

# PERK (R87) polyclonal antibody

Catalog: BCP01292 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **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.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

# **Molecular Weight:**

~ 140 kDa

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

Q9NZJ5

#### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### **Applications:**

WB: 1:500~1:1000 IHC: 1:50~1:200 IF: 1:50~1:200

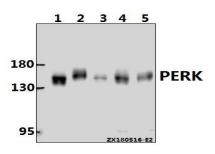
## Storage&Stability:

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

# **Specificity:**

PERK (R87) polyclonal antibody detects endogenous levels of PERK protein.

#### **DATA:**



Western blot (WB) analysis of PERK (R87) pAb at 1:1000 dilution

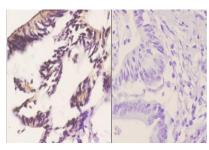
Lane1:HCT116 whole cell lysate(20ug)

Lane2:MCF-7 whole cell lysate(20ug)

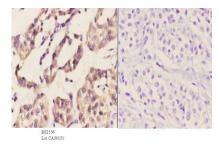
Lane3:A375 whole cell lysate(20ug)

Lane4:CT26 whole cell lysate(40ug)

Lane5:PMVEC whole cell lysate(40ug)

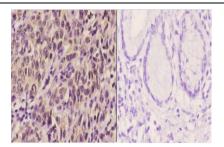


Immunohistochemistry (IHC) analyzes of PERK (R87) pAb in paraffin-embedded human colon carcinoma tissue at 1:50.showing cytoplasmic and nucleus staining. Negative control (the right)Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG-biotin followed by avidin-peroxidase.



Immunohistochemistry (IHC) analyzes of PERK (R87) pAb in paraffin-embedded human liver carcinoma tissue at 1:50.showing cytoplasmic and nucleus staining. Negative control (the right)Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG-biotin followed by avidin-peroxidase.





Immunohistochemistry (IHC) analyzes of PERK (R87) pAb in paraffin-embedded human esophagus carcinoma tissue at 1:50.showing cytoplasmic and nucleus staining. Negative control (the right)Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG-biotin followed by avidin-peroxidase.

## Note:

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