

## Phospho-PKR(T446) Rabbit mAb

Catalog No: #13351



Package Size: #13351-1 50ul #13351-2 100ul

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

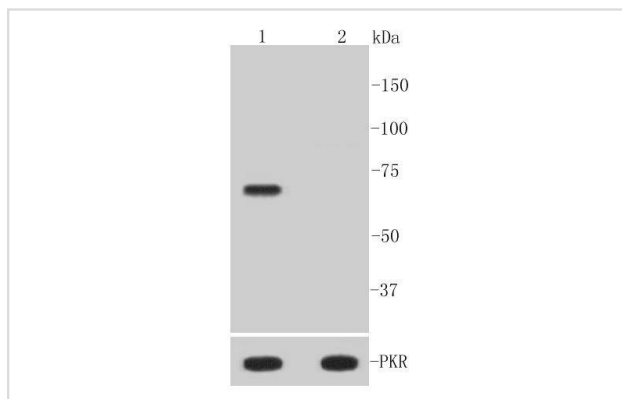
## Description

Product Name	Phospho-PKR(T446) Rabbit mAb
Host Species	Rabbit
Clonality	Monoclonal
Clone No.	SY230
Purification	ProA affinity purified
Applications	WB, IHC, IP, CHIP
Species Reactivity	Hu
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Thr446 of human PKR.
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
Uniprot	P19525
GeneID	5610;
Calculated MW	62 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

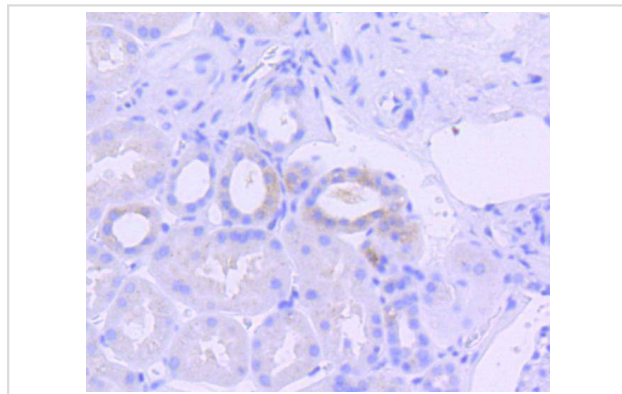
## Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200

## Images



Western blot analysis of Phospho-PKR(T446) on different lysates using anti-Phospho-PKR(T446) antibody at 1/1,000 dilution. Positive control:  
Lane 1: Hela treated with Calyculin A and TNF-alpha whole cell lysates  
Lane 2: Untreated Hela whole cell lysates



Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Phospho-PKR(T446) antibody. Counter stained with hematoxylin.

## Background

An interferon-inducible, RNA-dependent protein serine/threonine kinase, PKR has various designations. Mouse PKR is known as DAI, dsJ, PI kinase, p65, p67 or TIK, whereas human PKR is known as p68 or p69. PKR phosphorylates its substrate, a subunit of protein synthesis initiation factor eIF-2 on Ser 51 to inhibit translation. PKR contains two dsRNA binding motifs required for its activation by dsRNA. Three kinds of regulation of PKR enzymatic activity occur, and these include transcriptional regulation in response to interferon, an autoregulatory mechanism controlling PKR expression at the level of translation, and posttranslational regulation by RNA mediated autophosphorylation. Human PKR contains at least 15 autophosphorylation sites, but only Thr-446 and Thr-451 in the activation loop are critical for its kinase activity. Thr-446 is the in vivo autophosphorylation site of PKR. Mutation of threonine to alanine at position 446 substantially reduces PKR function, and mutant kinase containing Ala-451 is completely inactive.

## References

Note: This product is for in vitro research use only