

PRKG2 recombinant protein

PRKG2, Active

CATALOG # AAA73881	HOST Sf9 insect cells	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

PRKG2; Active; cGKII; PRKGR2; PRKG2 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 PRKG2 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 PRKG2 recombinant protein	Recombinant full-length human PRKG2 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is NM_006259. PRKG2 is a member of the cGMP-dependent protein kinase family and is highly expressed in brain, lung, and intestinal mucosa. PRKG2 mediates intestinal secretion of water and electrolytes induced by the E Coli toxin STa and the intestinal peptide guanylin (1). Mice deficient in PRKG2 are resistant to E Coli STa and developed dwarfism which is caused by a severe defect in endochondral ossification at the growth plates. PRKG2 phosphorylates SOX9 and attenuates SOX9 function by inhibiting its nuclear entry. PRKG2 is a molecular switch that couples the cessation of proliferation and the start of hypertrophic chondrocyte differentiation through attenuating SOX9 function (2).
Product Categories/Family for PRKG2 recombinant protein	Protein Kinases; Cardiovascular Disease; Neurobiology; NfκB Pathway; PKA/PKC Pathway; Ser/Thr Kinases

References

1. Pfeifer, A. et al: Intestinal secretory defects and dwarfism in mice lacking cGMP-dependent protein kinase II. Science 274: 2082-2084, 1996.
2. Chikuda, H. Et al: Cyclic GMP-dependent protein kinase II is a molecular switch from proliferation to hypertrophic differentiation of chondrocytes. Genes Dev. 18: 2418-2429, 2004.

NCBI AND UNIPROT INFORMATION

NCBI GenBank Nucleotide #

[NM_006259](#)

Molecular Weight

~112kDa

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/prkg2-recombinant-protein-sf9-insect-cells-wb-western-blot-kinase-assay/73881>