

## PHOSPHO-PERK (THR982) RABBIT PAB

**Cat.#:** N225398

**Product Name:** Anti-Phospho-PERK (Thr982) Rabbit pAb

**Synonyms:** EIF2AK3; PEK; PERK; Eukaryotic translation initiation factor 2-alpha kinase 3; PRKR-like endoplasmic reticulum kinase; Pancreatic eIF2-alpha kinase; HsPEK

**UNIPROT ID:** Q9NZJ5

**Background:** Metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (eIF-2-alpha/EIF2S1) on 'Ser-52' during the unfolded protein response (UPR) and in response to low amino acid availability. Converts phosphorylated eIF-2-alpha/EIF2S1 either in a global protein synthesis inhibitor, leading to a reduced overall utilization of amino acids, or to a translation initiation activator of specific mRNAs, such as the transcriptional activator ATF4, and hence allowing ATF4-mediated reprogramming of amino acid biosynthetic gene expression to alleviate nutrient depletion. Serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of cyclin-D1 (CCND1). Involved in control of mitochondrial morphology and function.

**Immunogen:** The antiserum was produced against synthesized peptide derived from human PEK/PERK around the phosphorylation site of Thr982. AA range:947-996

**Applications:** ICC/IF, WB, IHC-F, IHC-P, ELISA

**Recommended Dilutions:** WB: 1/500-1/1000 IHC: 1/50-1/100 IF: 1/50-1/200 ELISA: 1/10000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Clone ID:** -

**MW:** Calculated MW: 125 kDa; Observed MW: 130 kDa

**Isotype:** IgG

**Purification:** Affinity Purified

**Species Reactivity:** Human, Mouse, Rat

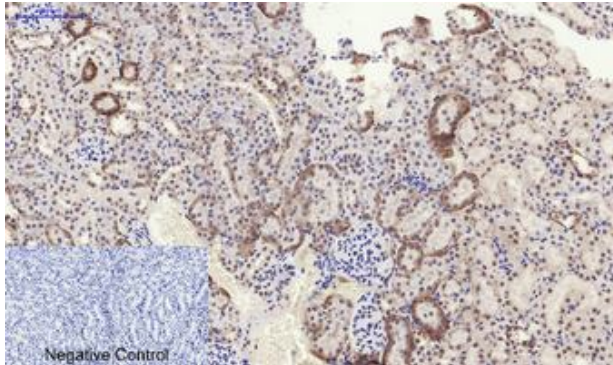
**Conjugation:** Unconjugated

**Modification:** Phosphorylated

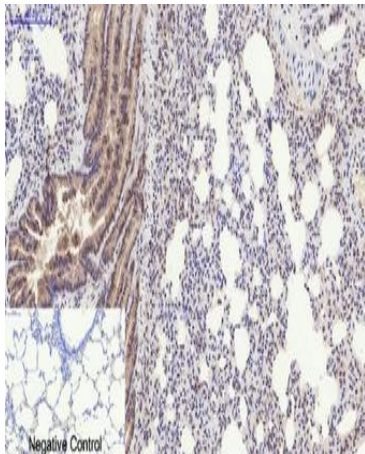
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.3 containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

**Research Areas:** Epigenetics and Nuclear Signaling

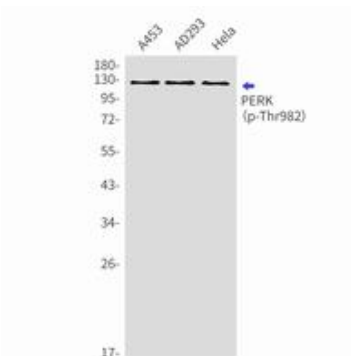
**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin-embedded mouse kidney tissue using Phospho-PERK (Thr982) antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Immunohistochemistry analysis of paraffin-embedded rat lung tissue using Phospho-PERK (Thr982) antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Western blot analysis of Phospho-PERK (Thr982) in A453, AD293, HeLa lysates using Phospho-PERK (Thr982) antibody.