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Product Datasheet

Human PKR protein, His tag, Unconjugated GTX00113-PRO

Article Name	Human PKR protein, His tag, Unconjugated
Biozol Catalog Number	GTX00113-PRO
Supplier Catalog Number	GTX00113-pro
Alternative Catalog Number	GTX00113-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	5610
UniProt	P19525
Buffer	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
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Ser224~Ile502 (NP_001129123.1)

Application Notes

Protein Kinase R (PKR) is activated by double-stranded RNA (dsRNA), the synthesis of which is caused virally. PKR can also be activated by the protein PACT or by heparin. It plays a key role in the innate immune response to viral infection and is also involved in the regulation of signal transduction, apoptosis, cell proliferation and differentiation. Besides, Cyclin Dependent Kinase 1 (CDK1) has been identified as an interactor of PKR, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PKR and recombinant human CDK1. Briefly, PKR were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to CDK1-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-PKR 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 µl stop solution to the wells and read at 450nm immediately. The binding activity of of PKR and CDK1 was in a dose dependent manner.