

## Product datasheet

# Anti-PERK (phospho T982) antibody ab192591

★★★★☆ 12 Abreviews 18 References 1 Image

### Overview

<b>Product name</b>	Anti-PERK (phospho T982) antibody
<b>Description</b>	Rabbit polyclonal to PERK (phospho T982)
<b>Host species</b>	Rabbit
<b>Specificity</b>	ab192591 detects endogenous levels of PERK only when phosphorylated at threonine 982.
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat
<b>Immunogen</b>	Synthetic peptide corresponding to Human PERK aa 976-988 (phospho T982). Sequence: (c)PAYARHTGQVGTK  Database link: <a href="#">Q9NZJ5</a>  <a href="#">Run BLAST with</a> <a href="#">Run BLAST with</a>
<b>Positive control</b>	IHC-P: Human prostate carcinoma tissue.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride  PBS is without Mg <sup>2+</sup> and Ca <sup>2+</sup> .
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab192591 was purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab192591** in the following tested applications.

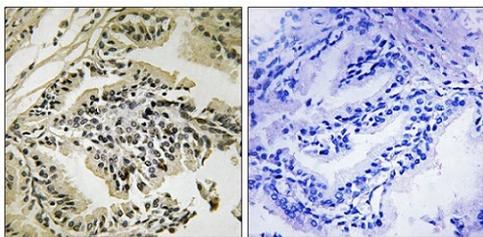
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★	1/50 - 1/100.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Ubiquitous. A high level expression is seen in secretory tissues.
<b>Involvement in disease</b>	Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS) [MIM:226980]; 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.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily. Contains 1 protein kinase domain.
<b>Domain</b>	The luminal domain senses perturbations in protein folding in the ER, probably through reversible interaction with HSPA5/BIP.
<b>Post-translational modifications</b>	Autophosphorylated. N-glycosylated.
<b>Cellular localization</b>	Endoplasmic reticulum membrane.

## Images



Immunohistochemical analysis of paraffin-embedded human prostate carcinoma tissue labeling PERK (phospho T982) with ab192591 at a 1/50 dilution. The image on the right shows the same antibody preincubated with blocking peptide.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PERK (phospho T982) antibody (ab192591)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors