

PERK positive control

PERK Positive Control

CATALOG #
AAA75976

APPLICATIONS
Western Blot

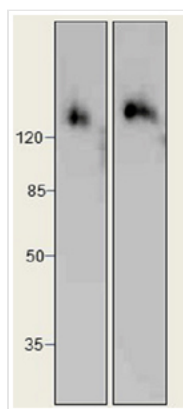
PRODUCT SYNONYMS

PERK; PERK Positive Control; PERK positive control

PRODUCT SPECIFICATIONS

Form/Format	Western Blot Positive Control in ready to use SDS-sample buffer
Sequence Length	1116
Applicable Applications for PERK positive control	WB (Western Blot)
Immunogen	Purified Protein
Alternative Nomenclature	DKFZp781H1925 antibody; E2AK3_HUMAN antibody; EC 2.7.11.1 antibody; Eif2ak3 antibody; Eukaryotic translation initiation factor 2 alpha kinase 3 antibody; Heme regulated EIF2 alpha kinase antibody; HRI antibody; HsPEK antibody; Pancreatic eIF2 alpha kinase antibody; PEK antibody; PRKR like endoplasmic reticulum kinase antibody; WRS antibody
Preparation and Storage	Store at -20°C for long term storage

IMAGES



WB (Western Blot)

Western Blot of Protein kinase R (PERK) antibody with rat adrenal extracts. Lane 1. Chicken serum Lane 2. Total IgYMW of PERK: 134kDa

ADDITIONAL INFORMATION

Related Product Information for PERK positive control	Western Blot Positive Control Eukaryotic translation initiation factor 2-alpha kinase 3 Overview: Protein kinase- Eukaryotic translation initiation factor 2-a kinase 3 (PERK) is a Serine/Threonine protein kinase, type I membrane protein of the endoplasmic reticulum that is abundant in secretory tissues and is inducible by ER-stress. ER stress increases the activity of PERK which phosphorylates the a subunit of eukaryotic translation-initiation factor 2 (EIF2), leading to its inactivation, a reduction of translation initiation and repression of global protein synthesis., which then phosphorylates eIF2a to promote reduced translation (1). PERK serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of Cyclin 01. Research studies have demonstrated that PERK-deficient mice have defects in pancreatic 13 cells several weeks after birth, suggesting a role for PERK-mediated translational control in protecting secretory cells from ER stress. Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS) which 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 PERK selective antibodies were generated against a peptide taken from the human PERK protein. The PERK-selective antibodies are affinity purified on an immobilized antigen based affinity matrix, the isolated antibodies were then stabilized in antibody stabilization buffer for long-term storage.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	134304838
NCBI GeneID	9451
NCBI Accession #	NP_004827
NCBI GenBank Nucleotide #	NM_004836.6
UniProt Accession #	Q9NZJ5; O95846; Q53QY0; Q53SB1; A0AVH1; A0AVH2; B2RCU9
Molecular Weight	134kDa
NCBI Official Full Name	eukaryotic translation initiation factor 2-alpha kinase 3 isoform 1
NCBI Official Synonym Full Names	eukaryotic translation initiation factor 2 alpha kinase 3
NCBI Official Symbol	EIF2AK3
NCBI Official Synonym Symbols	PEK; WRS; PERK
NCBI Protein Information	eukaryotic translation initiation factor 2-alpha kinase 3
UniProt Protein Name	Eukaryotic translation initiation factor 2-alpha kinase 3
UniProt Gene Name	EIF2AK3
UniProt Synonym Gene Names	PEK; PERK; HsPEK
UniProt Entry Name	E2AK3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/positive-control/perk/75976>