For Research Use Only

CoraLite® Plus 488-conjugated PERK/EIF2AK3 Polyclonal antibody



Catalog Number:CL488-24390 Featured Product

Basic Information

Catalog Number: CL488-24390 Concentration: 1000 μg/ml

Source: Rabbit Q9NZJ5 Isotype:

Immunogen Catalog Number:

AG18254

Tested Applications:

Species Specificity:

GenBank Accession Number:

BC126354 GeneID (NCBI): **UNIPROT ID:**

Full Name: eukaryotic translation initiation factor 2-alpha kinase 3

Calculated MW:

1116 aa. 125 kDa Observed MW: 140 kDa

Purification Method:

Antigen affinity purification Recommended Dilutions:

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima wavelengths: 493 nm / 522 nm

Applications

FC (Intra)

human

Positive Controls:

FC (Intra): HeLa cells,

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 $modifications \ such as \ glycosylation \ and \ phosphorylation \ (PMID: 20851775, 24371088, 21703327).$

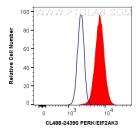
Storage

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

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

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).