

Recombinant Human PRKG1 Protein (His Tag)

Catalog Number: PKSH032242

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

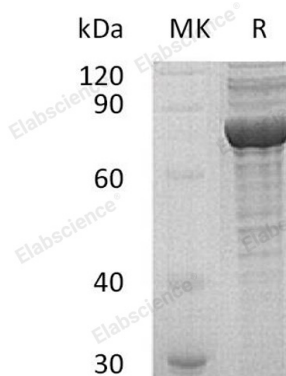
Description

Species	Human
Source	HEK293 Cells-derived Human PRKG1 protein Gly2-Pro686, with an C-terminal His
Calculated MW	78.8 kDa
Observed MW	75 kDa
Accession	Q13976-2
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	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.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 6% Sucrose, 4% Mannitol, 0.05% Tween 80, pH8.0.

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.