bs-3330R **[Primary Antibody]**

Phospho-PERK (Thr980) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 13666 **SWISS:** Q9Z2B5

Target: Phospho-PERK (Thr980)

Immunogen: KLH conjugated synthesised phosphopeptide derived from mouse PERK around the phosphorylation site of Thr980: H(p-T)GQ.

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 malfolded proteins. Mutations in this gene are associated with Wolcott-Rallison syndrome. [provided by RefSeq, Jan 2010].

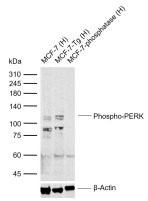
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (2ug/Test)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Cow, Dog)

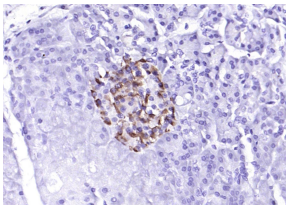
Predicted MW.: 119 kDa

Subcellular Location: Endoplasmic reticulum ,Membrane

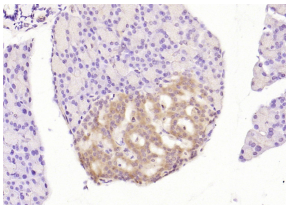
VALIDATION IMAGES



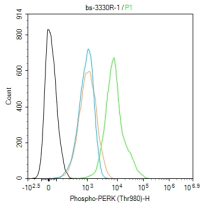
Sample: Lane 1: Human MCF-7 cell lysates Lane 2: Human MCF-7-Tg (1 μM thapsigargin, 20 min) cell lysates Lane 3: Human MCF-7-phosphatase cell lysates Primary: Anti-Phospho-PERK (Thr980) (bs-3330R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 119 kDa Observed band size: 120 kDa



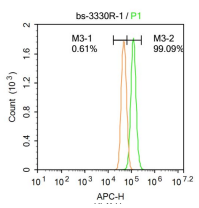
Paraformaldehyde-fixed, paraffin embedded (human pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-PERK (Thr980)) Polyclonal Antibody, Unconjugated (bs-3330R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat pancreas); 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 (Phospho-PERK (Thr980)) Polyclonal Antibody, Unconjugated (bs-3330R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Blank control（black line）:HepG2. Primary Antibody (green line): Rabbit Anti-Phospho-PERK (Thr980) antibody (bs-3330R) Dilution:1ug/Test; Secondary Antibody（white blue line）: Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control（orange line）:



Blank control (Black line): A431 (Black). Primary Antibody (green line): Rabbit Anti-PERK(Thr980) antibody (bs-3330R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647 Dilution: 1μg /test.

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.

Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% 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 -20°C .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=41.845]** Ashley R. Helseth. et al. Cholinergic neurons constitutively engage the ISR for dopamine modulation and skill learning in mice. Science. 2021 Apr;372(6540): IHC ;Mouse. 33888613
- **[IF=25.606]** Raines, Lydia N.. et al. PERK is a critical metabolic hub for immunosuppressive function in macrophages. Nat Immunol. 2022 Feb;23(3):431-445 FCM,WB ;Mouse. 10.1038/s41590-022-01145-x
- **[IF=14.7]** Anna Flury. et al. A neurodegenerative cellular stress response linked to dark microglia and toxic lipid secretion. NEURON. 2024 Dec 23 IF ;Mouse. 39719704
- **[IF=15]** Kai Chen. et al. Selective removal of astrocytic PERK protects against glymphatic impairment and decreases toxic aggregation of β-amyloid and tau. NEURON. 2025 五月 21 IF,WB ;Mouse,Human. 40403715
- **[IF=14.7]** Anna Flury. et al.A neurodegenerative cellular stress response linked to dark microglia and toxic lipid secretion.neuron.2025 Feb 19;113(4):554-571.e14. IF ;. 39719704