

Datasheet for ABIN7152141
anti-PERK antibody (AA 115-330)[Go to Product page](#)

3 Images

Overview

Quantity:	100 µL
Target:	PERK (EIF2AK3)
Binding Specificity:	AA 115-330
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PERK antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Eukaryotic translation initiation factor 2-alpha kinase 3 protein (115-330AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PERK (EIF2AK3)
Alternative Name:	EIF2AK3 (EIF2AK3 Products)
Background:	Background: Metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of

Target Details

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.

Aliases: DKFZp781H1925 antibody, E2AK3_HUMAN antibody, EC 2.7.11.1 antibody, Eif2ak3 antibody, Eukaryotic translation initiation factor 2 alpha kinase 3 antibody, Eukaryotic translation initiation factor 2-alpha kinase 3 antibody, Heme regulated EIF2 alpha kinase antibody, HRI antibody, HsPEK antibody, Pancreatic eIF2 alpha kinase antibody, Pancreatic eIF2-alpha kinase antibody, PEK antibody, PRKR like endoplasmic reticulum kinase antibody, PRKR-like endoplasmic reticulum kinase antibody, WRS antibody

UniProt: [Q9NZJ5](#)

Pathways: [Hormone Transport](#), [ER-Nucleus Signaling](#), [Positive Regulation of Endopeptidase Activity](#), [Hepatitis C](#)

Application Details

Application Notes: Recommended dilution: IHC:1:200-1:500, IF:1:50-1:200,

Restrictions: For Research Use only

Handling

Format: Liquid

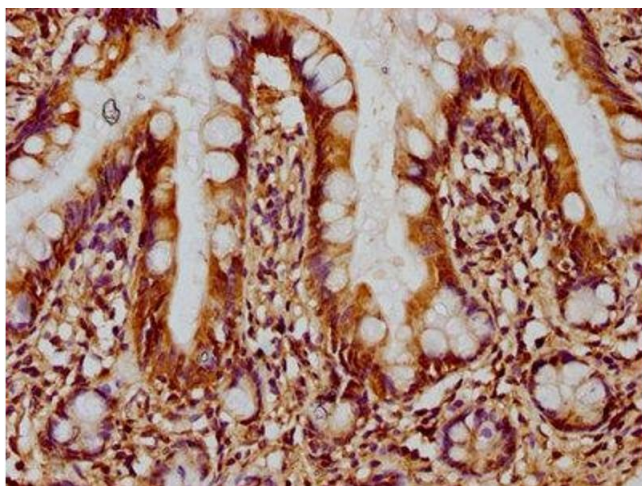
Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

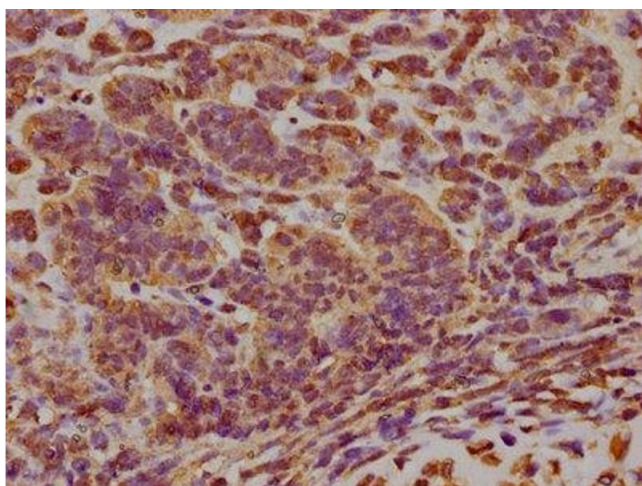
Storage: -20 °C, -80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



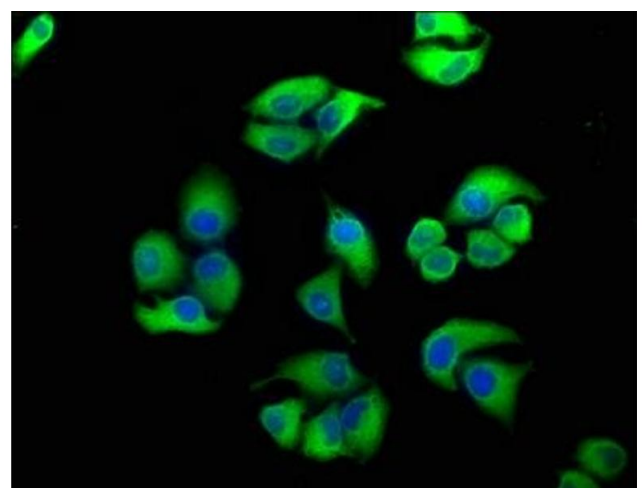
Immunohistochemistry

Image 1. IHC image of ABIN7152141 diluted at 1:300 and staining in paraffin-embedded human small intestine tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunohistochemistry

Image 2. IHC image of ABIN7152141 diluted at 1:300 and staining in paraffin-embedded human ovarian cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence

Image 3. Immunofluorescence staining of HeLa cells with ABIN7152141 at 1:100, counter-stained with DAPI. The cells were fixed in 4 % formaldehyde, permeabilized using 0.2 % Triton X-100 and blocked in 10 % normal Goat Serum. The cells were then incubated with the antibody overnight at 4 °C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).