Datasheet for ABIN360502

anti-PERK antibody (N-Term)

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Overview

Quantity:	0.4 mL
Target:	PERK (EIF2AK3)
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PERK antibody is un-conjugated
Application:	Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA)

Product Details

Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-term region of human PERK.
Isotype:	Ig Fraction
Specificity:	This antibody reacts to PERK.
Purification:	Prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS

Target Details

Target:	PERK (EIF2AK3)
Alternative Name:	EIF2AK3 (EIF2AK3 Products)
Background:	PERK, a member of the GCN2 subfamily of Ser/Thr protein kinases, phosphorylates the alpha

Target Details

	subunit of eukaryotic translation-initiation factor 2 (EIF2), leading to its inactivation and thus to a rapid reduction of translational initiation and repression of global protein synthesis. It likely serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of cyclin D1 Perturbation in protein folding in the endoplasmic reticulum (ER) promotes reversible dissociation from HSPA5/BIP and oligomerization, resulting in transautophosphorylation and kinase activity induction Expression of this Type I membrane protein is ubiquitous, with highest levels seen in secretory tissues. Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS), also known as multiple epiphyseal dysplasia with early-onset diabetes mellitus. WRS is a rare autosomal recessive disorder, characterized by permanent neonatal or early infancy insulin-dependent diabetes and, at a later age, epiphyseal dysplasia, osteoporosis, growth retardation and other multisystem manifestations, such as hepatic and renal dysfunctions, mental retardation and cardiovascular abnormalities.Synonyms: Eukaryotic translation initiation factor 2-alpha kinase 3, HsPEK, PEK, PERK, PRKR-like endoplasmic reticulum kinase, Pancreatic eIF2-alpha kinase
Gene ID:	9451, 9606
UniProt:	Q9NZJ5
Pathways:	Hormone Transport, ER-Nucleus Signaling, Positive Regulation of Endopeptidase Activity, Hepatitis C, Unfolded Protein Response

Application Details

Application Notes:	ELISA: 1/1,000. Immunohistochemistry: 1/50 - 1/100. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.25 mg/mL
Buffer:	PBS with 0.09 % (W/V) sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at-20 °C for longer.

Images

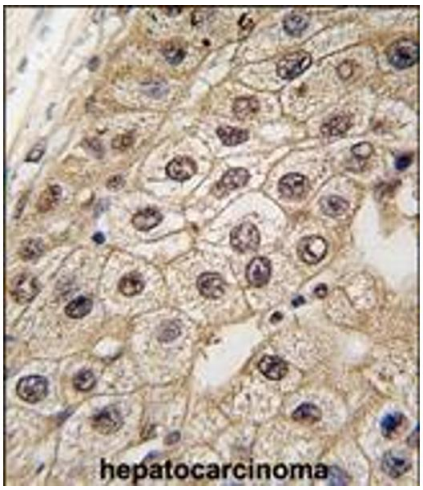

Image 1.