For Research Use Only

Phospho-PERK/EIF2AK3 (Ser719) Monoclonal antibody

Catalog Number: 60597-1-lg



Basic Information

Catalog Number: GenBank Accession Number:

60597-1-lg BC126354 GeneID (NCBI): 100ul, Concentration: 1000 ug/ml by 9451

Nanodrop: **UNIPROT ID:** Source: Q9NZJ5

Mouse Full Name:

Isotype: eukaryotic translation initiation lgG1 factor 2-alpha kinase 3

Calculated MW: 1116 aa, 125 kDa

> Observed MW: 140 kDa

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

Purification Method:

CloneNo.:

3H7A11

Protein G purification

Recommended Dilutions:

WB 1:5000-1:50000

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 (eif2a), 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.

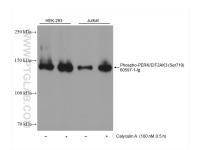
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

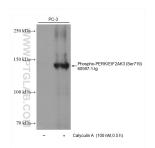
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

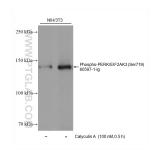
Selected Validation Data



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



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