

PRKG1 recombinant protein

PRKG1, Active

CATALOG # AAA73880	HOST Sf9 insect cells	APPLICATIONS Western Blot
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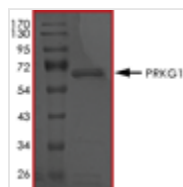
PRODUCT SYNONYMS

PRKG1; Active; PGK; CGKI; PRKG1B; PRKGR1B; FLJ36117; MGC71944; cGKI-BETA; cGKI-alpha; DKFZp686K042; PRKG1 recombinant protein

PRODUCT SPECIFICATIONS

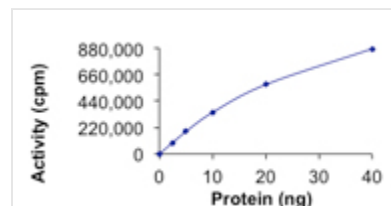
Host	Sf9 insect cells
Form/Format	Recombinant protein stored in 50mM Tris-HCl, pH7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Applicable Applications for PRKG1 recombinant protein	WB (Western Blot), Kinase Assay
Tag	GST
Species	Human
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



SDS-PAGE

Purity: Sample Purity Data. For specific information on a given lot, see related technical data sheet.



Activity

Specific Activity: Sample Kinase Activity Plot. For specific information on a given lot, see related technical data sheet.

ADDITIONAL INFORMATION

Related Product Information for PRKG1 recombinant protein	Recombinant human PRKG1 kinase domain (324-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The protein accession number is NP_001091982. PRKG1 is a homodimer, with each monomer containing a regulatory cGMP-binding domain and a catalytic domain (1). By Northern blot analysis PRKG1 was shown to be expressed at highest levels in bladder, uterus, adrenal gland, and fallopian tube. PRKG1 plays an important stimulatory role in platelet activation (2). Expression of recombinant PRKG1 in a reconstituted cell model enhanced von Willebrand factor-induced activation of the platelet integrin alpha-IIb/beta-3. Prkg1 knockout mice showed impaired platelet responses to VWF or low doses of thrombin and prolonged bleeding time. Human platelet aggregation induced by VWF or low-dose thrombin was inhibited by PRKG1 inhibitors but enhanced by cGMP.
Product Categories/Family for PRKG1 recombinant protein	Protein Kinases; Cardiovascular Disease; Neurobiology; NfκB Pathway; PKA/PKC Pathway; Ser/Thr Kinases

References	1. Orstavik, S. et al: Characterization of the human gene encoding the type I-alpha and type I-beta cGMP-dependent protein kinase (PRKG1). Genomics 42: 311-318, 1997. 2. Li, Z. et al: A stimulatory role for cGMP-dependent protein kinase in platelet activation. Cell 112: 77-86, 2003.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	148612818
NCBI GeneID	5592
NCBI Accession #	NP_001091982
NCBI GenBank Nucleotide #	NM_001098512
UniProt Accession #	Q13976; P14619; Q5JP05; Q5JSJ6; Q6P5T7; A5YM56; B3KSF3; E2PU10
Molecular Weight	44,185 Da
NCBI Official Full Name	cGMP-dependent protein kinase 1 isoform 1
NCBI Official Synonym Full Names	protein kinase, cGMP-dependent, type I
NCBI Official Symbol	PRKG1
NCBI Official Synonym Symbols	1; PKG; cGK; AAT8; cGK1; cGKI; cGK 1; PRKG1B; PRKGR1B; cGKI-BETA; cGKI-alpha
NCBI Protein Information	cGMP-dependent protein kinase 1; protein kinase, cGMP-dependent, regulatory, type I, beta
UniProt Protein Name	cGMP-dependent protein kinase 1
UniProt Gene Name	PRKG1
UniProt Synonym Gene Names	PRKG1B; PRKGR1A; PRKGR1B; cGK 1; cGK1; cGKI
UniProt Entry Name	KGP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/prkg1-recombinant-protein-sf9-insect-cells-wb-western-blot-kinase-assay/73880>