

For Research Use Only

EIF2AK1 Polyclonal antibody

Catalog Number: 20499-1-AP

Featured Product

17 Publications



Basic Information

Catalog Number:

20499-1-AP

Size:

150ul, Concentration: 550 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG14236

GenBank Accession Number:

BC006524

GeneID (NCBI):

27102

UNIPROT ID:

Q9BQI3

Full Name:

eukaryotic translation initiation factor 2-alpha kinase 1

Calculated MW:

630 aa, 71 kDa

Observed MW:

71 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IP, CoIP

Species Specificity:

human

Cited Species:

human, mouse

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, HEK-293 cells, K-562 cells, MCF-7 cells

IHC : human breast cancer tissue,

IF/ICC : HepG2 cells,

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
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

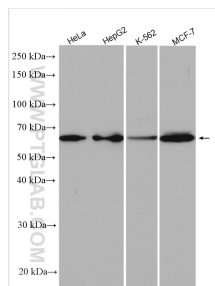
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

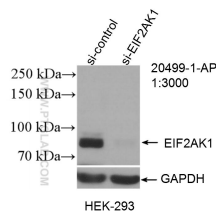
E: proteintech@ptglab.com
W: ptglab.com

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

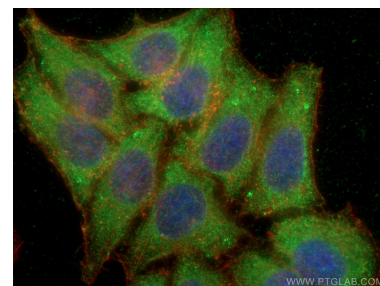
Selected Validation Data



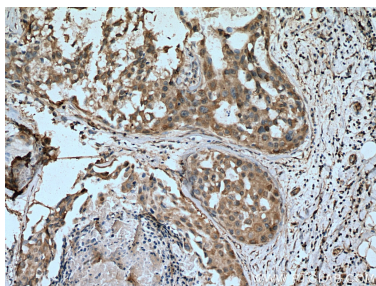
Various lysates were subjected to SDS PAGE followed by western blot with 20499-1-AP (EIF2AK1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



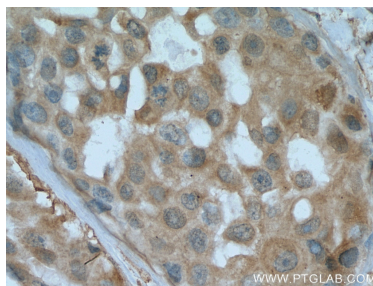
WB result of EIF2AK1 antibody (20499-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-EIF2AK1 transfected HEK-293 cells.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using EIF2AK1 antibody (20499-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated 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).