For Research Use Only

## CoraLite® Plus 488-conjugated Phospho-PERK/EIF2AK3 (Thr982) Recombinant antibody



Catalog Number: CL488-82534

**Basic Information** 

Catalog Number: CL488-82534 Concentration: 1000 ug/ml Source:

Isotype: IgG

Rabbit

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.:

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

4E16

**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 a), to attenuate global protein translation and reduce incoming ER protein load via upregulated ER chaperone expression. (PMID: 35922637, PMID: 32029570)

Storage

Storage:

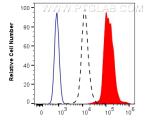
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

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

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



CL488-82534 Phospho-PERK/EIF2AK3(Thr982)

1X10^6 HEK-293 cells untreated (dashed lines) or treated with Calyculin A which intracellularly stained with 0.25 ug Coralite® Plus 488 Phospho-PERK/EIF2AK3 (Thr982) Recombinant Antibody (CL488-8253, Clone:4E16)(red), or 0.25 ug Coralite® Plus 488 Rabbit IgG Isotype Control RecAb (CL488-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.