

## PERK(Phospho Thr981) Polyclonal Antibody

### Description

<b>Product type</b>	Primary Antibody
<b>Code</b>	BT-AP12942
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Size</b>	20ul, 50ul, 100ul
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PEK/PERK around the phosphorylation site of Thr981. AA range:947-996
<b>Mol wt</b>	125147
<b>Species reactivity</b>	Human, Mouse, Rat
<b>Clonality</b>	Polyclonal
<b>Recommended application</b>	IF, ICC, WB, IHC-p, ELISA
<b>Concentration</b>	1 mg/ml
<b>Full name</b>	Eukaryotic translation initiation factor 2-alpha kinase 3
<b>Synonyms</b>	Eukaryotic translation initiation factor 2-alpha kinase 3; EIF2AK3; PEK; PERK; Eukaryotic translation initiation factor 2-alpha kinase 3; PRKR-like endoplasmic reticulum kinase; Pancreatic eIF2-alpha kinase; HsPEK

**This product is for research use only, not for use in human, therapeutic or diagnostic procedure.**

### Background

The protein encoded by this gene phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2, leading to its inactivation, and thus to a rapid reduction of translational initiation and repression of global protein synthesis. This protein is thought to modulate mitochondrial function. It is a type I membrane protein located in the endoplasmic reticulum (ER), where it is induced by ER stress caused by malformed proteins. Mutations in this gene are associated with Wolcott-Rallison syndrome.

### Recommended Dilution

WB: 1: 500 - 1: 2000

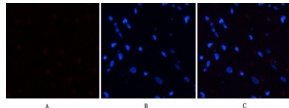
IHC-p: 1: 100 - 1: 300

IF: 1: 50 - 1: 200

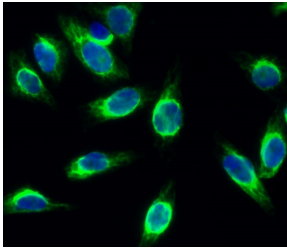
ELISA: 1: 40000

Not yet tested in other applications.

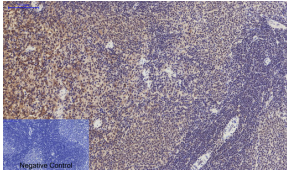
### Images



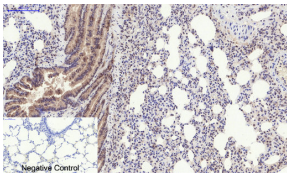
Immunofluorescence analysis of HeLa cell. 1,PERK (phospho Thr981) Polyclonal Antibody(Green) was diluted at 1:200(4°C overnight). 2 DAPI(blue) 10min.



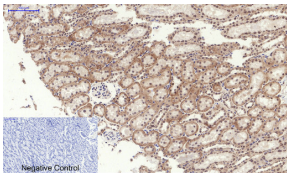
Immunofluorescence analysis of rat-heart tissue. 1,PERK (phospho Thr981) Polyclonal Antibody(Red) was diluted at 1:200(4°C overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



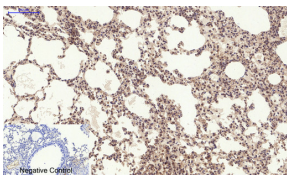
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,PERK (phospho Thr981) Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



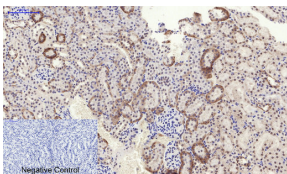
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,JAK2 (phospho Tyr1007) Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



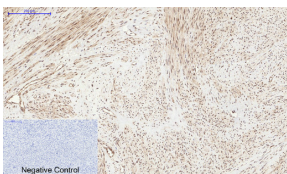
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,PERK (phospho Thr981) Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



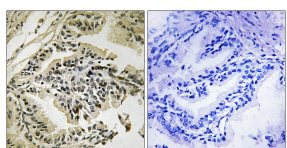
Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,PERK (phospho Thr981) Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



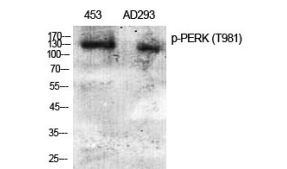
Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,PERK (phospho Thr981) Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



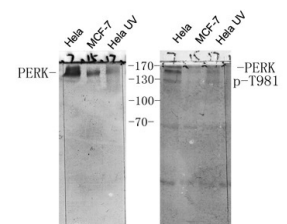
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,PERK (phospho Thr981) Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



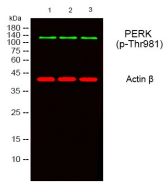
Immunohistochemistry analysis of paraffin-embedded human prostate carcinoma, using PEK/PERK (Phospho-Thr981) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 1) 453, 2) AD293, 3) HeLa cells, (Green) primary antibody was diluted at 1:1000, 4°C overnight, secondary antibody was diluted at 1:10000, 37°C 1hour. (Red) Actin β Monoclonal Antibody(5B7) was diluted at 1:5000 as loading control, 4°C overnight,secondary antibody was diluted at 1:10000, 37°C 1hour.



Western Blot analysis of various cells using Phospho-PERK (T981) Polyclonal Antibody diluted at 1:2000



Western Blot analysis of various cells using antibody diluted at 1:1000. Secondary antibody was diluted at 1:20000

### Storage

-20°C for 1 year

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