MW: 65 kDa

Buffer: PBS, pH 7.3, containing 0.02% sodium azide, 50% glycerol.

Concentration: 1.85 mg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC.

THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL

CONSUMPTION.