For Research Use Only

CoraLite® Plus 488-conjugated PERK/EIF2AK3 Polyclonal antibody



Purification Method:

IF/ICC 1:50-1:500

wavelengths:

Antigen affinity purification

Excitation/Emission maxima

Recommended Dilutions:

Catalog Number:CL488-20582 Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

CL488-20582 NM 004836 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 9451 Nanodrop: **UNIPROT ID:**

Source: Q9NZJ5 Rabbit Full Name:

Isotype: eukaryotic translation initiation

factor 2-alpha kinase 3 IgG

> Calculated MW: 125 kDa Observed MW: 140 kDa

493 nm / 522 nm

Applications

Tested Applications: IF/ICC, FC (Intra) **Species Specificity:**

Positive Controls:

IF/ICC: HEK-293 cells,

Background Information

PERK, also named as EIF2AK3 or PEK, belongs to the protein kinase superfamily, Ser/Thr protein kinase family and ${\sf GCN2}\ subfamily.\ It\ acts\ potentially\ as\ a\ metabolic\ sensor\ in\ the\ INS-secreting\ beta-cells\ to\ modulate\ the\ trafficking$ and quality control of pro-INS in the ER relative to the physiological demands for circulating INS (PMID:20530744). 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 170 kDa due to some $modifications \ such as \ glycosylation \ and \ phosphorylation \ (PMID: 20851775, 24371088, 21703327). \ This \ antibody \ is$ specific to PERK.

Storage

Storage:

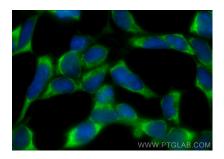
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

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

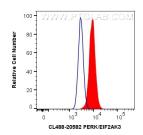
Aliquoting is unnecessary for -20°C storage

in USA), or 1(312) 455-8498 (outside USA)

Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using CoraLite® Plus 488 PERK/EIF2AK3 antibody (CL488-20582) at dilution of 1:200.



1X10^6 HepG2 cells were intracellularly stained with 0.8 ug Coralite® Plus 488 Anti-Human PERK/EIF2AK3 (CL488-20582) (red), or 0.8 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).