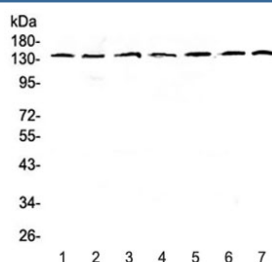


## PERK Antibody / EIF2AK3 (RQ4206)

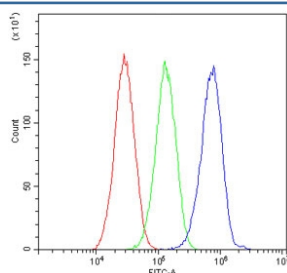
Catalog No.	Formulation	Size
RQ4206	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
<b>UniProt</b>	Q9NZJ5
<b>Applications</b>	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/10 <sup>6</sup> cells Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This PERK antibody is available for research use only.



Western blot testing of human 1) HeLa, 2) COLO320, 3) A549, 4) SK-OV-3, 5) A431, 6) rat brain and 7) mouse brain lysate with PERK antibody at 0.5ug/ml. Predicted molecular weight ~125 kDa, observed here at ~140 kDa.



Flow cytometry testing of human HepG2 cells with PERK antibody at 1ug/10<sup>6</sup> cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PERK antibody.

## Description

Eukaryotic translation initiation factor 2-alpha kinase 3, also known as protein kinase R (PKR)-like endoplasmic reticulum kinase (PERK), is an enzyme that in humans is encoded by the EIF2AK3 gene. 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.

## Application Notes

Optimal dilution of the PERK antibody should be determined by the researcher.

## Immunogen

A recombinant human protein corresponding to amino acids R222-Q334 was used as the immunogen for the PERK antibody.

## Storage

After reconstitution, the PERK antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.