



Recombinant Protein Technical Manual

Recombinant Human PRKG1 Protein (His Tag)

RPES0433

Product Data:

Product SKU: RPES0433

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q13976-2

Protein Information:

Molecular Mass: 78.8 kDa

AP Molecular Mass: 75 kDa

Tag: C-6His

Bio-activity:

Purity: > 80 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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, 150mM NaCl, 0.25mM DTT, 0.1mM EDTA, 0.1mM PMSF, 20% glycerol, pH8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: cGMP-Dependent Protein Kinase 1; cGK 1; cGK1; cGMP-Dependent Protein Kinase I; cGKI; PRKG1; PRKG1B; PRKGR1A; PRKGR1B

Immunogen Information:

Sequence: Gly2-Pro686

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.