

PERK/EIF2AK3 Polyclonal antibody

Catalog Number: 24390-1-AP

81 Publications

Basic Information

Catalog Number: 24390-1-AP	GenBank Accession Number: BC126354	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 600 µg/ml by Nanodrop;	GeneID (NCBI): 9451	Recommended Dilutions: WB 1:500-1:3000 IHC 1:50-1:500
Source: Rabbit	Full Name: eukaryotic translation initiation factor 2-alpha kinase 3	
Isotype: IgG	Calculated MW: 1116 aa, 125 kDa	
Immunogen Catalog Number: AG18254	Observed MW: 140 kDa	

Applications

Tested Applications: FC, IHC, WB, ELISA	Positive Controls: WB : HeLa cells, HepG2 cells, MCF-7 cells IHC : human liver cancer tissue,
Cited Applications: IF, IHC, WB	
Species Specificity: human	
Cited Species: human, rat, sheep, mouse, pig	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

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
Jun Shao	28950253	Cell Physiol Biochem	WB
Yu Sun	34562065	J Cell Mol Med	WB
Yaoyao Bian	36121296	Pharm Biol	WB

Storage

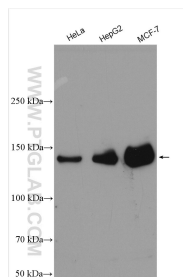
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
 Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

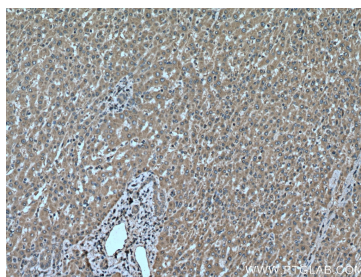
For technical support and original validation data for this product please contact:
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
 E: proteintech@ptglab.com
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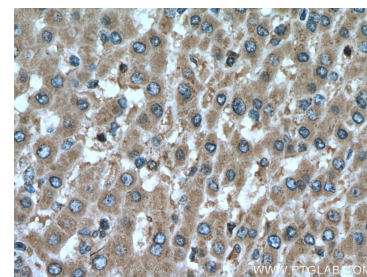
Selected Validation Data



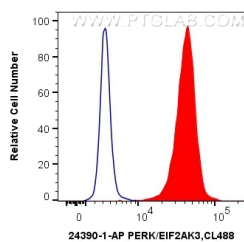
Various lysates were subjected to SDS PAGE followed by western blot with 24390-1-AP (PERK/EIF2AK3 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



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 AffiniPure 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 Intracellular Staining Permeabilization Wash Buffer.