

For Research Use Only

CoraLite® Plus 488-conjugated PERK/EIF2AK3 Polyclonal antibody

Catalog Number: CL488-20582

Featured Product



Basic Information

Catalog Number:

CL488-20582

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_004836

GeneID (NCBI):

9451

UNIPROT ID:

Q9NZJ5

Full Name:

eukaryotic translation initiation factor 2-alpha kinase 3

Calculated MW:

125 kDa

Observed MW:

140 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

human

Positive Controls:

IF/ICC : HEK-293 cells,

FC (Intra) : HepG2 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 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.

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:

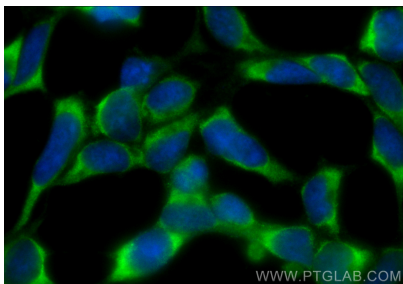
T: 4006900926

E: Proteintech-CN@ptglab.com

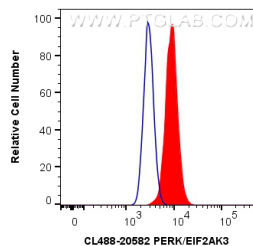
W: ptgcn.com

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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.



1X10⁶ 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).