

## PRKD2 active protein

Recombinant PRKD2 protein

CATALOG #  
**AAA60332**

HOST  
**Baculovirus**

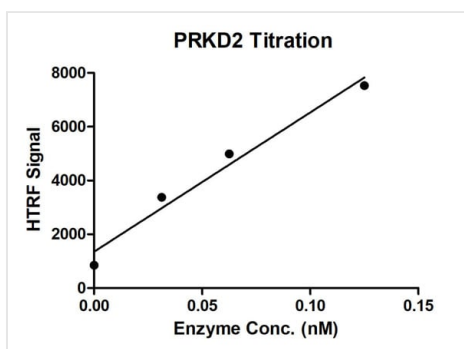
### PRODUCT SYNONYMS

PRKD2; Recombinant PRKD2 protein; Protein Kinase D2; PKD2; Serine/threonine-protein kinase D2; PRKD2 active protein

### PRODUCT SPECIFICATIONS

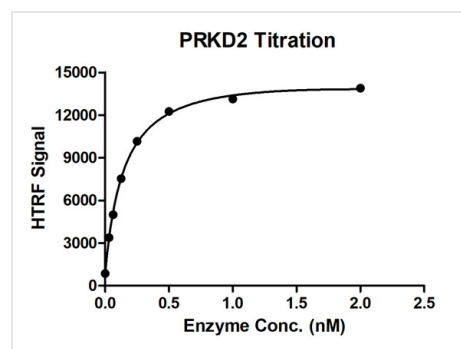
|                         |                                                                                                                                                                                                                      |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | Baculovirus                                                                                                                                                                                                          |
| Purity/Purification     | >80%                                                                                                                                                                                                                 |
| Form/Format             | Recombinant PRKD2 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.                                                                                        |
| Protein Species         | Human                                                                                                                                                                                                                |
| Tag                     | DYKDDDDK-Tag                                                                                                                                                                                                         |
| Protein Details         | Recombinant PRKD2 protein was expressed in baculovirus expression system as the full length protein (accession number NP_001073349.1) with a N-terminal DYKDDDDK tag. The molecular weight of the protein is 98 kDa. |
| 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 | Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage.                         |

### IMAGES



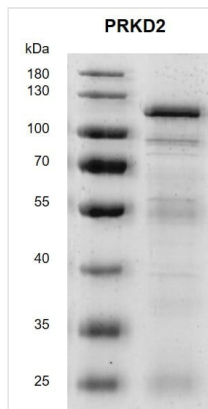
#### Bioactivity

HTRF Assay for Recombinant PRKD2 activity. 1  $\mu$ M STK S1 substrate was incubated with different concentrations of PRKD2 protein in 10  $\mu$ l reaction system containing 1 $\times$ Enzymatic Buffer, 5 mM MgCl<sub>2</sub>, 1 mM DTT and 100  $\mu$ M ATP for 1 hour. The 10  $\mu$ l detection reagents containing anti-STK antibody (1:2) and SA-XL665 (1:100) diluted with 1 $\times$  Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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#### SDS-PAGE

Recombinant PRKD2 protein gel 10% SDS-PAGE gel with Coomassie blue staining MW: 98 kDa Purity: >80%

### ADDITIONAL INFORMATION

#### Related Product Information for PRKD2 active protein

PRKD2 (Protein Kinase D2), a Serine/threonine-protein kinase that converts transient diacylglycerol (DAG) signals into prolonged physiological effects downstream of PKC and PRKD2 is involved in the regulation of cell proliferation via MAPK1/3 (ERK1/2) signaling, oxidative stress-induced NF-kappa-B activation, inhibition of HDAC7 transcriptional repression, signaling downstream of T-cell antigen receptor (TCR) and cytokine production, and PRKD2 plays a role in Golgi membrane trafficking, angiogenesis, secretory granule release and cell adhesion. PRKD2 may potentiate mitogenesis induced by the neuropeptide bombesin by mediating an increase in the duration of MAPK1/3 (ERK1/2) signaling, which leads to accumulation of immediate-early gene products including FOS that stimulate cell cycle progression. In response to oxidative stress, PRKD2 is phosphorylated at Tyr-438 and Tyr-717 by ABL1, which leads to the activation of PRKD2 without increasing its catalytic activity, and mediates activation of NF-kappa-B. Diseases associated with PRKD2 include Angiolipoma and Mitochondrial Complex I Deficiency, Nuclear Type 1.

#### Product Categories/Family for PRKD2 active protein

Kinase; Recombinant Proteins

**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/baculovirus-active-protein/prkd2/60332>