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## EIF2AK2 (PKR) Rabbit pAb

Catalog Number: bs-1493R

Target Protein: EIF2AK2 (PKR)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500)

Reactivity: Human, Rat (predicted:Mouse)

Predicted MW: 61 kDa

Entrez Gene: 5610

Swiss Prot: P19525

Source: KLH conjugated synthetic peptide derived from human PKR: 251-360/551.

Purification: affinity purified by Protein A

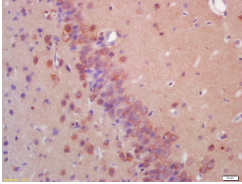
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** PKR is an interferon-inducible serine/threonine specific protein kinase. It is widely expressed in eukaryotic organisms and activated by double stranded RNA. Activation of PKR by dsRNAs leads to autophosphorylation at multiple sites. Phosphorylation of Thr446 and Thr451 in the PKR activation loop is required in vivo and in vitro for high level kinase activity. PKR phosphorylates its natural substrate, the alpha subunit of eukaryotic protein synthesis initiation factor 2 (EIF2 alpha), leading to the inhibition of protein synthesis. PKR is also involved in TLR signaling and mediates apoptosis in fibroblasts in response to viral infection and inflammatory cytokines, and also activates IKK and NFkB, thereby suppressing apoptosis. Recently, it has been reported that PKR also phosphorylates human p53 on serine 392. PKR might play a role in ER stress-induced apoptosis and in Alzheimer's disease. Alzheimer cases show prominent PKR activation in association with neuritic plaques and pyramidal neurons in the hippocampus and neocortex.

### VALIDATION IMAGES

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Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-EIF2AK2/PKR Polyclonal Antibody, Unconjugated(bs-1493R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

## PRODUCT SPECIFIC PUBLICATIONS

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[IF=2.66] Lopušná, Katarína, et al. "Murine gammaherpesvirus targets type I IFN receptor but not type III IFN receptor early in infection." Cytokine 83 (2016): 158-170. WB ; ="Mouse" . 27152708

[IF=2.245] Pengwei Wang. et al. Deoxynivalenol Induces Inflammation in the Small Intestine of Weaned Rabbits by Activating Mitogen-Activated Protein Kinase Signaling. Front Vet Sci. 2021; 8: 632599 WB,IHC ; Rabbit . 33604367