

For Research Use Only

# CoraLite®594-conjugated Phospho-PERK/EIF2AK3 (Thr982) Recombinant antibody

Catalog Number: CL594-82534



## Basic Information

Catalog Number:

CL594-82534

Concentration:

1000 ug/ml

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:

588 nm / 604 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 (eif2  $\alpha$ ), 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

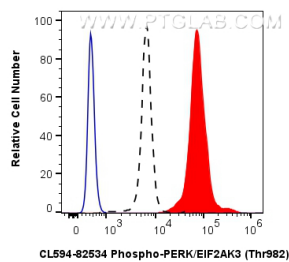
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W: [ptgcn.com](http://ptgcn.com)

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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®594 Phospho-PERK/EIF2ak3 (Thr982) Recombinant Antibody (CL594-82534, Clone:4E16)(red), or 0.25 ug CoraLite®594 Rabbit IgG Isotype Control RecAb (CL594-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.