

Datasheet for ABIN968165

**anti-EIF2AK2 antibody (AA 117-250)****4** Images**4** Publications[Go to Product page](#)

## Overview

Quantity:	50 µg
Target:	EIF2AK2
Binding Specificity:	AA 117-250
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This EIF2AK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

## Product Details

Immunogen:	Human p68 Kinase aa. 117-250
Clone:	13-PKR
Isotype:	IgG1
Characteristics:	<ol style="list-style-type: none"><li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li><li>2. Please refer to us for technical protocols.</li><li>3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li><li>4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li></ol>
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

## Product Details

chromatography.

## Target Details

Target:	EIF2AK2
Alternative Name:	PKR ( <a href="#">EIF2AK2 Products</a> )
Background:	<p>Double stranded RNA (dsRNA) generated by most viruses during the infectious cycle is a potent stimulator of interferons. Interferons bind to cell surface receptors and stimulate the synthesis of several proteins that interfere with viral replication. One protein, 2'5'-oligo-adenylate synthetase, indirectly activates an endoribonuclease that degrades viral RNA. Another protein, p68 serine/threonine protein kinase (also known as PKR and TIK), is induced following interferon stimulation and activated by autophosphorylation in the presence of dsRNA. Upon activation, p68 phosphorylates the alpha subunit of the eukaryotic initiation factor 2 (eIF-2) resulting in inhibition of protein synthesis and, in turn, inhibition of viral replication. Evidence also suggests that p68 protein kinase inhibits proliferation and potentiates tumor suppressor function. In addition, p68 has been shown to phosphorylate I<math>\kappa</math>B, thus activating NF-<math>\kappa</math>B which induces interferon-beta gene transcription. This antibody is routinely tested by western blot analysis.</p> <p>Synonyms: Protein Kinase R, p68 Kinase, TIK</p>
Molecular Weight:	68 kDa
Pathways:	<a href="#">DNA Damage Repair</a> , <a href="#">ER-Nucleus Signaling</a> , <a href="#">Hepatitis C</a>

## Application Details

Comment:	Related Products: <a href="#">ABIN968533</a> , <a href="#">ABIN967389</a>
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Concentration:	250 $\mu$ g/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09$ % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

## Handling

should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store undiluted at -20° C.

## Publications

Product cited in: Feng, Chong, Kumar, Williams: "Identification of double-stranded RNA-binding domains in the interferon-induced double-stranded RNA-activated p68 kinase." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 89, Issue 12, pp. 5447-51, (1992) ([PubMed](#)).

Lee, Tomita, Hovanessian, Katze: "Characterization and regulation of the 58,000-dalton cellular inhibitor of the interferon-induced, dsRNA-activated protein kinase." in: **The Journal of biological chemistry**, Vol. 267, Issue 20, pp. 14238-43, (1992) ([PubMed](#)).

Barber, Tomita, Hovanessian, Meurs, Katze: "Functional expression and characterization of the interferon-induced double-stranded RNA activated P68 protein kinase from Escherichia coli." in: **Biochemistry**, Vol. 30, Issue 42, pp. 10356-61, (1991) ([PubMed](#)).

Meurs, Chong, Galabru, Thomas, Kerr, Williams, Hovanessian: "Molecular cloning and characterization of the human double-stranded RNA-activated protein kinase induced by interferon." in: **Cell**, Vol. 62, Issue 2, pp. 379-90, (1990) ([PubMed](#)).

## Images



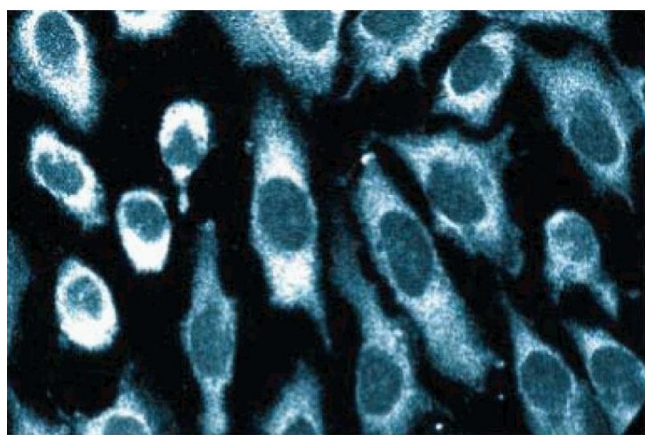
### Western Blotting

**Image 1.** Western blot analysis of PKR on a A431 cell lysate (Human epithelial carcinoma, ATCC CRL-1555). Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti- human PKR antibody.



#### Western Blotting

**Image 2.**



#### Immunofluorescence

**Image 3.** Immunofluorescence staining of human endothelial cells.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN968165.