

Anti-EIF2AK2 (PKR)

Rabbit Polyclonal Antibody

Catalog # P80-63BR

Lot # O2109-59

Cited Applications

WB, ELISA, IF, IHC

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes the EIF2AK2 protein

Cross Reactivity

Human, Mouse and Rat

Host/Isotype/Clone#

Rabbit, IgG

Immunogen

EIF2AK2 antibody was raised against a peptide corresponding to 14 amino acids near the carboxy terminus of human EIF2AK2

Formulation

PBS + 0.02% sodium azide

Stability

1yr at -20°C from date of shipment

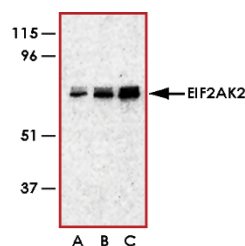
Scientific Background

EIF2AK2 (also known as double-stranded RNA-activated protein kinase) is a protein kinase that has been shown to be involved in HIV/gp120-associated neurodegeneration (1). EIF2AK2 acts as a critical mediator of gp120 neurotoxicity and is a substrate for a family of protein kinases that respond to various forms of environmental stress. Activation of EIF2AK2 leads to its autophosphorylation and then phosphorylation of its natural substrate, the alpha subunit of eukaryotic protein synthesis initiation factor-2. EIF2AK2 plays a critical role in mRNA translation, cell proliferation and apoptosis. A novel cross-talk between the EIF2AKs and p53 has been shown that has implications in cell proliferation and tumorigenesis (2).

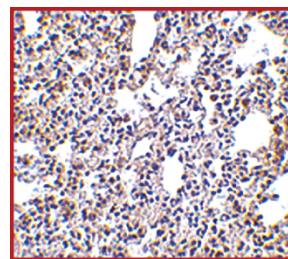
References

1. Baltzis, D. et al: The eIF2alpha kinases PERK and PKR activate glycogen synthase kinase 3 to promote the proteasomal degradation of p53. J. Biol Chem. 2007; 282(43):31675-87.
2. Alirezaei, M. et al: Human immunodeficiency virus-1/surface glycoprotein 120 induces apoptosis through RNA-activated protein kinase signaling in neurons. J.Neurosci. 2007; 27(41):11047-55.

Sample Data



Western blot analysis of EIF2AK2 in A431 whole cell lysate with EIF2AK2 antibody at (A) 0.5, (B) 1 and (C) 2 µg/ml.



Immunohistochemistry of EIF2AK2 in rat lung tissue with EIF2AK2 antibody at 2.5 µg/ml.

Anti-EIF2AK2 (PKR)

Rabbit Polyclonal Antibody

Catalog Number

P80-63BR

Specific Lot Number

O2109-59

Purification
Stability
Storage & Shipping

Affinity chromatography
1yr at -20°C from date of shipment
Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
www.signalchem.com

FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.