For Research Use Only

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

Catalog Number:81251-2-PBS



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method:

81251-2-PBS

GeneID (NCBI):

BC126354

Protein A purification

100ug, Concentration: 1 mg/ml by

CloneNo.: 243165A4

Nanodrop: Source:

Rabbit

IgG

UNIPROT ID: Q9NZJ5

Full Name:

Isotype:

eukaryotic translation initiation

factor 2-alpha kinase 3

Calculated MW: 1116 aa, 125 kDa

Observed MW:

140 kDa

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 (eif2a), to attenuate global protein translation and reduce incoming ER protein load via upregulated ER chaperone expression. (PMID: 35922637, PMID: 32029570)

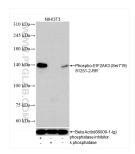
Storage

Storage:

Store at -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 re-blotted 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

