

Active Recombinant Human PRKG2 protein, His-GST-tagged

Cat. No. PRKG2-1981H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human PRKG2 protein(Q13237)(453-728 aa), fused with N-terminal His tag and GST tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	453-728 aa
Form	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Protein Kinase, cGMP Dependent Type II (PRKG2) belong to cGMP-dependent protein kinase or Protein Kinase G (PKG) which is a serine/threonine-specific protein kinase that is activated by cGMP. Two PKG genes, coding for PKG type I (PKG-I) and type II (PKG-II), have been identified in mammals. The PKG-I and PKG-II are homodimers of two identical subunits (~75kDa and ~85kDa, respectively) and share common structural features. PKG phosphorylates a number of biologically important targets and is implicated in the regulation of smooth muscle relaxation, platelet function, sperm metabolism, cell division, and nucleic acid synthesis. Besides, Heat Shock Protein 90kDa Alpha A1 (HSP90aA1) has been identified as an interactor of PRKG2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PRKG2 and recombinant human HSP90aA1. Briefly, PRKG2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μ

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were then transferred to HSP90aA1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PRKG2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μ stop solution to the wells and read at 450nm immediately. The binding activity of PRKG2 and HSP90aA1 was shown, and this effect was in a dose dependent manner.

Molecular Mass	61.8kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method).
Purity	> 90%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	PRKG2 protein kinase, cGMP-dependent, type II [Homo sapiens]
Official Symbol	PRKG2
Synonyms	PRKG2; protein kinase, cGMP-dependent, type II; cGMP-dependent protein kinase 2; cGKII; PRKGR2; cGK2; cGK 2; cGMP-dependent protein kinase II;
Gene ID	5593

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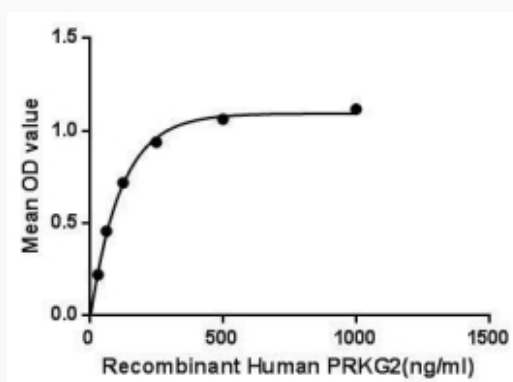
mRNA Refseq [NM_006259](#)

Protein Refseq [NP_006250](#)

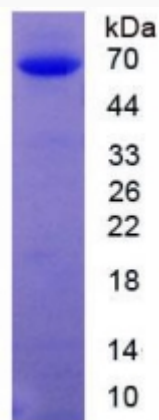
MIM [601591](#)

UniProt ID [Q13237](#)

Activity



SDS-PAGE



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