

Datasheet for ABIN4909079
anti-PERK antibody



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1 Image

Overview

Quantity:	100 µL
Target:	PERK (EIF2AK3)
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PERK antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This EIF2AK3 antibody is generated from a mouse immunized with a recombinant protein conjugated synthetic peptide between 530-850 amino acids from human EIF2AK3.
Clone:	3C3
Isotype:	IgG1
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein G.

Target Details

Target:	PERK (EIF2AK3)
Alternative Name:	EIF2AK3 (EIF2AK3 Products)
Background:	Synonyms: PEK, WRS, PERK, Eukaryotic translation initiation factor 2-alpha kinase 3, PRKR-like

Target Details

endoplasmic reticulum kinase, Pancreatic eIF2-alpha kinase, HsPEK, EIF2AK3

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.

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
IHC-P 1:200-400

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.5 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

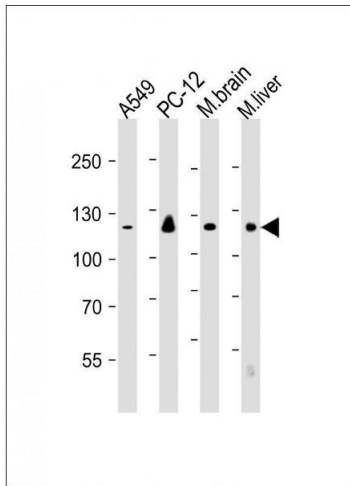
Preservative: ProClin

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

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

Expiry Date: 12 months



Western Blotting

Image 1. Lane 1: A549, Lane 2: PC-12, Lane 3: mouse brain, Lane 4: mouse liver cell lysate at 20 μg per lane, probed with bsm-51385M EIF2AK3 (1385CT582.4.39) Monoclonal Antibody at 1:1000 dilution and 4°C *overnight incubation*, followed by *secondary antibody incubation for 60min at room temperature*.