

Datasheet for ABIN740715
anti-PERK antibody (AA 1001-1116)

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Overview

Quantity:	100 µL
Target:	PERK (EIF2AK3)
Binding Specificity:	AA 1001-1116
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PERK antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human PER
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	PERK (EIF2AK3)
Alternative Name:	PERK (EIF2AK3 Products)

Target Details

Background:	Synonyms: PEK, WRS, PERK, Eukaryotic translation initiation factor 2-alpha kinase 3, PRKR-like endoplasmic reticulum kinase, Pancreatic eIF2-alpha kinase, HsPEK, EIF2AK3 Background: Phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2 (EIF2), leading to its inactivation and thus to a rapid reduction of translational initiation and repression of global protein synthesis. 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 (By similarity).
Gene ID:	9451
UniProt:	Q9NZJ5
Pathways:	Hormone Transport , ER-Nucleus Signaling , Positive Regulation of Endopeptidase Activity , Hepatitis C , Unfolded Protein Response

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 FCM 1:20-100 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C

Handling

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

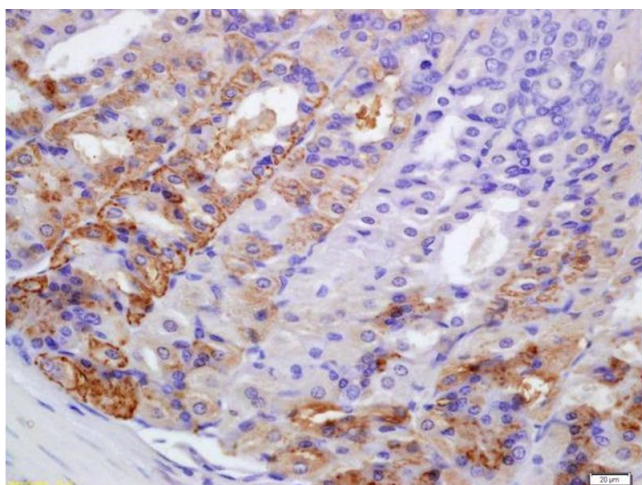
Expiry Date: 12 months

Publications

Product cited in: Yu, Zhang, Zhao, Guo, Li, Li, Zhang, Sun: "Gypenoside Protects against Myocardial Ischemia-Reperfusion Injury by Inhibiting Cardiomyocytes Apoptosis via Inhibition of CHOP Pathway and Activation of PI3K/Akt Pathway In Vivo and In Vitro." in: **Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology**, Vol. 39, Issue 1, pp. 123-36, (2016) ([PubMed](#)).

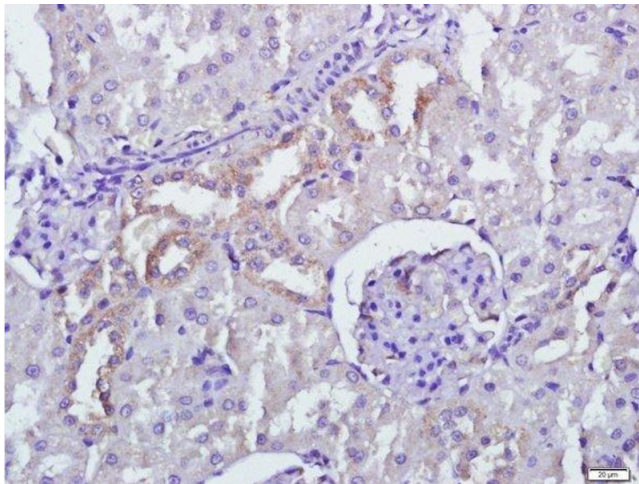
He, Long, Zhong, Fu, Li, Lin: "Sustained endoplasmic reticulum stress inhibits hepatocyte proliferation via downregulation of c-Met expression." in: **Molecular and cellular biochemistry**, Vol. 389, Issue 1-2, pp. 151-8, (2014) ([PubMed](#)).

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded mouse stomach labeled with Anti-PERK Polyclonal Antibody, Unconjugated (ABIN740715) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Paraformaldehyde-fixed, paraffin embedded rat kidney tissue, Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with Rabbit Anti-PERK Polyclonal Antibody, Unconjugated at 1:500 overnight at 4°C, followed by a conjugated secondary and DAB staining

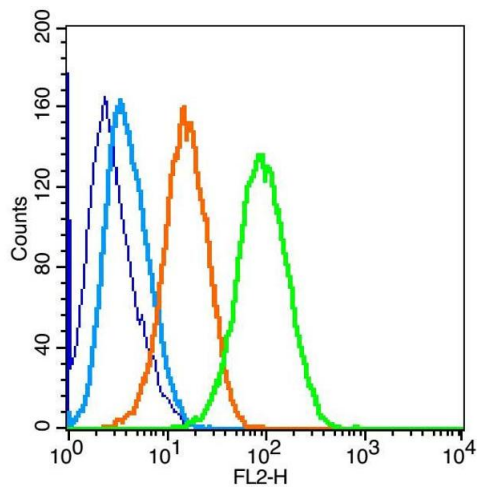


Image 3. U-87MG cells were fixed with 4% PFA for 10min at room temperature, permeabilized with 20% PBST for 20 min at room temperature, and incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with PERK Polyclonal Antibody at 1: 50 dilution in blocking buffer and incubated for 30 min at -20°C, washed twice with 2%BSA in PBS, followed by secondary antibody incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed.