

Anti-PERK Rabbit Monoclonal Antibody

Introduction

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.

Product parameters

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
Gene Name	EIF2AK3
SwissProt ID	Q9NZJ5
Host	Rabbit
Reactivity	Human, Mouse, Rat
Molecular Weight	Calculated MW: 125 kDa; Observed MW: 140 kDa
Conjugation	Unconjugated
Ex	-
Em	-
Modification	Unmodified
Clonality	IgG
Isotype	Monoclonal Antibody
Clonality No.	AP-18F3D10
Form	Liquid
Concentration	See label
Carrier	Carrier Not Free
Immunogen	Recombinant protein of human PERK
Purification	Affinity Purified
Buffer System	50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA.

Application	WB
Dilution Ratio	WB: 1/500-1/1000
Research Field	Epigenetics and Nuclear Signaling
Product Categories	Primary antibody
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

Protocol

Configure the product according to the application range and recommended dilution ratio.

***Note:** The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).

Note

1. This product is for scientific research use only.





APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

