For Research Use Only

## EIF2AK1 Monoclonal antibody, PBS Only



Catalog Number: 67674-1-PBS

**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** Protein G purification

67674-1-PBS

GeneID (NCBI):

27102

BC006524

CloneNo.: 2H1F3

100ug, Concentration: 1mg/ml by Nanodrop:

**UNIPROT ID:** Q9BQI3

Mouse

Full Name: eukaryotic translation initiation

factor 2-alpha kinase 1

Immunogen Catalog Number:

Calculated MW:

AG16970

Isotype:

lgG1

630 aa, 71 kDa Observed MW:

71 kDa

**Applications** 

**Tested Applications:** 

WB, IF, IHC, Indirect ELISA

Species Specificity:

**Background Information** 

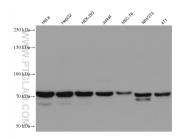
Eukaryotic initiation factor 2a (eIF2a), which is a critical component in the formation of the translation initiation ternary complex (eIF2a/GTP/methionyl transfer RNA), plays a key role in the ER stress response. EIF2AK1, which is activated by heme deficiency and other stimuli, is a major kinase that 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

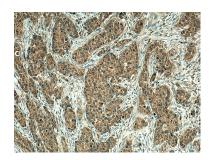
Storage: Store at -80°C. Storage Buffer:

PBS Only

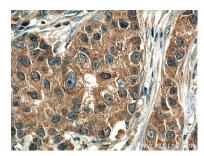
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 67674-1-lg (EIF2AK1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67674-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 67674-1-lg (EIF2AK1 antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67674-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 67674-1-1g (EIF2AK1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67674-1-PBS in a different storage buffer formulation.



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 AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67674-1-PBS in a different storage buffer formulation.