

Rabbit PERK Polyclonal Antibody | anti-PERK antibody

Phospho-PERK (Thr982) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31134	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunofluorescence, ELISA

PRODUCT SYNONYMS

PERK; Polyclonal Antibody; Phospho-PERK (Thr982) Antibody; DKFZp781H1925; E2AK3_HUMAN; EC 2.7.11.1; Eif2ak3; Eukaryotic translation initiation factor 2 alpha kinase 3; Eukaryotic translation initiation factor 2-alpha kinase 3; Heme regulated EIF2 alpha kinase; HRI; HsPEK; Pancreatic eIF2 alpha kinase; Pancreatic eIF2-alpha kinase; PEK; PRKR like endoplasmic reticulum kinase; PRKR-like endoplasmic reticulum kinase; WRS; anti-PERK antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	p-PERK (Thr 982) antibody detects endogenous levels of total p-PERK (Thr 982).
Purity/Purification	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns
Form/Format	Supplied in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	~1mg/ml (varies by lot)
Sequence Length	1116
Applicable Applications for anti-PERK antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ELISA (Peptide ELISA)
Application Notes	WB: 1:1000-3000 IHC: 1:50-1:200 IF: 1:100-500 ELISA (peptide): 1:20000-1:40000 The optimal dilutions should be determined by the end user. IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.
Immunogen	A synthesized peptide derived from human p-PERK around the phosphorylation site of Thr982.
Preparation and Storage	Store at -20°C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA31134 staining HepG2 cells(30min of 4uM Forskolin treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab (AAA31134) and mouse anti-beta tubulin Ab for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



WB (Western Blot)

Western blot analysis of extracts from various samples, using Phospho-PERK (Thr982) Ab.Lane 1: 293 cells(heat-shock treatment), blocked with antigen-specific peptidesLane 2: 293 cells(heat-shock treatment)Lane 3: A549 cells(serum starvation treatment).



IHC (Immunohistochemistry)

AAA31134 at 1/100 staining human liver carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

References	Liu Y, Shen HJ, Wang XQ, Liu HQ, Zheng LY, Luo JD; Journal: J Cell Biochem. EndophilinA2 protects against angiotensin II-induced cardiac hypertrophy by inhibiting angiotensin II type 1 receptor trafficking in neonatal rat cardiomyocytes. Cai Y, Zheng Y, Gu J, Wang S, Wang N, Yang B, Zhang F, Wang D, Fu W, Wang Z; Journal: Cell Death Dis. Betulinic acid chemosensitizes breast cancer by triggering ER stress-mediated apoptosis by directly targeting GRP78. Yao Y, Lu Q, Hu Z, Yu Y, Chen Q, Wang QK; Journal: Nat Commun. A non-canonical pathway regulates ER stress signaling and blocks ER stress-induced apoptosis and heart failure.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	134304838
NCBI GeneID	9451
NCBI Accession #	NP_004827.4
NCBI GenBank Nucleotide #	NM_004836.6
UniProt Accession #	Q9NZJ5; O95846; Q53QY0; Q53SB1; A0AVH1; A0AVH2; B2RCU9
Molecular Weight	125 kDa~140 kDa
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

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