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# Rabbit Anti-Phospho-PERK (Thr980) antibody

SL23340R

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| **Product Name:** | Phospho-PERK (Thr980) |
| **Chinese Name:** | 磷酸化蛋白激酶样内质网激酶抗体 |
| **Alias:** | p-PERK(Thr980); PERK(Phospho Thr980); PERK(Phospho T980); Phospho-PERK(Thr982)(human); HRI; HsPEK; Pancreatic eIF2-alpha kinase; PEK; PRKR like endoplasmic reticulum kinase; WRS; DKFZp781H1925; EC 2.7.11.1; EIF2AK3; Eukaryotic translation initiation factor 2 alpha kinase 3; Heme regulated EIF2 alpha kinase. |
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| **Organism Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **React Species:** | Human,Mouse,Rat,Rabbit, |
| **Applications:** | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Molecular weight:** | 119kDa |
| **Cellular localization:** | cytoplasmicThe cell membrane |
| **Form:** | Lyophilized or Liquid |
| **Concentration:** | 1mg/ml |
| **immunogen:** | KLH conjugated synthesised phosphopeptide derived from human PERK around the phosphorylation site of Thr980:H(p-T)GQ |
| **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:** | 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].

**Function:**
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. Serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of cyclin D1.

**Subunit:**
Forms dimers with HSPA5/BIP in resting cells. Oligomerizes in ER-stressed cells. Interacts with DNAJC3.

**Subcellular Location:**
Endoplasmic reticulum membrane; Single-pass type I membrane protein.

**Tissue Specificity:**
Ubiquitous.

**Post-translational modifications:**
Autophosphorylated.
N-glycosylated.

**Similarity:**
Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily.
Contains 1 protein kinase domain.

**SWISS:**
Q9Z2B5

**Gene ID:**
13666

**Database links:**

Entrez Gene: 9451Human

Entrez Gene: 13666Mouse

Entrez Gene: 29702Rat

Omim: 604032Human

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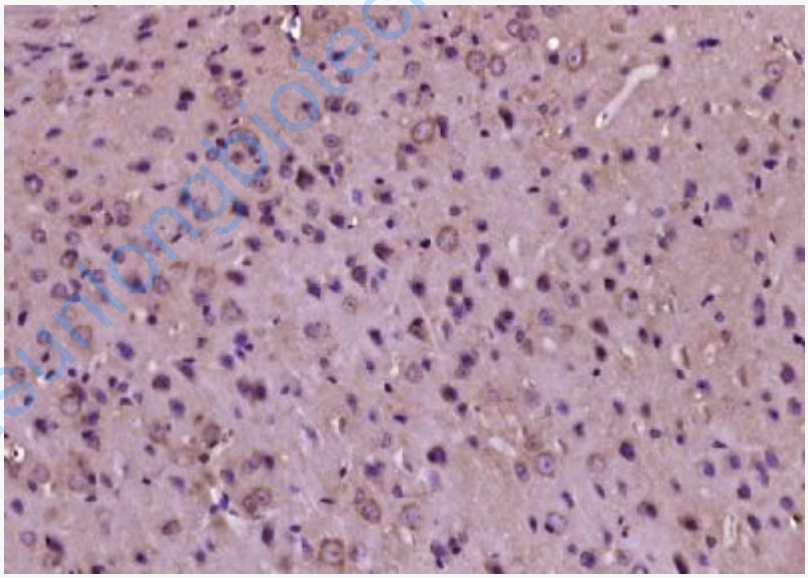
| | SwissProt: Q9NZJ5Human<br>SwissProt: Q9Z2B5Mouse<br>SwissProt: Q9Z1Z1Rat<br>Unigene: 591589Human<br>Unigene: 247167Mouse<br>Unigene: 24897Rat<br><br>**Important Note:**<br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Picture:** |  <br>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 incubation with (Phospho-PERK(Thr980)) Polyclonal Antibody, Unconjugated (SL23340R) at 1:400 overnight at 4°C, followed by |

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| | operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining. |