

For Research Use Only

EIF2AK1 Polyclonal ANTIBODY



Catalog Number: 20499-1-AP **2 Publications**

Basic Information

Catalog Number: 20499-1-AP	GenBank Accession Number: BC006524	Purification Method: Antigen affinity purification
Size: 150UL, Concentration: 360 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 27102	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:50-1:500 IF 1:10-1:100
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
Cited Applications: CoIP, WB	IHC : human breast cancer tissue,
Species Specificity: human	IF : HepG2 cells,
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- α . Phosphorylation of the α 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
Evelyn Fessler	32132706	Nature	WB, CoIP
Hongtan Wu	25695629	Nat Commun	WB

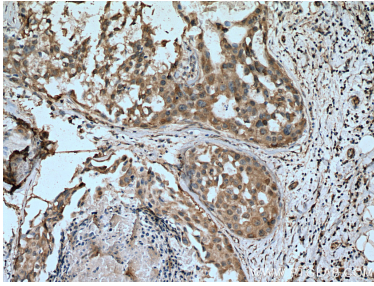
Storage

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

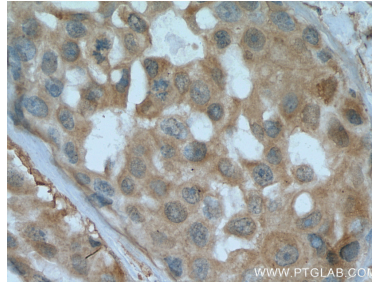
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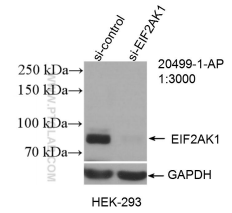
Selected Validation Data



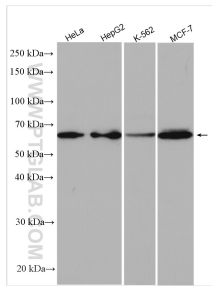
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20499-1-AP (EIF2AK1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



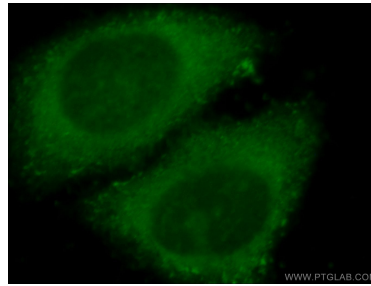
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20499-1-AP (EIF2AK1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 HepG2 cells, using EIF2AK1 antibody 20499-1-AP at 1:25 dilution and FITC- labeled goat anti-Rabbit IgG (green).