

DATASHEET

PERK (Phospho-T982) Rabbit Polyclonal Antibody

CAT. NO. APA10999

KEY FEATURES

Target	PERK (Phospho-T982)	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

BACKGROUND

Metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (EIF2S1/eIF-2-alpha) in response to various stress, such as unfolded protein response (UPR) in response to various stress, such as unfolded protein response (UPR) . Key effector of the integrated stress response (ISR) to unfolded proteins: EIF2AK3/PERK specifically recognizes and binds misfolded proteins, leading to its activation and EIF2S1/eIF-2-alpha phosphorylation .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to PERK (Phospho-T982)
Specificity	Recognizes endogenous levels of PERK protein only when phosphorylated at T982.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding T982 of human PERK protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 125 kD; Observed: 140 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	PEK; PERK; Eukaryotic translation initiation factor 2-alpha kinase 3; PRKR-like endoplasmic reticulum kinase; Pancreatic eIF2-alpha kinase; HsPEK
Gene Symbol	EIF2AK3
Entrez Gene	9451(Human); 13666(Mouse); 29702(Rat)
SwissProt	Q9NZJ5(Human); Q9Z2B5(Mouse); Q9Z1Z1(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

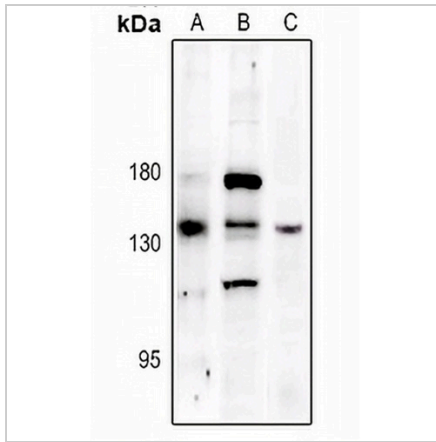
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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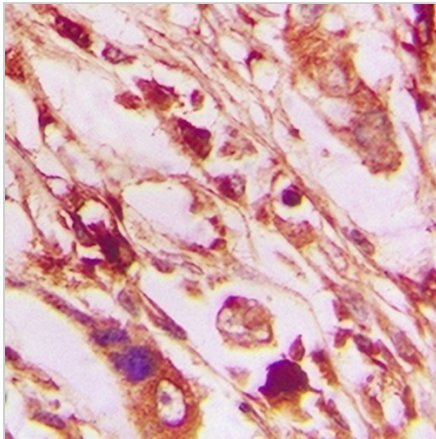
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DATA



Western blot analysis of PERK (Phospho-T982) expression in A375 (A), MCF7 (B), mouse testis (C) whole cell lysates. (Predicted band size: 125 kD; Observed band size: 140 kD)



Immunohistochemical analysis of PERK (Phospho-T982) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.