

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# PKR monoclonal antibody

Catalog: MB66916 Host: Mouse Reactivity: Human

#### **BackGround:**

Protein kinase is transcriptionally induced by interferon and activated by double-stranded RNA (dsRNA). PKR inhibits translation initiation through phosphorylation of the 伪 subunit of the initiation factor eIF2 and also controls the activation of several transcription factors, such as NF-魏 B, p53, and the Stats. In addition, PKR mediates apoptosis induced by many different stimuli, such as LPS, TNF-伪, viral infection, and serum starvation. Activation of PKR by dsRNA results in PKR dimerization and autophosphorylation of Thr446 and Thr451 in the activation loop. Substitution of threonine for alanine at position 451 completely inactivated PKR, while a mutant with a threonine to alanine substitution at position 446 was partially active. Research studies have implicated PKR activation in the pathologies of neurodegenerative diseases, including Alzheimer's disease.

## **Product:**

Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

#### **Molecular Weight:**

~ 70 kDa

#### **Swiss-Prot:**

P19525

### **Purification&Purity:**

This antibody is purified through a protein G column.

#### **Applications:**

WB (1/500 - 1/1000), IF/ICC (1/10 - 1/50)

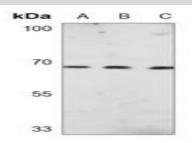
#### **Storage&Stability:**

Store at  $4 \, \mathbb{C}$  short term. Aliquot and store at  $-20 \, \mathbb{C}$  long term. Avoid freeze-thaw cycles.

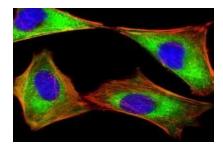
#### **Specificity:**

Recognizes endogenous levels of PKR protein.

## **DATA:**



Western blot analysis of PKR expression in A431 (A), HepG2 (B), SHSY5Y (C) whole cell lysates.



Immunofluorescent analysis of PKR staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF555 was used to stain the cytoplasm (red). DAPI was used to stain the cell nuclei (blue).

#### Note:

For research use only, not for use in diagnostic procedure.

## Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151