

PEK/PERK Antibody

Catalog No: #33247



Package Size: #33247-1 50ul #33247-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	PEK/PERK Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC IF/ICC ELISA
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous levels of total PEK/PERK protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized non-phosphopeptide derived from human PEK/PERK around the phosphorylation site of threonine 981 (R-H-T(p)-G-Q).
Conjugates	Unconjugated
Target Name	PEK/PERK
Other Names	E2AK3; EC 2.7.11.1; EIF2AK3; Eukaryotic translation initiation factor 2-alpha kinase 3 precursor; HsPEK
Accession No.	Swiss-Prot: Q9NZJ5NCBI Gene ID: 9451
SDS-PAGE MW	125kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

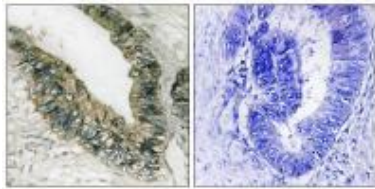
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

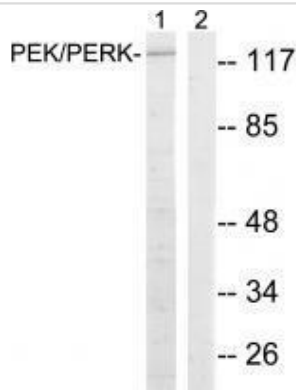
IF/ICC 1:100-1:500

ELISA 1:20000-1:40000

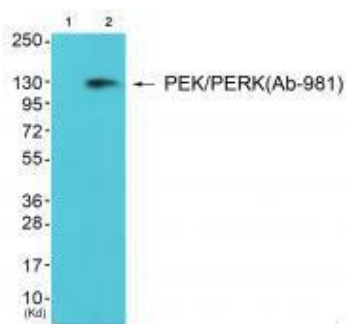
Images



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue using PEK/PERK (Ab-981) antibody #33247.



Western blot analysis of extracts from MCF-7 cells, using PEK/PERK (Ab-981) antibody #33247.



Western blot analysis of extracts from JK cells (Lane 2), using PEK/PERK (Ab-981) antibody #33247. The lane on the left is treated with synthesized peptide.

Background

Phosphorylates the alpha 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. Serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of cyclin-D1 (CCND1) By similarity.

Shi Y., J. Biol. Chem. 274:5723-5730(1999).

Sood R., Biochem. J. 346:281-293(2000).

Delepine M., Nat. Genet. 25:406-409(2000).

Published Papers

el at., Quercetin Stimulates Mitochondrial Apoptosis Dependent on Activation of Endoplasmic Reticulum Stress in Hepatic Stellate Cells .In Pharm Biol. On 2016 Dec by Liwei He , Xianbang Hou et al..PMID:27572285

, , (2016)

[PMID:27572285](#)

el at., 5l ζ itroi ?l ?3l ζ henylpropylamino) benzoic acid induces apoptosis of human lens epithelial cells via reactive oxygen species and endoplasmic reticulum stress through the mitochondrial apoptosis pathway. In Int J Mol Med on 2021 Apr by Lingzhi Niu, Xin Liu,et

al..PMID:33604681, , (2021)

[PMID:33604681](#)

el at., Qing Hua Chang Yin ameliorates chronic colitis in mice by inhibiting PERK β ATF4 β CHOP pathway of ER stress and the NF- κ B signalling pathway. In Pharm Biolon 2024 Dec by Liya Liu, Youqin Chen,et al..PMID:39034914, , (2024)

[PMID:39034914](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.