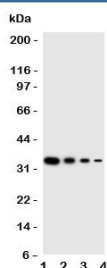


PKR Antibody (R31134)

Catalog No.	Formulation	Size
R31134	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P19525
Applications	Western Blot : 0.5-1ug/ml
Limitations	This PKR antibody is available for research use only.



Western blot testing of PKR antibody; Lane 1: Recombinant human protein 10ng; 2: 5ng; 3: 2.5ng; 4: 1.25ng

Description

Eukaryotic Translation Initiation Factor 2-Alpha Kinase 2, also called PKR (Protein kinase RNA activated), is an enzyme that in humans is encoded by the EIF2AK2 gene. Activation of the protein allows the kinase to phosphorylate its natural substrate, the alpha subunit of eukaryotic protein synthesis initiation factor-2, leading to the inhibition of protein synthesis(summary by Kuhen et al., 1996). By FISH analysis, Squire et al.(1993) assigned the gene to the boundary between chromosome 2p22-p21. Ben-Asouli et al.(2002) showed that human gamma-interferon mRNA uses local activation of PKR in the cell to control its own translation yield. IFNG mRNA was found to activate PKR through a pseudoknot in its 5-prime untranslated region. Taylor et al.(1999) studied the mechanism underlying the resistance of hepatitis C virus(HCV) to interferon. They demonstrated that the HCV envelope protein E2 contains a sequence identical

with phosphorylation sites of the interferon-inducible protein kinase PKR and its target, the translation initiation factor EIF2-alpha. E2 inhibited the kinase activity of the protein and blocked its inhibitory effect on protein synthesis and cell growth.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the PKR antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of human Protein kinase RNA activated (AGDLSAGFFMEELNTYR) was used as the immunogen for this PKR antibody.

Storage

After reconstitution, the PKR antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.