

# Recombinant Human PRKG1 Protein (His Tag)

Catalog Number:PKSH032242



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

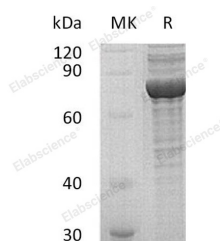
## Description

<b>Synonyms</b>	cGMP-Dependent Protein Kinase 1;cGK 1;cGK1;cGMP-Dependent Protein Kinase I;cGKI;PRKG1;PRKG1B;PRKGR1A;PRKGR1B
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Gly2-Pro686
<b>Accession</b>	Q13976-2
<b>Calculated Molecular Weight</b>	78.8 kDa
<b>Observed molecular weight</b>	75 kDa
<b>Tag</b>	C-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 6% Sucrose, 4% Mannitol, 0.05% Tween 80, pH8.0.
<b>Reconstitution</b>	Not Applicable

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

cGMP-Dependent Protein Kinase 1 (PRKG1) belongs to the protein kinase superfamily and AGC Ser/Thr protein kinase family. PRKG1 contains one AGC-kinase C-terminal domain, two cyclic nucleotide-binding domains, and one protein kinase domain. PRKG1 is mainly expressed in the lung and placenta. PRKG1 acts as a key mediator of the nitric oxide (NO)/cGMP signaling pathway. PRKG1 can phosphorylate many proteins that regulate platelet activation and adhesion, smooth muscle contraction, cardiac function, gene expression, feedback of the NO-signaling pathway, and other processes involved in several aspects of the CNS like axon guidance, hippocampal and cerebellar learning, circadian rhythm, and nociception.

## For Research Use Only

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