For Research Use Only

## CoraLite® Plus 488-conjugated PERK/EIF2AK3 Polyclonal antibody



Catalog Number: CL488-24390

**Basic Information** 

Catalog Number: CL488-24390

1000 µg/ml Source: Rabbit

Isotype:

Immunogen Catalog Number:

AG18254

140 kDa

GenBank Accession Number:

BC126354 GeneID (NCBI):

**UNIPROT ID:** Q9NZJ5

Full Name:

eukaryotic translation initiation

factor 2-alpha kinase 3

Calculated MW: 1116 aa. 125 kDa Observed MW:

**Purification Method:** 

Antigen affinity purification

Excitation/Emission maxima wavelengths: 493 nm / 522 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity:

**Background Information** 

PERK, also named as EIF2AK3 or PEK, belongs to the protein kinase superfamily, Ser/Thr protein kinase family and GCN2 subfamily. It acts as a metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (EIF2S1/eIF-2-alpha) in response to various stress conditions. PERK and EIF2AK4 also have a functional role on regulating translation under non-stressed conditions, apart from their long established roles as stress kinases (PMID: 21638082). Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS). The molecular mass of PERK is 125 kDa and can be detected as 140 kDa or 170kDa due to some  $modifications \ such as \ glycosylation \ and \ phosphorylation \ (PMID: 20851775, 24371088, 21703327).$ 

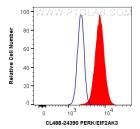
Storage

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

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

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human PERK/EIF2AK3 (CL488-24390) (red), or 0.4 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000, Clone: ) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).