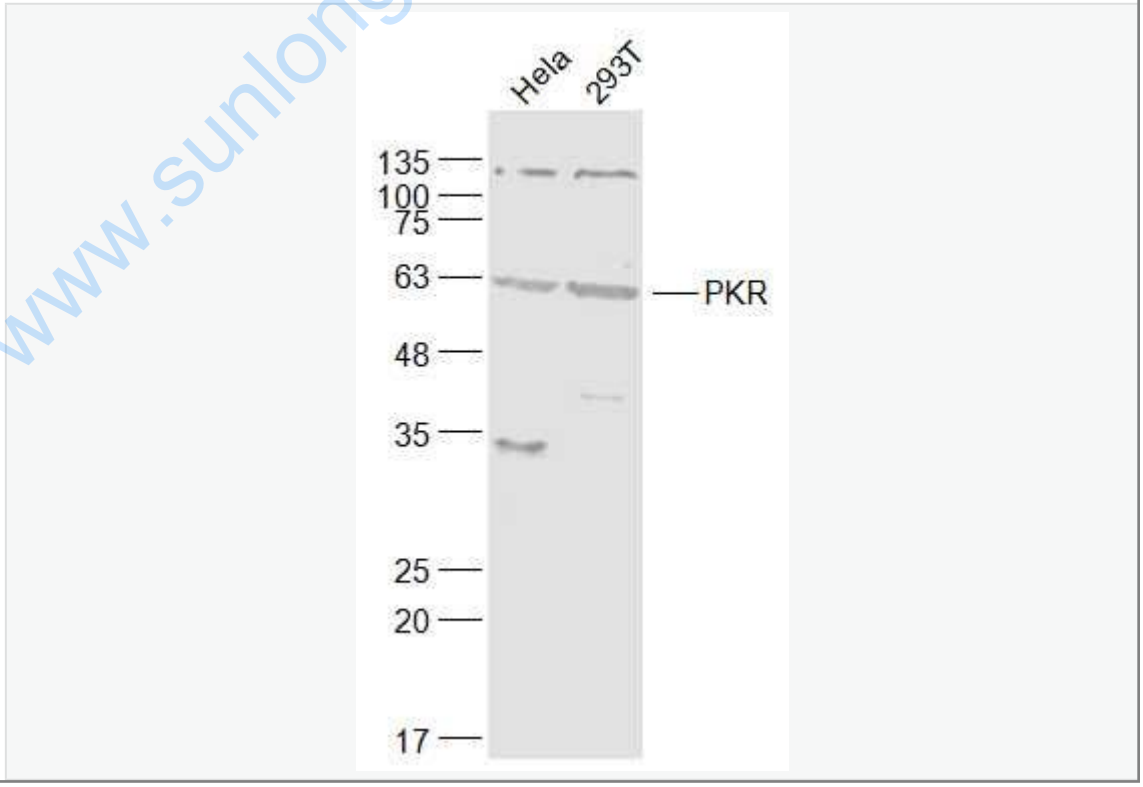
SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-PKR antibody

SL1493R

Product Name:	PKR
Chinese Name:	蛋白激酶R/EIF2AK1抗体
Alias:	double-stranded RNA-dependent Protein Kinase; interferon-induced, double-stranded RNA-activated protein kinase isoform a; protein kinase, interferon-inducible double stranded RNA dependent; interferon-inducible elF2alpha kinase; double stranded RNA activated protein kinase; p68 kinase; eIF-2A protein kinase 2; P1/eIF-2A protein kinase; protein kinase RNA-activated; interferon-inducible RNA-dependent protein kinase; EIF2AK2; EIF2AK1; MGC126524; PKR; PRKRv.
文献引用 PubMed :	**Specific References(1)**|SL1493R has been referenced in 1 publications. **[IF=2.66]**Lopu?ná, Katarína, et al. "Murine gammaherpesvirus targets type I IFN receptor but not type III IFN receptor early in infection." Cytokine 83 (2016): 158-170.**WB;Mouse**. PubMed:27152708
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/testIF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	61kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PKR:251-360/551
Lsotype:	IgG
Purification:	affinity purified by Protein A

Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	PKR is an interferon-inducible serine/threonine specific protein kinase. It is widely expressed in eukaryotic organisms and activated by double stranded RNA. Activation of PKR by dsRNAs leads to autophosphorylation at multiple sites. Phosphorylation of Thr446 and Thr451 in the PKR activation loop is required in vivo and in vitro for high level kinase activity. PKR phosphorylates its natural substrate, the alpha subunit of eukaryotic protein synthesis initiation factor 2 (EIF2 alpha), leading to the inhibition of protein synthesis. PKR is also involved in TLR signaling and mediates apoptosis in fibroblasts in response to viral infection and inflammatory cytokines, and also activates IKK and NFKB, thereby suppressing apoptosis. Recently, it has been reported that PKR also phosphorylates human p53 on serine 392. PKR might play a role in ER stress-induced apoptosis and in Alzheimer's disease. Alzheimer cases show prominent PKR activation in association with neuritic plaques and pyramidal neurons in the hippocampus and neocortex. **Function:** Following activation by double-stranded RNA in the presence of ATP, the kinase becomes autophosphorylated and can catalyze the phosphorylation of the translation initiation factor EIF2S1, which leads to an inhibition of the initiation of protein synthesis. Double-stranded RNA is generated during the course of a viral infection. **Subunit:** Homodimer. Interacts with STRBP. Interacts with DNAJC3. Inhibited by direct interaction with viral proteins such as HCV E2, HCV NS5A and influenza A NS1. Activated by the interaction with HIV-1 Tat. Forms a complex with FANCA, FANCC, FANCG and HSP70. **Post-translational modifications:** Autophosphorylated on several Ser and Thr residues. Autophosphorylation of Thr-451 is dependent on Thr-446 and is stimulated by dsRNA binding and dimerization. Autophosphorylation apparently leads to the activation of the kinase. **Similarity:** Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily. Contains 2 DRBM (double-stranded RNA-binding) domains. Contains 1 protein kinase domain. **SWISS:** P19525

	Gene ID: 5610 **Database links:** Entrez Gene: 5610Human Omim: 176871Human SwissProt: P19525Human SwissProt: Q52M43Human Unigene: 131431Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 蛋白激酶R/双链RNA依赖蛋白激酶(PKR)是一种Interferon诱导的、双链RNA激活的丝氨酸/苏氨酸激酶, PKR在Signal transduction、细胞生长、分化和凋亡的控制中起重要作用.也有人认为:PKR是一个重要的凋亡效应物,是许多不同刺激物诱导凋亡的一个转导物。
Picture:	

Sample:

Hela(Human) Cell Lysate at 30 ug

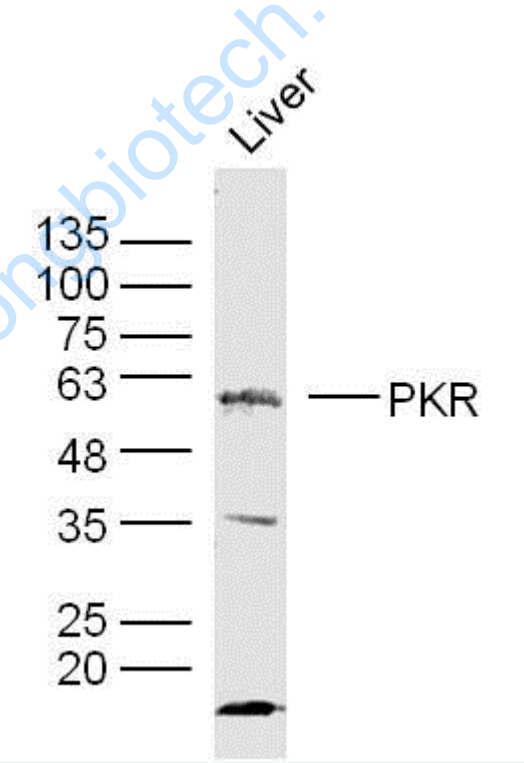
293T(Human) Cell Lysate at 30 ug

Primary: Anti-PKR (SL1493R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

Observed band size: 61 kD



Sample:

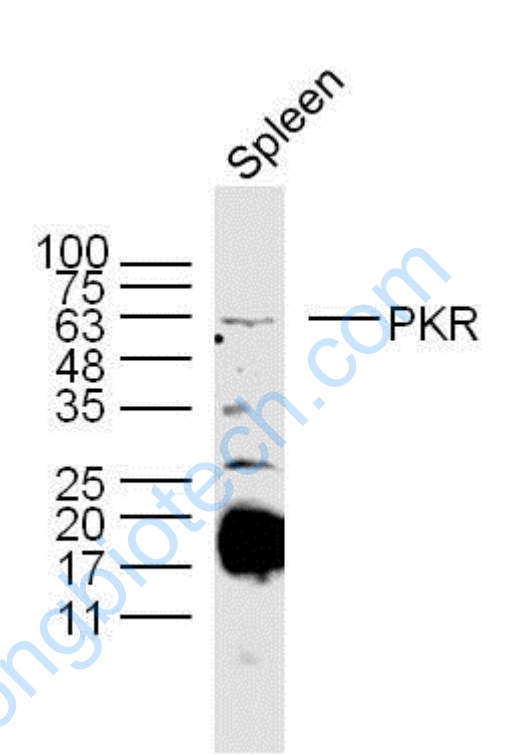
Liver (Mouse) Lysate at 40 ug

Primary: Anti- PKR (SL1493R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

Observed band size: 61 kD



Sample:

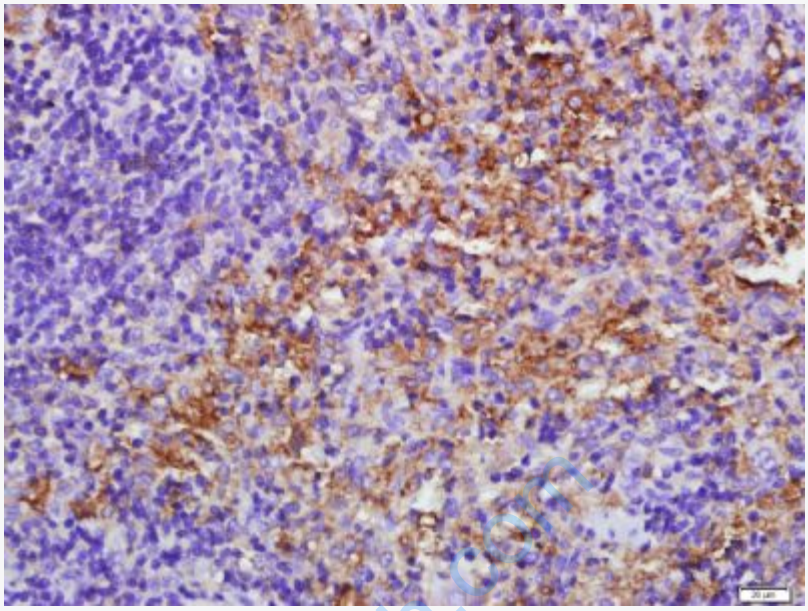
Spleen (Mouse) Lysate at 40 ug

Primary: Anti- PKR (SL1493R)at 1/300 dilution

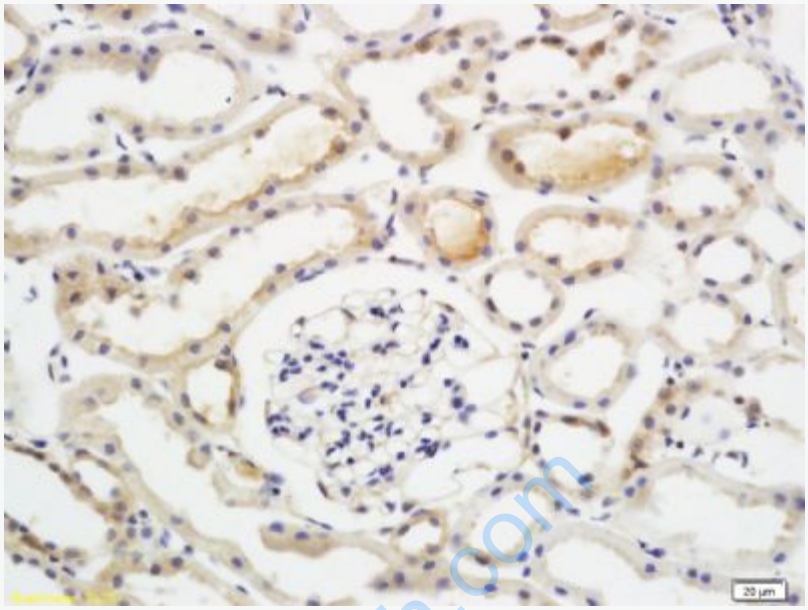
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

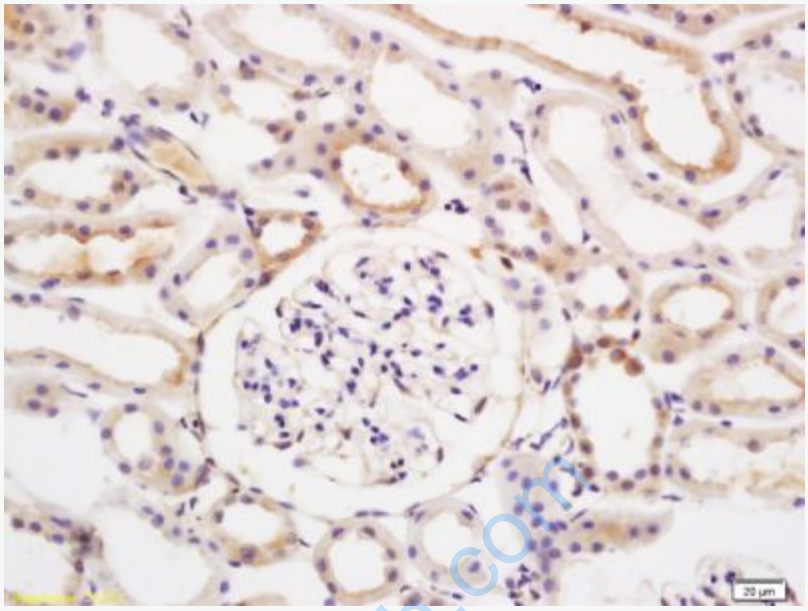
Observed band size: 61 kD



Paraformaldehyde-fixed, paraffin embedded (rat spleen tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PKR) Polyclonal Antibody, Unconjugated (SL1493R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

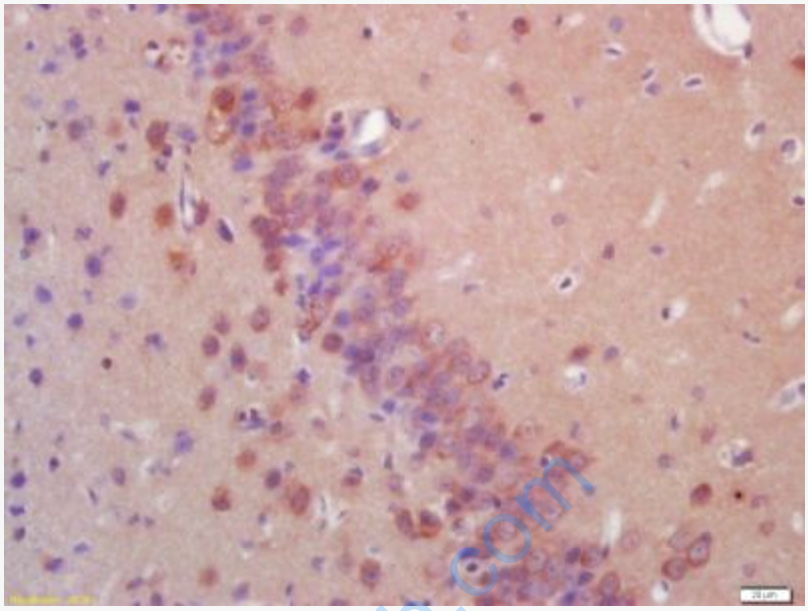


Paraformaldehyde-fixed, paraffin embedded (rat kidney tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EIF2AK2) Polyclonal Antibody, Unconjugated (SL1493R) at 1:200 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

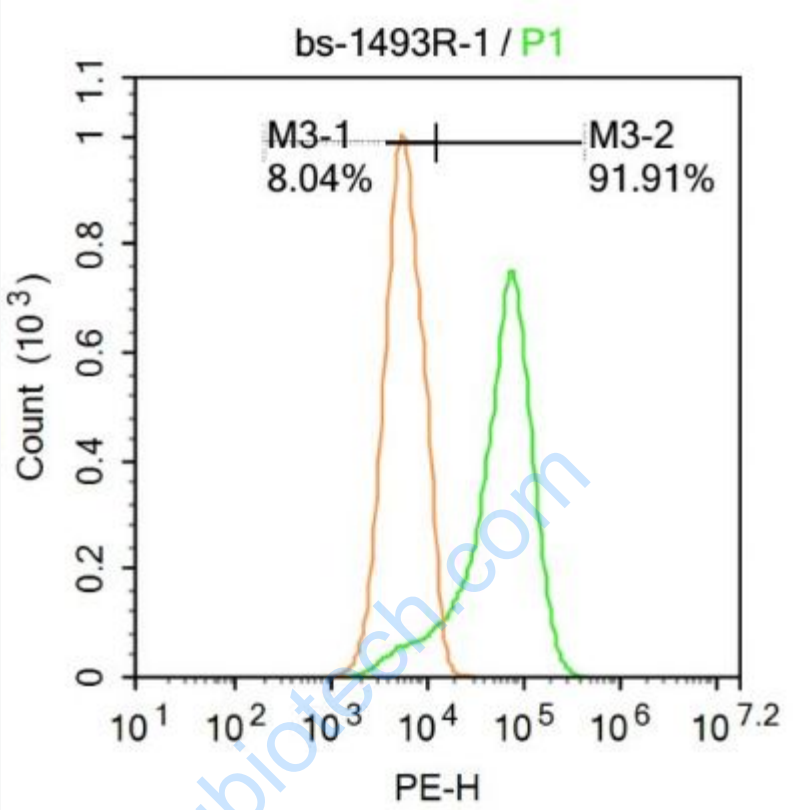
Incubation: Anti-EIF2AK2/PKR Polyclonal Antibody, Unconjugated(SL1493R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-EIF2AK2/PKR Polyclonal Antibody, Unconjugated(SL1493R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Raji.

Primary Antibody (green line): Rabbit Anti-PKR antibody (SL1493R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1μg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room

	temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.