

For Research Use Only

PERK/EIF2AK3 Monoclonal antibody

Catalog Number: 68482-1-Ig **2 Publications**



Basic Information

Catalog Number:

68482-1-Ig

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG18254

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.:

3G3F2

Recommended Dilutions:

WB 1:5000-1:50000

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

Human, mouse, rat

Cited Species:

human, pig

Positive Controls:

WB : Daudi cells, HSC-T6 cells, Ramos cells, Jurkat cells, K-562 cells, HuH-7 cells, MCF-7 cells, HEK-293 cells, NIH/3T3 cells

Background Information

PERK, also named as EIF2AK3 or PEK, belongs to the protein kinase superfamily, Ser/Thr protein kinase family and GCN2 subfamily. It acts as a metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (EIF2S1/elf-2-alpha) in response to various stress conditions. PERK and EIF2AK4 also have a functional role on regulating translation under non-stressed conditions, apart from their long established roles as stress kinases (PMID: 21638082). Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS). The molecular mass of PERK is 125 kDa and can be detected as 140 kDa or 170kDa due to some modifications such as glycosylation and phosphorylation (PMID: 20851775, 24371088, 21703327).

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-------------|-----------|------------------|-------------|
| Xinyu Sun | 39653741 | Cancer Gene Ther | WB |
| Qiyuan Wang | 39000093 | Int J Mol Sci | 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:

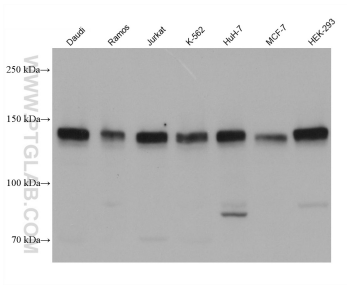
T: 4006900926

E: Proteintech-CN@ptglab.com

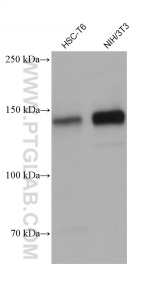
W: ptgcn.com

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

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68482-1-Ig (PERK/EIF2AK3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 68482-1-Ig (PERK/EIF2AK3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.