

Rabbit PKR Polyclonal Antibody | anti-EIF2AK2 antibody

PKR Antibody

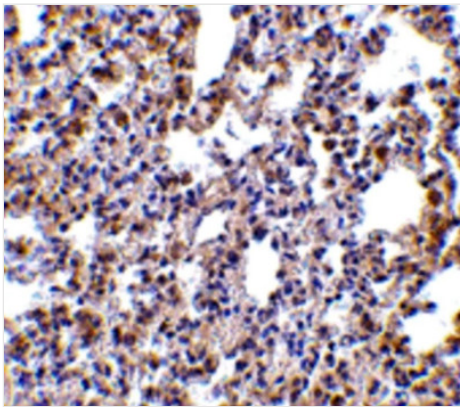
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA10917	Rabbit	Human, Mouse, Rat	ELISA, Western Blot, Immunohistochemistry, Immunofluorescence

PRODUCT SYNONYMS

PKR; Polyclonal Antibody; PKR Antibody; PRKR; EIF2AK1; Interferon-induced; double-stranded RNA-activated protein kinase; Eukaryotic translation initiation factor 2-alpha kinase 2; eIF-2A protein kinase 2; eukaryotic translation initiation factor 2-alpha kinase 2; anti-EIF2AK2 antibody

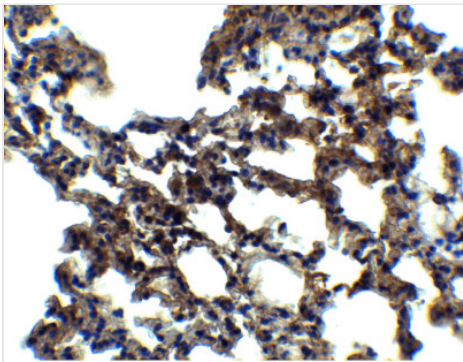
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	At least two different isoforms of PKR are known to exist; this antibody will detect both isoforms.
Purity/Purification	PKR Antibody is affinity chromatography purified via peptide column.
Form/Format	Liquid
Concentration	1 mg/mL (varies by lot)
Sequence Length	510
Applicable Applications for anti-EIF2AK2 antibody	ELISA, WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence)
Application Notes	WB: 1 ug/mL; IF: 20 ug/mL; IHC-p: 2.5-5 ug/mL Antibody validated: Western Blot in human and mouse samples; Immunohistochemistry in mouse and rat samples and Immunofluorescence in mouse samples. All other applications and species not yet tested. PKR antibody can be used for detection of PKR by Western blot at 0.5 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 mug/mL. For immunofluorescence start at 20 ug/mL.
Conjugate	Unconjugated
Immunogen	Anti-PKR antibody was raised against a 14 amino acid synthetic peptide near the carboxy terminus of human PKR. The immunogen is located within the last 50 amino acids of PKR.
Buffer	PKR Antibody is supplied in PBS containing 0.02% sodium azide.
Preparation and Storage	PKR antibody can be stored at 4 degree C for three months and -20 degree C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.



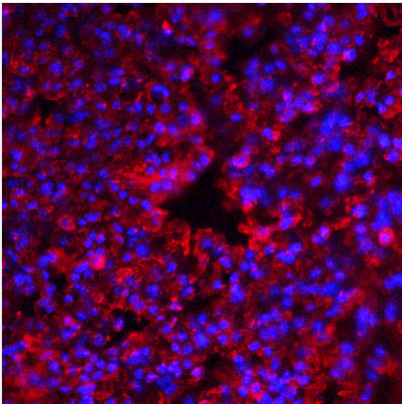
IHC (Immunohistochemistry)

Validation of PKR in Rat Lung Immunohistochemical analysis of paraffin-embedded rat lung tissue using anti-PKR antibody (AAA10917) at 2.5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4 degree C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



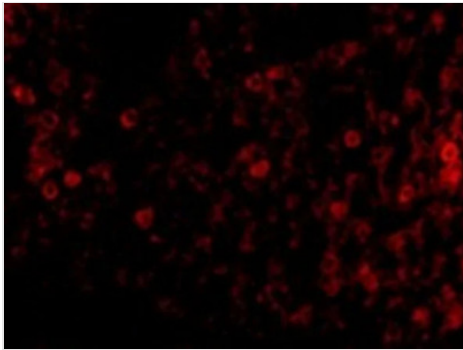
IHC (Immunohistochemistry)

Immunohistochemistry Validation of PKR in Mouse Lung Immunohistochemical analysis of paraffin-embedded mouse lung tissue using anti-PKR antibody (AAA10917) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 44°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



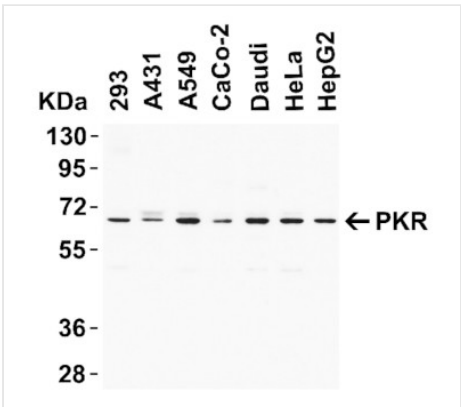
IF (Immunofluorescence)

Immunofluorescence Validation of PKR in Mouse Lung Immunofluorescent analysis of 4% paraformaldehyde fixed mouse lung tissue labeling PKR with AAA10917 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red) and DAPI staining (blue).



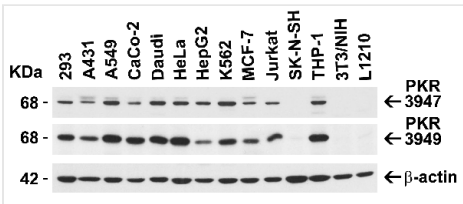
IF (Immunofluorescence)

Immunofluorescence Validation of PKR in Mouse Lung Immunofluorescent analysis of 4% paraformaldehyde fixed mouse lung tissue labeling PKR with AAA10917 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red).



WB (Western Blot)

Western Blot Validation of PKR in Human Cell Lines Loading: 15 ug of lysates per lane. Antibodies: PKR AAA10917 (1 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



WB (Western Blot)

Independent Antibody Validation (IAV) via Protein Expression Profile in Cell Lines Loading: 15 ug of lysates per lane. Antibodies: PKR AAA10917 (1 ug/mL), PKR (1 ug/mL), and beta-actin (1 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.

ADDITIONAL INFORMATION

Related Product Information for anti-EIF2AK2 antibody	PKR Antibody: The interferon-inducible, double-stranded RNA (dsRNA)-dependent protein kinase PKR is a member of the eukaryotic initiation factor-2 alpha (eIF2-alpha) kinase family, possessing serine-threonine kinase activity and two dsRNA-binding motifs that acts as part of the innate immune system. Upon binding dsRNA, PKR undergoes a conformational change leading to its activation and its phosphorylation of the translation factor eIF2, resulting in a general shutdown of protein synthesis and induction of apoptosis through upregulation of caspase-8 and capsase-9 activity in order to prevent the production of more viruses. To evade the antiviral effects of PKR, viruses have evolved multiple mechanisms, such as the inhibition of PKR by the non-structural protein (NS1) of the influenza virus. More recently, PKR has been implicated in several neurodegenerative diseases including Alzheimer, Huntington, and amyotrophic lateral sclerosis.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	31747519
NCBI GeneID	5610
UniProt Accession #	P19525; Q52M43; Q7Z6F6; Q9UIR4; A8K3P0; D6W584; E9PC80
Molecular Weight	Predicted: 62kD Observed: 68kD
NCBI Official Full Name	interferon-inducible double-stranded RNA-dependent protein kinase
NCBI Official Synonym Full Names	eukaryotic translation initiation factor 2-alpha kinase 2
NCBI Official Symbol	EIF2AK2
NCBI Official Synonym Symbols	PKR; PRKR; EIF2AK1; PPP1R83
NCBI Protein Information	interferon-induced, double-stranded RNA-activated protein kinase; p68 kinase; protein kinase R; eIF-2A protein kinase 2; P1/eIF-2A protein kinase; tyrosine-protein kinase EIF2AK2; interferon-inducible eIF2alpha kinase; double stranded RNA activated protein kinase; protein phosphatase 1, regulatory subunit 83; protein kinase, interferon-inducible double stranded RNA dependent
UniProt Protein Name	Interferon-induced, double-stranded RNA-activated protein kinase
UniProt Gene Name	EIF2AK2
UniProt Synonym Gene Names	eIF-2A protein kinase 2; PKR; Protein kinase R
UniProt Entry Name	E2AK2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pkr-antibody-western-blot-immunohistochemistry-immunofluorescence-elisa/10917>