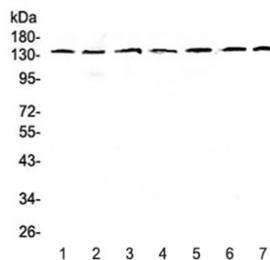


PERK Antibody / EIF2AK3 (RQ4206)

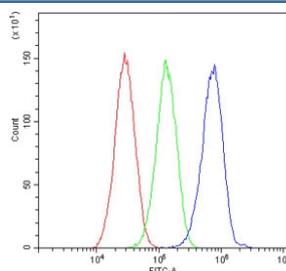
Catalog No.	Formulation	Size
RQ4206	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q9NZJ5
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/10 ⁶ cells Direct ELISA : 0.1-0.5ug/ml
Limitations	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/10⁶ 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 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.