

## PKR Rabbit mAb

Catalog No: #49002



Package Size: #49002-1 50ul #49002-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

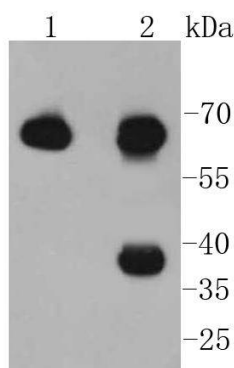
## Description

Product Name	PKR Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC06-37
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	Double stranded RNA activated protein kinase; antibody E2AK2_HUMAN antibody eIF-2A protein kinase 2 antibody EIF2AK1 antibody EIF2AK2 antibody Eukaryotic translation initiation factor 2 alpha kinase 2 antibody Eukaryotic translation initiation factor 2-alpha kinase 2 antibody HGNC:9437 antibody Interferon induced double stranded RNA activated protein kinase antibody Interferon inducible eIF2 alpha kinase antibody Interferon inducible RNA dependent protein kinase antibody Interferon-induced, double-stranded RNA-activated protein kinase antibody Interferon-inducible RNA-dependent protein kinase antibody MGC126524 antibody P1/eIF-2A protein kinase antibody P1/eIF2A protein kinase antibody p68 kinase antibody PKR antibody PPP1R83 antibody PRKR antibody Protein kinase interferon inducible double stranded RNA dependent antibody Protein kinase RNA activated antibody Protein kinase RNA-activated antibody Protein phosphatase 1 regulatory subunit 83 antibody Serine/threonine protein kinase TIK antibody Tyrosine protein kinase EIF2AK2 antibody
Accession No.	Swiss-Prot#:P19525
Calculated MW	68 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

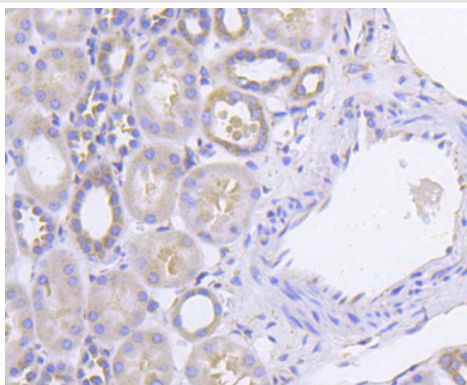
## Application Details

WB: 1:1,000-5,000 IHC: 1:50-1:100 ICC: 1:50-1:100

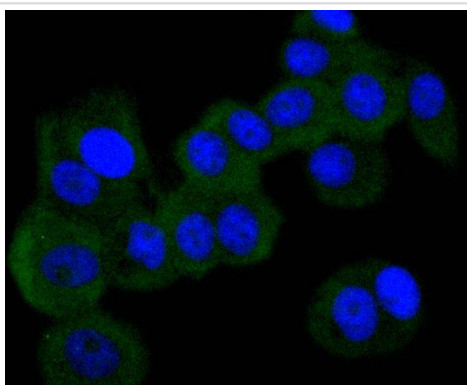
## Images



Western blot analysis of PKR on different lysates using anti-PKR antibody at 1/1,000 dilution. Positive control: Lane 1: MCF-7 Lane 2: HeLa



Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-PKR antibody. Counter stained with hematoxylin.



ICC staining PKR in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

## 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 a subunit of protein synthesis initiation factor eIF-2. Phosphorylation of eIF-2a on serine-51 results in inhibition of translation. Molecular cDNA clones have been isolated from both human and mouse cells. 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. Three kinds of regulation of PKR enzymatic activity have been described. These include transcriptional regulation in response to interferon, an autoregulatory mechanism controlling PKR expression at the level of translation and post-translational regulation by RNA mediated autophosphorylation.

## References

1. Maity B et al. Molecular mechanism of the anti-inflammatory activity of a natural diarylnonanoid, malabaricone C. *Free Radic Biol Med* 52:1680-1691 (2012).
2. Lindquist ME et al. Activation of protein kinase R is required for induction of stress granules by respiratory syncytial virus but dispensable for viral replication. *Virology* 413:103-10 (2011).

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.