Product Name: PERK Rabbit Polyclonal Antibody
Catalog #: APRab00457
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% sodium azide, pH 7.3.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:1000,IHC 1:50-1:100,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	Calculated MW: 125 kDa; Observed MW: 125 kDa

Antigen Information

Gene Name	EIF2AK3
Alternative Names	EIF2AK3; PEK; PERK; Eukaryotic translation initiation factor 2-alpha kinase 3; PRKR-like endoplasmic reticulum kinase; Pancreatic eIF2-alpha kinase; HsPEK
Gene ID	9451
SwissProt ID	Q9NZJ5
Immunogen	Recombinant protein of human PERK

Background

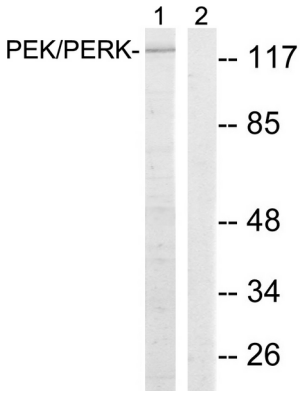
Metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (eIF-

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.

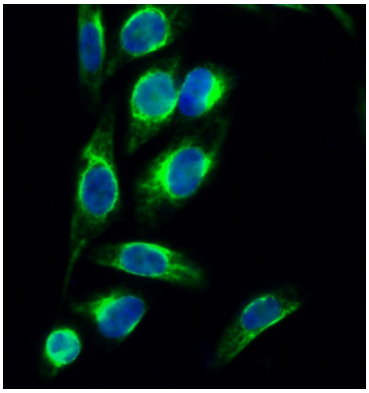
Research Area

Epigenetics and Nuclear Signaling

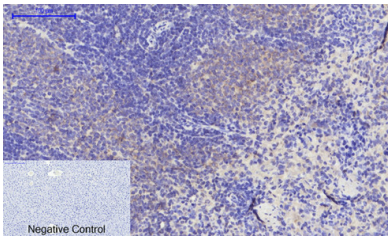
Image Data



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



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



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.