

For Research Use Only

PERK/EIF2AK3 Polyclonal antibody

Catalog Number: 24390-1-AP

Featured Product

119 Publications



Basic Information

Catalog Number:

24390-1-AP

Concentration:

600 µg/ml

Source:

Rabbit

Isotype:

IgG

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:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:3000

IHC: 1:50-1:500

FC (Intra): 0.40 µg per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human

Cited Species:

human, mouse, rat, pig, chicken, bovine, sheep

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, HepG2 cells, MCF-7 cells

IHC : human liver cancer tissue,

FC (Intra) : HeLa 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/eIF-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 170 kDa due to some modifications such as glycosylation and phosphorylation (PMID: 20851775, 24371088, 21703327).

Notable Publications

Author	Pubmed ID	Journal	Application
Jun Shao	28950253	Cell Physiol Biochem	WB
Yu Sun	34562065	J Cell Mol Med	WB
Yaoyao Bian	36121296	Pharm Biol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

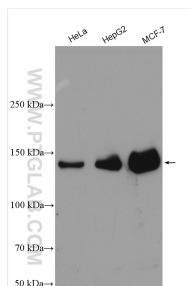
T: 4006900926

E: Proteintech-CN@ptglab.com

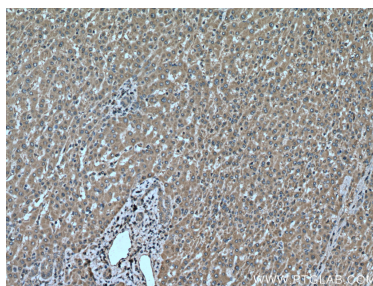
W: ptgcn.com

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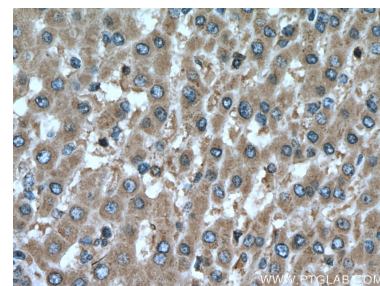
Selected Validation Data



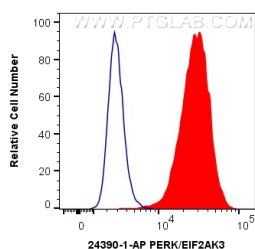
Various lysates were subjected to SDS PAGE followed by western blot with 24390-1-AP (PERK/EIF2AK3 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 24390-1-AP (PERK/EIF2AK3 antibody) at dilution of 1:200 (under 10x lens)..



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 24390-1-AP (PERK/EIF2AK3 antibody) at dilution of 1:200 (under 40x lens)..



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human PERK/EIF2AK3 (24390-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).