

PKR (Phospho-Thr446) Antibody

Catalog No: #13333

Package Size: #13333-1 50ul #13333-2 100ul

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

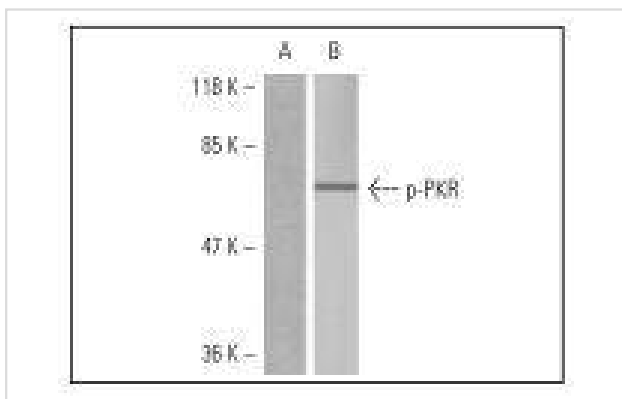
Description

Product Name	PKR (Phospho-Thr446) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Immunogen affinity purified
Applications	WB, IP, IF, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Amino acid sequence containing phosphorylated Thr 446 of PKR of human origin.
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	68kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

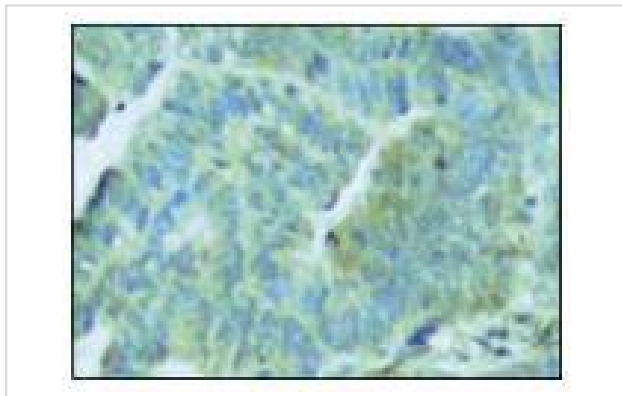
Application Details

WB: 1:100-1:1,000 IHC: 1:50-500 IP: 1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)

Images



Western blot analysis of phosphorylated PKR expression in K-562 (A) and starved K-562 (B) whole cell lysates.



Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma tissue showing cytoplasmic staining.

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