

bs-2469R

[Primary Antibody]

PERK Rabbit pAb

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DATASHEET

Host: Rabbit

Isotype: IgG

Clonality: Polyclonal

GeneID: 9451

SWISS: Q9NZJ5

Target: PERK

Immunogen: KLH conjugated synthetic peptide derived from human PERK: 1001-1116/1116.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

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: The protein encoded by this gene phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2 (EIF2), leading to its inactivation, and thus to a rapid reduction of translational initiation and repression of global protein synthesis. It is a type I membrane protein located in the endoplasmic reticulum (ER), where it is induced by ER stress caused by malformed proteins. Mutations in this gene are associated with Wolcott-Rallison syndrome. [provided by RefSeq, Jan 2010].

Applications: WB (1:500-2000)

IHC-P (1:100-500)

IHC-F (1:100-500)

IF (1:100-500)

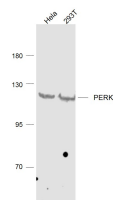
Flow-Cyt (2µg/Test)

Reactivity: Human, Mouse, Rat

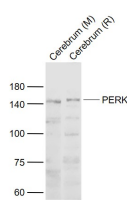
Predicted MW.: 122 kDa

Subcellular Location: Endoplasmic reticulum, Membrane

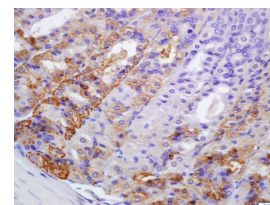
VALIDATION IMAGES



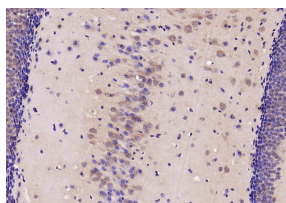
Sample: HeLa(Human) Cell Lysate at 30 ug
293T(Human) Cell Lysate at 30 ug Primary: Anti-PERK (bs-2469R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 122 kD Observed band size: 122 kD



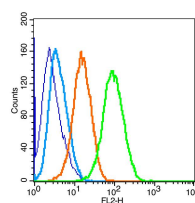
Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug
Lane 2: Cerebrum (Rat) Lysate at 40 ug Primary: Anti-PERK (bs-2469R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 150 kD Observed band size: 145 kD



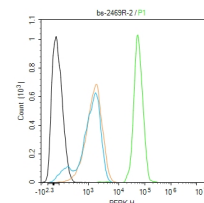
Tissue/cell: mouse stomach tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-PERK Polyclonal Antibody, Unconjugated(bs-2469R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (mouse brain); 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



Blank control: U-87MG(blue). Primary Antibody: Rabbit Anti-PERK antibody(bs-2469R), Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange), used under the same conditions; Secondary Antibody: Goat anti-rabbit IgG-



Blank control (black line) :K562. Primary Antibody (green line): Rabbit Anti-PERK antibody (bs-2469R) 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

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incubation with (PERK) Polyclonal Antibody, Unconjugated (bs-2469R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice. Primary antibody (bs-2469R, 1μg /1x10⁶ cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

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.

— SELECTED CITATIONS —

- **[IF=25.269]** Changzheng Li. et al. Amino acid catabolism regulates hematopoietic stem cell proteostasis via a GCN2-eIF2α axis. CELL STEM CELL. 2022 Jul;29:1119 WB ;Mouse. 35803229
- **[IF=18.962]** Xue Li. et al. Dual regulation on oxidative stress and endoplasmic reticulum stress by [70] fullerenes for reversing insulin resistance in diabetes. NANO TODAY. 2022 Aug;45:101541 WB ;Mouse. 10.1016/j.nantod.2022.101541
- **[IF=12.8]** Xinli Wang. et al. Sustained therapeutic effects of self-assembled hyaluronic acid nanoparticles loaded with α-Ketoglutarate in various osteoarthritis stages. BIOMATERIALS. 2024 Sep;:122845 WB ;Mouse. 39326362
- **[IF=10.8]** Jin Zhichun. et al. Macrophage ATF6 accelerates corticotomy-assisted orthodontic tooth movement through promoting Tnfα transcription. INT J ORAL SCI. 2025 Apr;17(1):1-15 WB ;Mouse. 40164575
- **[IF=8.701]** Dandan Wu. et al. Unfolded Protein Response Factor ATF6 Augments T Helper Cell Responses and Promotes Mixed Granulocytic Airway Inflammation. MUCOSAL IMMUNOL. 2023 May;: WB ;Mouse. 37209959