

For Research Use Only

EIF2AK1 Monoclonal antibody

Catalog Number: 67674-1-Ig



Basic Information

Catalog Number: 67674-1-Ig	GenBank Accession Number: BC006524	Purification Method: Protein G purification
Size: 150ul , Concentration: 1000 ug/ml by Nanodrop and 586 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 27102	CloneNo.: 2H1F3
Source: Mouse	UNIPROT ID: Q9BQI3	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:150-1:600 IF/ICC 1:400-1:1600
Isotype: IgG1	Full Name: eukaryotic translation initiation factor 2-alpha kinase 1	
Immunogen Catalog Number: AG16970	Calculated MW: 630 aa, 71 kDa	
	Observed MW: 71 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
Human

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, MCF-7 cells, HepG2 cells, HEK-293 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells

IHC : human breast cancer tissue,

IF/ICC : HeLa 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.

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**

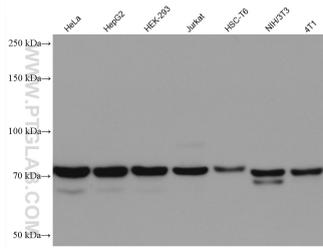
For technical support and original validation data for this product please contact:

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

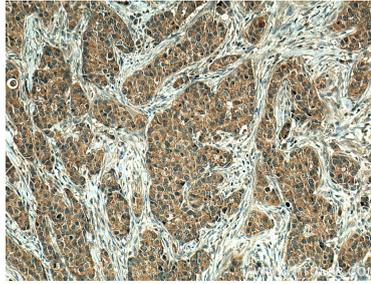
E: proteintech@ptglab.com
W: ptglab.com

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

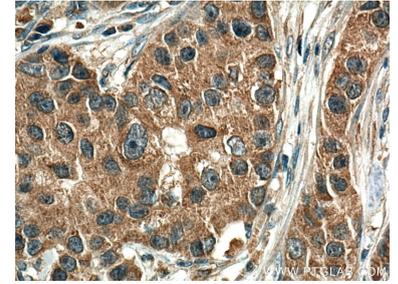
Selected Validation Data



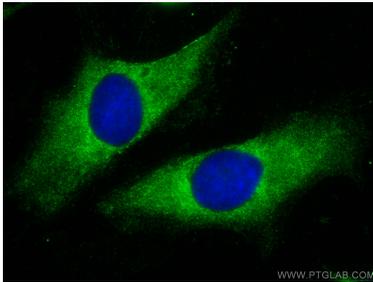
Various lysates were subjected to SDS PAGE followed by western blot with 67674-1-Ig (EIF2AK1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67674-1-Ig (EIF2AK1 antibody) at dilution of 1:300 (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 67674-1-Ig (EIF2AK1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using EIF2AK1 antibody (67674-1-Ig, Clone: 2H1F3) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).