

For Research Use Only

EIF2AK1 Polyclonal antibody

Catalog Number: 20499-1-AP

Featured Product

9 Publications



Basic Information

Catalog Number: 20499-1-AP	GenBank Accession Number: BC006524	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 550 µg/ml by Nanodrop;	GeneID (NCBI): 27102	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:50-1:500 IF 1:50-1:500
Source: Rabbit	Full Name: eukaryotic translation initiation factor 2-alpha kinase 1	
Isotype: IgG	Calculated MW: 630 aa, 71 kDa	
Immunogen Catalog Number: AG14236	Observed MW: 71 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : HeLa cells, HepG2 cells, HEK-293 cells, K-562 cells, MCF-7 cells IHC : human breast cancer tissue, IF : HepG2 cells,
Cited Applications: CoIP, IP, WB	
Species Specificity: human	
Cited Species: human	

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

Eukaryotic initiation factor 2a (eIF2a), which is a critical component in the formation of the translation initiation ternary complex (eIF2a/GTP/methionyl transfer RNA), plays a key role in the ER stress response. EIF2AK1, which is activated by heme deficiency and other stimuli, is a major kinase that phosphorylates EIF2-alpha. Phosphorylation of the alpha subunit of EIF2 downregulates protein synthesis in response to various stress conditions. EIF2AK1 has some isoforms with 630aa, 577aa and 422aa.

Notable Publications

Author	Pubmed ID	Journal	Application
Halime Kalkavan	36055199	Cell	WB,IP
Stefan Bauernfried	33243852	Science	WB
Jack Chun-Chieh Hsu	35316659	Mol Cell	WB

Storage

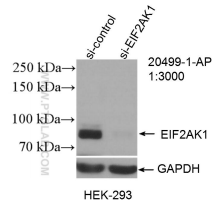
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

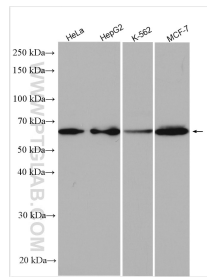
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

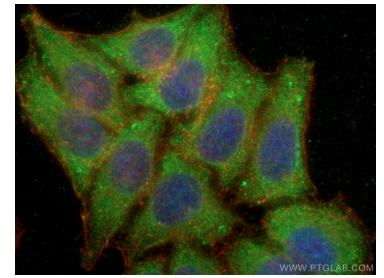
Selected Validation Data



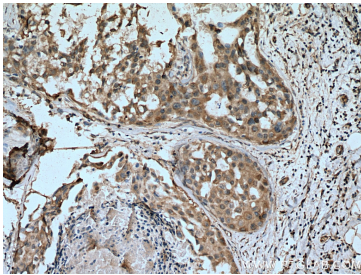
WB result of EIF2AK1 antibody (20499-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-EIF2AK1 transfected HEK-293 cells.



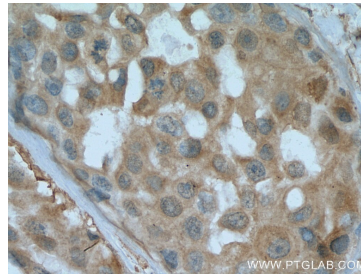
Various lysates were subjected to SDS PAGE followed by western blot with 20499-1-AP (EIF2AK1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using EIF2AK1 antibody (20499-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20499-1-AP (EIF2AK1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20499-1-AP (EIF2AK1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).