

Datasheet for ABIN6264143
anti-PERK antibody (C-Term)

4 Images

3 Publications

[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	PERK (EIF2AK3)
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PERK antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human PERK, corresponding to a region within C-terminal amino acids.
Isotype:	IgG
Specificity:	PERK Antibody detects endogenous levels of total PERK.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Rabbit,Dog,Chicken,Xenopus
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	PERK (EIF2AK3)
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Target Details

Alternative Name:	EIF2AK3 (EIF2AK3 Products)
Background:	<p>Description: 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.</p> <p>Gene: EIF2AK3</p>
Molecular Weight:	125 kDa
Gene ID:	9451
UniProt:	Q9NZJ5
Pathways:	Hormone Transport , ER-Nucleus Signaling , Positive Regulation of Endopeptidase Activity , Hepatitis C

Application Details

Application Notes:	WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.

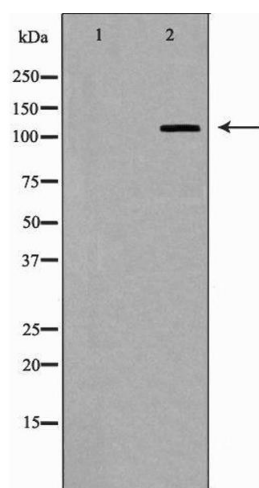
Handling

Expiry Date: 12 months

Publications

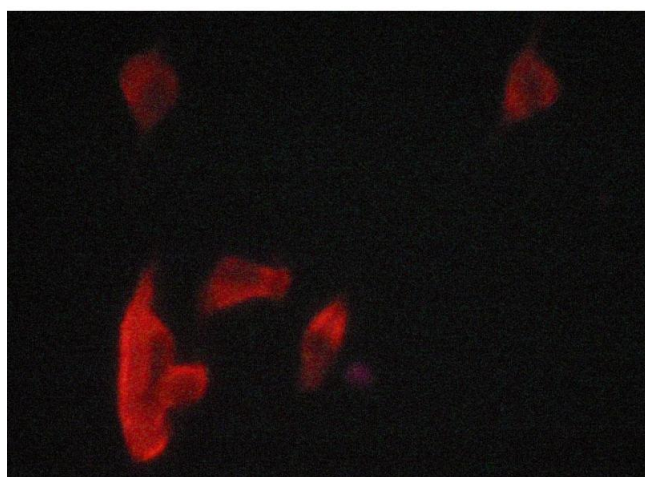
Product cited in: Wang, Zhang, Meng, Wang, Li, Liu, Liu: "Ozone protects the rat lung from ischemia-reperfusion injury by attenuating NLRP3-mediated inflammation, enhancing Nrf2 antioxidant activity and inhibiting apoptosis." in: **European journal of pharmacology**, Vol. 835, pp. 82-93, (2018) ([PubMed](#)).

Images



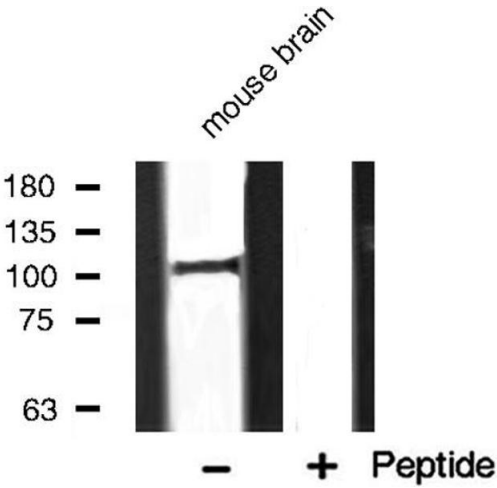
Western Blotting

Image 1. Western blot analysis of PERK expression in HeLa cells. The lane on the left is treated with the antigen-specific peptide.



Immunofluorescence (fixed cells)

Image 2. ABIN6268851 staining HeLa cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37°C. The primary antibody was diluted 1/400 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor® 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary antibody.



Western Blotting

Image 3. Western blot analysis of PERK expression in mouse brain

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6264143.