# perk (Phospho-Ser1094) Antibody

Catalog No: #12888

Package Size: #12888-1 50ul #12888-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

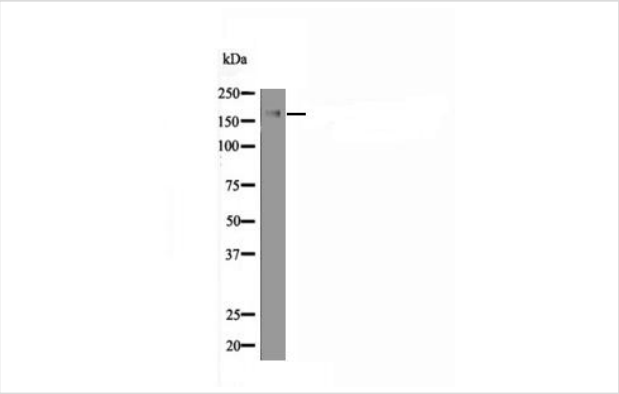
## Description

| | |
|---|---|
| Product Name | perk (Phospho-Ser1094) Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Applications | WB |
| Species Reactivity | Human;Mouse;Rat |
| Specificity | Phospho-perk (S1094) Antibody detects endogenous levels of perk only when phosphorylated at S1094 |
| Immunogen Type | Peptide-KLH |
| Immunogen Description | A synthesized peptide derived from human perk (Phospho-Ser1094) |
| Conjugates | Unconjugated |
| Target Name | EIF2AK3 |
| Other Names | DKFZp781H1925 antibody<br>E2AK3_HUMAN antibody<br>EC 2.7.11.1 antibody<br>Eif2ak3 antibody<br>Eukaryotic translation initiation factor 2 alpha kinase 3 antibody<br>Eukaryotic translation initiation factor 2-alpha kinase 3 antibody<br>Heme regulated EIF2 alpha kinase antibody<br>HRI antibody<br>HsPEK antibody<br>Pancreatic eIF2 alpha kinase antibody<br>Pancreatic eIF2-alpha kinase antibody<br>PEK antibody<br>PRKR like endoplasmic reticulum kinase antibody<br>PRKR-like endoplasmic reticulum kinase antibody<br>WRS antibody |
| Accession No. | Swiss-Prot#:Q9NZJ5? NCBI Gene ID9451 |
| Calculated MW | 170 |
| Concentration | 1.0mg mL |
| Formulation | Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+) pH 7.4 150mM NaCl 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C |

## Application Details

WB dilution:1:1000

## Images




Western blot analysis perk (Phospho-Ser1094) using Jurkat whole cell lysates

## Product Description

PERK (protein kinase-like endoplasmic reticulum kinase) is an eIF2α kinase and transmembrane protein resident in the endoplasmic reticulum (ER) membrane that couples ER stress signals to translation inhibition (1-3). ER stress increases the activity of PERK, which then phosphorylates eIF2α to promote reduced translation. PERK-deficient mice have defects in pancreatic β cells several weeks after birth, suggesting a role for PERK-mediated translational control in protecting secretory cells from ER stress (4). PERK activation during ER stress correlates with autophosphorylation of its cytoplasmic kinase domain (1-3). Phosphorylation of PERK at Thr980 serves as a marker for its activation status.

## Published Papers

Ran Hao;Xiaolei Gao;Qi Lu;Tong Zhao;Xinxin Lu;Fuping Zhang;Yanjiao Pei;Jiqing Lang;Huanhuan Liu;Jinggui Song;Zhaohui Zhang el at., CUMS induces depressive-like behaviors and cognition impairment by activating the ERS-NLRP3 signaling pathway in mice., , (2025)

PMID:39378914

Note: This product is for in vitro research use only and is not intended for use in humans or animals.