

**Recombinant Human cGMP-Dependent Protein Kinase 1/PRKG1 Protein(C-6His)**

**Cat.NO.: TP05703**

3th Edition

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

**Description:**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.

**Form:**PBS

**Molecular Weight:**78.8 kDa

**Sequences:**Gly2-Pro686

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.