

For Research Use Only

# Phospho-PERK/EIF2AK3 (Ser719) Monoclonal antibody

Catalog Number: 60597-1-Ig



## Basic Information

Catalog Number:

60597-1-Ig

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG1

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 G purification

CloneNo.:

3H7A11

Recommended Dilutions:

WB 1:5000-1:50000

## Applications

Tested Applications:

WB, ELISA

Species Specificity:

human, mouse

Positive Controls:

WB : HEK-293 cells, NIH/3T3 cells, PC-3 cells, Jurkat cells, Calyculin A treated Jurkat cells, Calyculin A treated HEK-293 cells, Calyculin A treated PC-3 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 (eif2  $\alpha$ ), to attenuate global protein translation and reduce incoming ER protein load via upregulated ER chaperone expression. (PMID: 35922637, PMID: 32029570)

## 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:

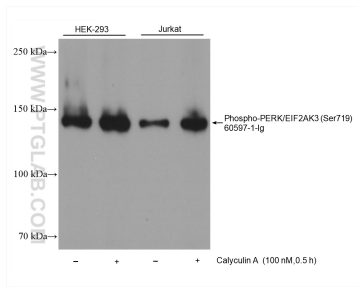
T: 4006900926

E: Proteintech-CN@ptglab.com

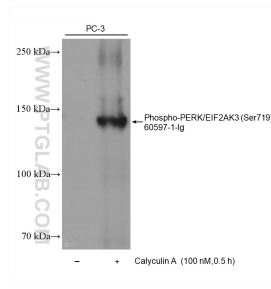
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

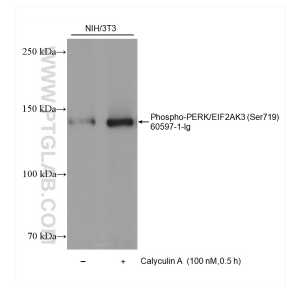
## Selected Validation Data



Non-treated cells and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 60597-1-Ig (EIF2AK3 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Non-treated PC-3 cells and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 60597-1-Ig (EIF2AK3 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Non-treated NIH/3T3 cells and Calyculin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 60597-1-Ig (EIF2AK3 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.