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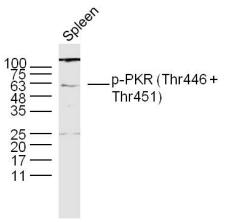
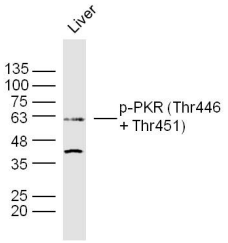
Phospho-PKR (Thr446 + Thr451) Rabbit pAb

Catalog Number:	bs-3337R
Target Protein:	Phospho-PKR (Thr446 + Thr451)
Concentration:	1mg/ml
Form:	Liquid
Host:	Rabbit
Clonality:	Polyclonal
Isotype:	IgG
Applications:	WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (2ug/Test), ICC/IF (1:100)
Reactivity:	Human, Mouse, Rat
Predicted MW:	62 kDa
Entrez Gene:	5610
Swiss Prot:	P19525
Source:	KLH conjugated synthesised phosphopeptide derived from human PKR around the phosphorylation site of Thr446/451: KR(p-T)RSKG(p-T)LR.
Purification:	affinity purified by Protein A
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Background:	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.

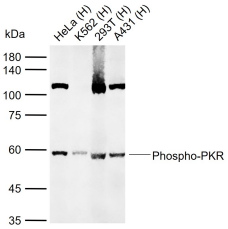
VALIDATION IMAGES



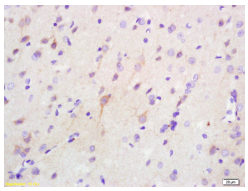
Sample: Spleen (Mouse) Lysate at 40 ug Primary: Anti- p-PKR (Thr446 + Thr451) (bs-3337R)at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 62 kD Observed band size: 62 kD



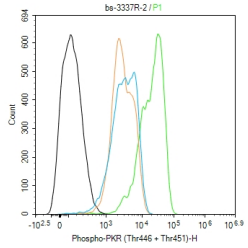
Sample: Liver (Mouse) Lysate at 40 ug Primary: Anti- p-PKR (Thr446 + Thr451) (bs-3337R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 62 kD Observed band size: 62 kD



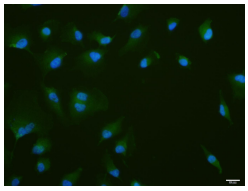
Sample: Lane 1: Human HeLa cell lysates Lane 2: Human K562 cell lysates Lane 3: Human 293T cell lysates Lane 4: Human A431 cell lysates Primary: Anti-Phospho-PKR (Thr446 + Thr451) (bs-3337R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 62 kDa Observed band size: 60 kDa



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°C for 20 min; Incubation: Anti-Phospho-PKR(Thr446+Thr451) Polyclonal Antibody, Unconjugated(bs-3337R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control（black line）:U251. Primary Antibody (green line): Rabbit Anti-Phospho-PKR (Thr446 + Thr451) antibody (bs-3337R) Dilution:2ug/Test; Secondary Antibody（white blue line）: Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control（orange line）: Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min 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.



U251 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Phospho-PKR (Thr446 + Thr451)) polyclonal Antibody, Unconjugated (bs-3337R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

PRODUCT SPECIFIC PUBLICATIONS

[IF=16.6] Xue Yonger. et al. LNP-RNA-engineered adipose stem cells for accelerated diabetic wound healing. NAT COMMUN. 2024 Jan;15(1):1-13 FCM ; Mouse . 38272900