

For Research Use Only

# CoraLite® Plus 647-conjugated Phospho-PERK/EIF2AK3 (Thr982) Recombinant antibody

Catalog Number: CL647-82534



## Basic Information

**Catalog Number:**

CL647-82534

**Size:**

100ul , Concentration: 1000 ug/ml by  
Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

BC126354

**GeneID (NCBI):**

9451

**UNIPROT ID:**

Q9NZJ5

**Full Name:**

eukaryotic translation initiation  
factor 2-alpha kinase 3

**Calculated MW:**

1116 aa, 125 kDa

**Observed MW:**

180 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

4E16

**Excitation/Emission maxima  
wavelengths:**

654 nm / 674 nm

## Applications

**Tested Applications:**

FC (Intra)

**Species Specificity:**

human, mouse

## Background Information

EIF2AK3 encodes the protein kinase RNA-like ER kinase (PERK), a key regulator of the unfolded protein response (UPR) in response to ER stress. Under ER stress conditions, activation of PERK is triggered by the dissociation of glucose-regulated protein (GRP) 78 (also known as BiP) from its luminal domain, followed by oligomerization and autophosphorylation. Phosphorylated PERK subsequently phosphorylates eukaryotic translation initiation factor 2 alpha (eif2a), to attenuate global protein translation and reduce incoming ER protein load via upregulated ER chaperone expression. (PMID: 35922637, PMID: 32029570)

## Storage

**Storage:**

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

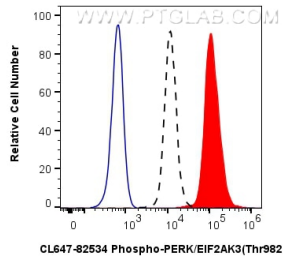
For technical support and original validation data for this product please contact:

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## Selected Validation Data



1X10<sup>6</sup> HEK-293 cells untreated (dashed lines) or treated with Calyculin A which intracellularly stained with 0.25 ug CoraLite® Plus 647 Phospho-PERK/EIF2AK3 (Thr982) Recombinant Antibody (CL647-82534, Clone:4E16)(red), or 0.25 ug CoraLite® Plus 647 Rabbit IgG Isotype Control RecAb (CL647-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.