For Research Use Only

Phospho-PERK/EIF2AK3 (Ser719) Polyclonal antibody

Catalog Number:29546-1-AP 7 Publications

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Basic Information

Catalog Number:
29546-1-AP

Size:
250 μg/ml

Source:
Rabbit

Isotype:
IgG

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:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
Human

Cited Species:
human, rat, mouse

Positive Controls:

WB : λ phosphatase treated HeLa cells, Thapsigargin treated HeLa cells

Background Information

EIF2AK3 encodes the protein kinase RNA-like ER kinase (PERK), a key regulator of the unfolded protein response (UPR) in response to ER stress. Under ER stress conditions, activation of PERK is triggered by the dissociation of glucose-regulated protein (GRP) 78 (also known as BiP) from its luminal domain, followed by oligomerization and autophosphorylation. Phosphorylated PERK subsequently phosphorylates eukaryotic translation initiation factor 2 alpha (eif2α), to attenuate global protein translation and reduce incoming ER protein load via upregulated ER chaperone expression. (PMID: 35922637, PMID: 32029570)

Notable Publications

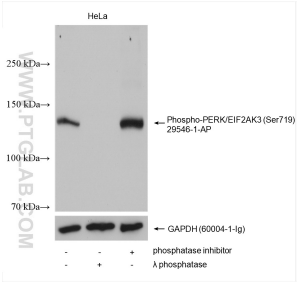
Author	Pubmed ID	Journal	Application
Guanjun Li	38452464	Environ Int	WB
Yun Huang	38132921	Mar Drugs	WB
Jie Cui	37348685	Fish Shellfish Immunol	WB

Storage

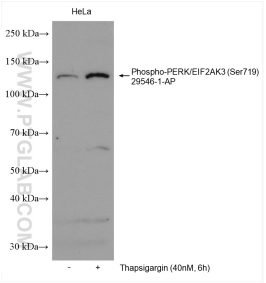
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

Selected Validation Data



Non-treated HeLa cells, phosphatase inhibitor treated and λ phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 29546-1-AP (Phospho-PERK/EIF2AK3 (Ser719) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



Non-treated HeLa cells and Thapsigargin treated HeLa cells were subjected to SDS PAGE followed by western blot with 29546-1-AP (Phospho-PERK/EIF2AK3 (Ser719) antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.