

For Research Use Only

PERK/EIF2AK3 Recombinant monoclonal antibody

Catalog Number: 88220-2-RR



Basic Information

Catalog Number:

88220-2-RR

Size:

100ul, Concentration: 1000 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG18254

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:

140 kDa

Purification Method:

Protein A purification

CloneNo.:

260327C7

Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

FC (Intra): 0.25 µg per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, FC (Intra), IP, ELISA

Species Specificity:

human

Positive Controls:

WB: RD cells, HeLa cells, HEK-293 cells, MCF-7 cells

IP: HeLa cells,

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 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).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

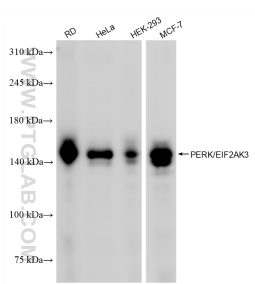
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

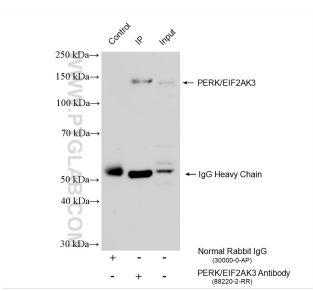
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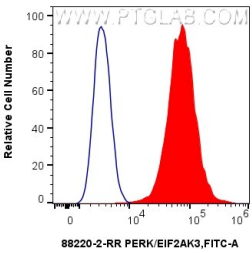
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 88220-2-RR (PERK/EIF2AK3 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



IP result of anti-PERK/EIF2AK3 (IP:88220-2-RR, 4ug; Detection:88220-2-RR 1:800) with HeLa cells lysate 1200 ug.



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug PERK/EIF2AK3 Recombinant monoclonal antibody (88220-2-RR, Clone:260327C7) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019).