

## Anti-PKR Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

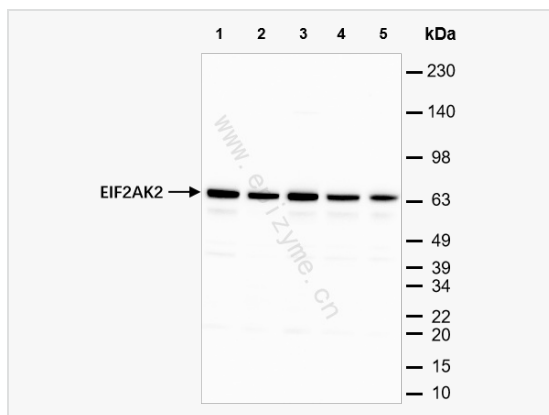
Catalog # M014638

### Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	17N88T49
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human PKR
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PKR Mouse mAb [17N88T49] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	Double stranded RNA activated protein kinase;, E2AK2_HUMAN, eIF-2A protein kinase 2, EIF2AK1, EIF2AK2, Eukaryotic translation initiation factor 2 alpha kinase 2, Eukaryotic translation initiation factor 2-alpha kinase 2, HGNC:9437, Interferon induced double stranded RNA activated protein kinase, Interferon inducible eIF2 alpha kinase, Interferon inducible RNA dependent protein kinase, Interferon-induced, double-stranded RNA-activated protein kinase, Interferon-inducible RNA-dependent protein kinase, MGC126524, P1/eIF-2A protein kinase, P1/eIF2A protein kinase, p68 kinase, PKR, PPP1R83, PRKR, Protein kinase interferon inducible double stranded RNA dependent, Protein kinase RNA activated, Protein kinase RNA-activated, Protein phosphatase 1 regulatory subunit 83, Serine/threonine protein kinase TIK, Tyrosine protein kinase EIF2AK2.
Calculated MW	Calculated MW: 62 kDa; Observed MW: 68 kDa
Uniprot ID	P19525
Gene ID	5610
Background	IFN-induced dsRNA-dependent serine/threonine-protein kinase which plays a key role in the innate immune response to viral infection and is also involved in the regulation of signal transduction, apoptosis, cell proliferation and differentiation. Exerts its antiviral activity on a wide range of DNA and RNA viruses including hepatitis C virus (HCV), hepatitis B virus (HBV), measles virus (MV) and herpes simplex virus 1 (HSV-1). Inhibits viral replication via phosphorylation of the alpha subunit of eukaryotic initiation factor 2 (EIF2S1), this phosphorylation impairs the recycling of EIF2S1 between successive rounds of initiation leading to inhibition of translation which eventually results in shutdown of cellular and viral protein synthesis. Also phosphorylates other substrates including p53/TP53, PPP2R5A, DHX9, ILF3, IRS1 and the HSV-1 viral protein US11. In addition to serine/threonine-protein kinase activity, also has tyrosine-protein kinase activity and phosphorylates CDK1 at 'Tyr-4'



Western Blot - Anti-PKR Mouse mAb [17N88T49]

All lanes: M014638 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates

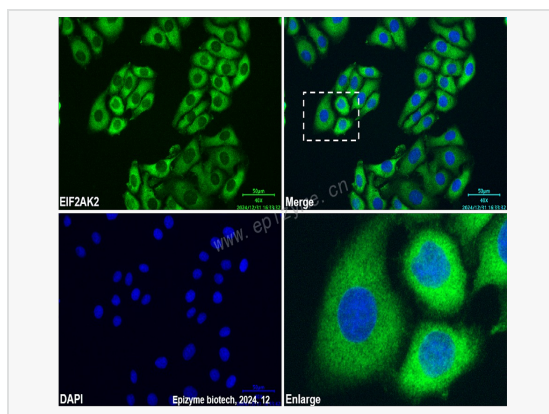
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution

Predicted band size: 62 kDa

Observed band size: 68 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-PKR Mouse mAb [17N88T49]

Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibody: M014638 at 1:100 dilution

Secondary antibody: Goat anti-Mouse (488) at 1:1,000 dilution (shown in green)

Nuclei were stained with DAPI (shown in blue).