# PRODUCT DATA SHEET



# **Bioworld Technology CO., Ltd.**

# PERK (R87) Peptide

Cat No.: BS2156P

# **Background**

An interferon-inducible, RNA-dependent protein serine /threonine kinase (PKR) has been described. PKR in earlier literature is variously known as DAI, dsJ, PI kinase, p65, p67 or TIK for the mouse kinase; and p68 or p69 for the human kinase. The PKR kinase substrate is the  $\alpha$  subunit of protein synthesis initiation factor eIF-2. Phosphorylation of eIF-2 $\alpha$  on serine-51 results in inhibition of translation. The serine /threonine kinase catalytic domains map to the carboxy terminal half of the protein while the RNA-binding domains are located in the amino terminal region. PERK is a type I transmembrane protein located in the endoplasmic reticulum (ER) that contains a kinase domain similar to the kinase domain of PKR. PERK is activated in response to ER stress and phosphorylates eIF-2 $\alpha$ , thus inhibiting the translation of mRNA.

# **Swiss-Prot**

O9NZJ5

# **Applications**

Blocking

# **Specificity**

This peptide can be used with studies using BS2156 PERK (R87) pAb.

# **Purification & Purity**

Synthetic peptide PERK (R87). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

#### **Storage & Stability**

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

#### **Research Use**

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