For Research Use Only

## Phospho-PERK/EIF2AK3 (Ser719) Recombinant antibody, PBS Only

Catalog Number:81251-2-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

243165A4

**Basic Information** 

Catalog Number: 81251-2-PBS

Concentration: 1 mg/ml

Source: Rabbit Isotype:

eukaryotic translation initiation factor 2-alpha kinase 3

Calculated MW:

GenBank Accession Number:

1116 aa, 125 kDa Observed MW: 140 kDa

BC126354

GeneID (NCBI):

**UNIPROT ID:** 

Q9NZJ5
Full Name:

**Applications** 

Tested Applications: WB, Indirect ELISA Species Specificity: human, mouse

## **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 a), to attenuate global protein translation and reduce incoming ER protein load via upregulated ER chaperone expression. (PMID: 35922637, PMID: 32029570)

Storage

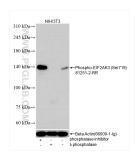
Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  $\,$ 

Storage Buffer: PBS only, pH7.3

## Selected Validation Data



Non-treated NIH/3T3 cells, phosphatase inhibitor treated and  $\lambda$  phosphatase NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 81251-2-RR (Phospho-PERK/EIF2AK3 (Ser719) antibody) at dilution of 1:10000 incubated at room temperature for 1:5 hours. The membrane was stripped and reblotted with Beta Actin (66009-1-Ig) antibody as loading control. This data was developed using the same antibody clone with 81251-2-PBS in a different storage buffer formulation.

