

# Human PKR protein, His tag

## Cat. No. GTX00113-pro

Application	Functional Assay	Package 10 μg
Species	Human	13

#### APPLICATION

#### **Application Note**

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  $\mu$ l were then transferred to CDK1-coated microtiter wells and incubated for 2h at 37°C. 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 37°C. Finally, add 50  $\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of of PKR and CDK1 was in a dose dependent manner.

**Observed MW** 32 kDa.

FormLyophilized powderBufferReconstitute 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.PreservativeProClin 300StorageFor short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.Region/SequenceN-terminal His-Tag; Ser224~lle502 (NP_001129123.1)Expression SystemE. coliPurity> 80%Endotoxin< 1 EU/µg	PROPERTIES		
Burrer       1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.         Preservative       ProClin 300         Storage       For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.         Region/Sequence       N-terminal His-Tag; Ser224~Ile502 (NP_001129123.1)         Expression System       E. coli         Purity       > 80%         Endotoxin       < 1 EU/μg         Conjugation       Unconjugated         Note       For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	Form	Lyophilized powder	
Storage For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.  Region/Sequence N-terminal His-Tag; Ser224~Ile502 (NP_001129123.1)  Expression System E. coli  Purity > 80%  Endotoxin < 1 EU/µg  Conjugation Unconjugated  For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	Buffer		
as concentrated solution. Avoid freeze-thaw cycles.  Region/Sequence N-terminal His-Tag; Ser224~Ile502 (NP_001129123.1)  Expression System E. coli  Purity > 80%  Endotoxin <1 EU/μg  Conjugation Unconjugated  For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	Preservative	ProClin 300	
Expression System       E. coli         Purity       > 80%         Endotoxin       < 1 EU/μg         Conjugation       Unconjugated         Note       For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	Storage		
Purity       > 80%         Endotoxin       < 1 EU/μg         Conjugation       Unconjugated         Note       For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	Region/Sequence	N-terminal His-Tag; Ser224~Ile502 (NP_001129123.1)	
Endotoxin       < 1 EU/μg         Conjugation       Unconjugated         Note       For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	<b>Expression System</b>	E. coli	
Conjugation Unconjugated  For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	Purity	> 80%	
Note  For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human	Endotoxin	< 1 EU/μg	
Note	Conjugation	Unconjugated	
	Note		

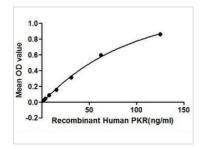


For full product information, images and publications, please visit our <u>website</u>.

Date 2024 / 05 / 19 Page 1 of 2

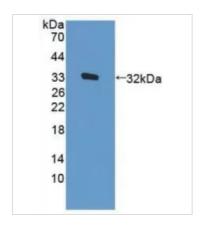


## DATA IMAGES



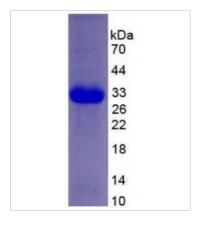
#### **GTX00113-pro Functional Assay Image**

Functional ELISA analysis of GTX00113-pro Human PKR protein which can bind immobilized CDK1 protein.



#### GTX00113-pro Image

WB analysis of GTX00113-pro Human PKR protein.



## GTX00113-pro Image

SDS-PAGE analysis of GTX00113-pro Human PKR protein.



For full product information, images and publications, please visit our <u>website</u>.

Date 2024 / 05 / 19 Page 2 of 2