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## Product Datasheet

### Human CGK2 protein, His tag, Unconjugated GTX00173-PRO

Artikelname	Human CGK2 protein, His tag, Unconjugated
Artikelnummer	GTX00173-PRO
Hersteller Artikelnummer	GTX00173-pro
Alternativnummer	GTX00173-PRO-10
Hersteller	GeneTex
Kategorie	Proteine/Peptide
Applikation	FA
Spezies Reaktivität	Human
Konjugation	Unconjugated
NCBI	<a href="#">5593</a>
UniProt	<a href="#">Q13237</a>
Puffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Formulierung	Lyophilized powder
Sequenz	N-terminal His-Tag, Leu453~Leu728 (NP_001269409.1)

Anwendungsbeschreibung

Protein Kinase, cGMP Dependent Type II (PRKG2) belong to cGMP-dependent protein kinase or Protein Kinase G (PKG) which is a serine/threonine-specific protein kinase that is activated by cGMP. Two PKG genes, coding for PKG type I (PKG-I) and type II (PKG-II), have been identified in mammals. The PKG-I and PKG-II are homodimers of two identical subunits (~75kDa and ~85kDa, respectively) and share common structural features. PKG phosphorylates a number of biologically important targets and is implicated in the regulation of smooth muscle relaxation, platelet function, sperm metabolism, cell division, and nucleic acid synthesis. Besides, Heat Shock Protein 90kDa Alpha A1 (HSP90aA1) has been identified as an interactor of PRKG2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PRKG2 and recombinant human HSP90aA1. Briefly, PRKG2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to HSP90aA1-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-PRKG2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37C. Finally, add 50  $\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of PRKG2 and HSP90aA1 was in a dose dependent manner.