

PERK RABBIT PAB

Cat.#: N225379

Product Name: Anti-PERK 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 EIF2AK3. 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: 125 kDa

Isotype: IgG

Purification: Affinity Purified

Species Reactivity: Human,Mouse,Rat

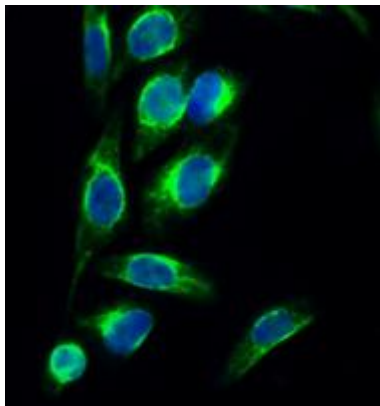
Conjugation: Unconjugated

Modification: Unmodified

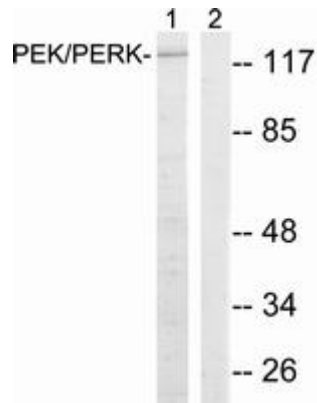
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.3 containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

Research Areas: Epigenetics and Nuclear Signaling

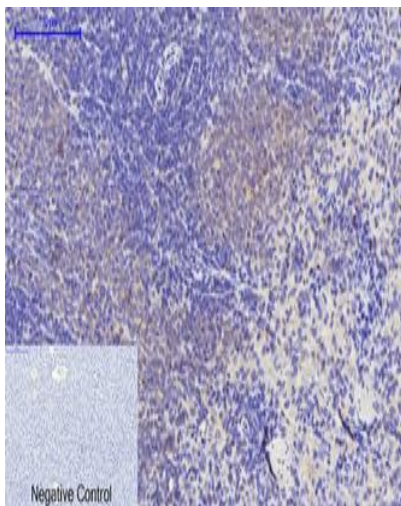
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunofluorescence analysis of PERK in HeLa using PERK antibody (green)



Western blot analysis of PERK in MCF-7 lysates using PERK antibody. The lane on the right is blocked with the synthesized peptide.



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