

Active Recombinant Human PRKG1, His-tagged

Cat. No. PRKG1-563H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human PRKG1 was expressed by baculovirus in <i>Sf9 insect cell</i> using an N-terminal His tag. MW=80kDa.
Species	Human
Source	Sf9 Cells
Description	<p>PRKG1 is a homodimer, with each monomer containing a regulatory cGMP-binding domain and a catalytic domain. By Northern blot analysis PRKG1 was shown to be expressed at highest levels in bladder, uterus, adrenal gland, and fallopian tube.</p> <p>PRKG1 plays an important stimulatory role in platelet activation. Expression of recombinant PRKG1 in a reconstituted cell model enhanced von Willebrand factor-induced activation of the platelet integrin alpha-IIb/beta-3.</p>
Purity	60%.
Specific Activity	579 pmoles/min/μg. Enzyme reaction is conducted in a buffer containing 50 mM HEPES (pH7.5), 10 mM MgCl ₂ , 1 mM EGTA, 200 μM ATP, 0.01% Brij-35, and 2 μM substrate (SER/THR 14, Invitrogen) at room temperature for 1 hour.
Application	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.
Formulated In	25 mM Tris-HCl, pH 7.5, 100 mM NaCl, 0.05% Tween-20, 10% glycerol, and 1 mM DTT.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Stability >12 months at –80°C.

GENE INFORMATION

Gene Name [PRKG1 protein kinase, cGMP-dependent, type I \[Homo sapiens \]](#)

Synonyms PRKG1; protein kinase, cGMP-dependent, type I; PGK; PKG; CGKI; PRKG1B; PRKGR1B; FLJ36117; MGC71944; cGKI-BETA; cGKI-alpha; DKFZp686K042; protein kinase, cGMP-dependent, regulatory, type I, beta; protein kinase, cGMP-dependent, type I; EC 2.7.11.12

Gene ID [5592](#)

mRNA Refseq [NM_001098512](#)

Protein Refseq [NP_001091982](#)

MIM [176894](#)

UniProt ID [Q13976](#)

Chromosome Location 10q11.2

Pathway Gap junction; Long-term depression; Olfactory transduction; Vascular smooth muscle contraction

Function ATP binding; cGMP binding; cGMP-dependent protein kinase activity; nucleotide binding; protein serine/threonine kinase activity; transferase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA