Product Name: PERK Rabbit Monoclonal Antibody
Catalog #: AMRe02423

Summary

Production Name	PERK Rabbit Monoclonal Antibody
Description	Recombinant Rabbit Monoclonal antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal Antibody
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Purification	Affinity Purified

Immunogen

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

Application

Dilution Ratio	WB: 1/500-1/1000
Molecular Weight	Calculated MW: 125 kDa; Observed MW: 140 kDa

Product Name: PERK Rabbit Monoclonal Antibody
Catalog #: AMRe02423

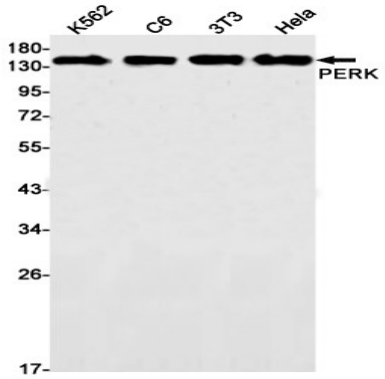
Background

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 K562, C6, 3T3, Hela lysates using PERK antibody.

Note

For research use only.