

PKR Antibody

Catalog No: #24458

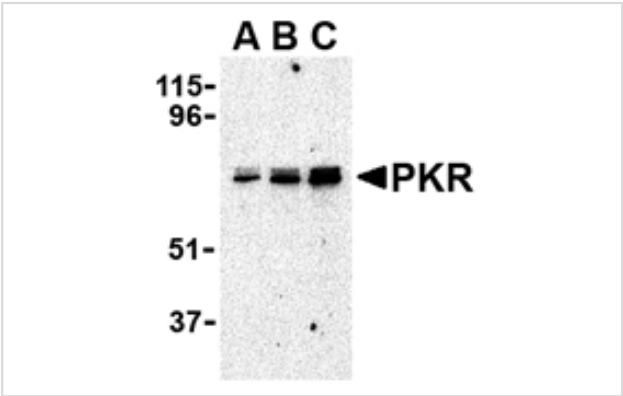


Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

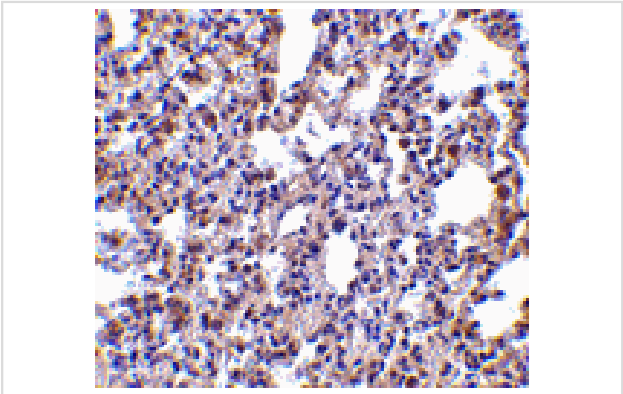
Description

Product Name	PKR Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a peptide corresponding to 14 amino acids near the carboxy terminus of human PKR.
Target Name	PKR
Other Names	Protein kinase RNA-activated, interferon-inducible RNA-dependent protein kinase
Accession No.	Swiss-Prot:P19525Gene ID:5610
Uniprot	P19525
GeneID	5610;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

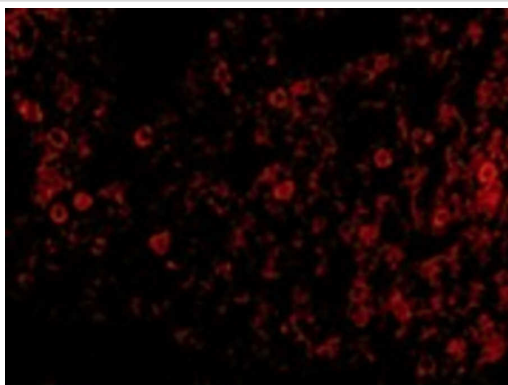
Images



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



Immunohistochemistry of PKR in rat lung tissue with PKR antibody at 2.5 ug/mL.



Immunofluorescence of PKR in mouse lung tissue with PKR antibody at 20 µg/ml.

Background

The interferon-inducible, double-stranded RNA (dsRNA)-dependent protein kinase PKR is a member of the eukaryotic initiation factor-2 alpha (eIF2-alpha) kinase family, possessing serine-threonine kinase activity and two dsRNA-binding motifs that acts as part of the innate immune system. Upon binding dsRNA, PKR undergoes a conformational change leading to its activation and its phosphorylation of the translation factor eIF2, resulting in a general shutdown of protein synthesis and induction of apoptosis through upregulation of caspase-8 and capsase-9 activity in order to prevent the production of more viruses. To evade the antiviral effects of PKR, viruses have evolved multiple mechanisms, such as the inhibition of PKR by the non-structural protein (NS1) of the influenza virus. More recently, PKR has been implicated in several neurodegenerative diseases including Alzheimer, Huntington, and amyotrophic lateral sclerosis.

Note: This product is for in vitro research use only