

Anti-Phospho-PERK (Thr982) Rabbit Polyclonal 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: 130 kDa
Conjugation	Unconjugated
Ex	-
Em	-
Modification	Phosphorylated
Clonality	IgG
Isotype	Polyclonal Antibody
Clonality No.	-
Form	Liquid
Concentration	See label
Carrier	Carrier Not Free
Immunogen	The antiserum was produced against synthesized peptide derived from human PEK/PERK around the phosphorylation site of Thr982.
Purification	Affinity Purified

Buffer System	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Application	WB, IHC-F, IHC-P, ICC/IF, ELISA
Dilution Ratio	WB: 1/500-1/1000 IHC: 1/50-1/100 IF: 1/50-1/200 ELISA: 1/10000
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.



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