10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

EIF2A Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1904a

Specification

EIF2A Antibody - Product Information

Application	**E, WB, IF, FC, IHC**
Primary Accession	Q9BY44
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**65kDa KDa**

Description
EIF2A is a 65-kD protein that catalyzes the formation of puromycin-sensitive 80S preinitiation complexes

Immunogen
Purified recombinant fragment of human EIF2A (AA: 448-576) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide.

EIF2A Antibody - Additional Information

Gene ID 83939

Other Names
Eukaryotic translation initiation factor 2A, eIF-2A, 65 kDa eukaryotic translation initiation factor 2A, Eukaryotic translation initiation factor 2A, N-terminally processed, EIF2A

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400
IHC~~1/200 - 1/1000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
EIF2A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EIF2A Antibody - Protein Information

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Name EIF2A

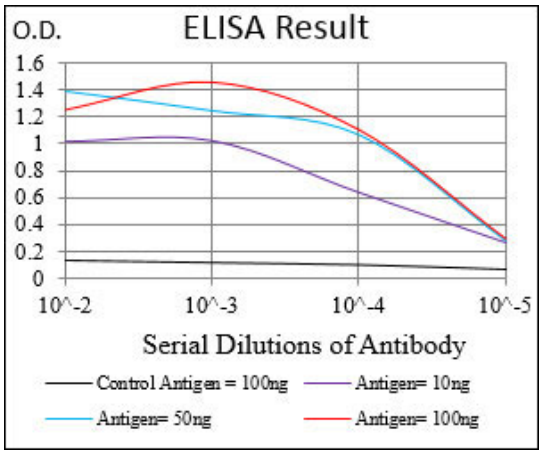
Function
Functions in the early steps of protein synthesis of a small number of specific mRNAs. Acts by directing the binding of methionyl- tRNAi to 40S ribosomal subunits. In contrast to the eIF-2 complex, it binds methionyl-tRNAi to 40S subunits in a codon-dependent manner, whereas the eIF-2 complex binds methionyl-tRNAi to 40S subunits in a GTP-dependent manner.

Tissue Location
Widely expressed. Expressed at higher level in pancreas, heart, brain and placenta.

EIF2A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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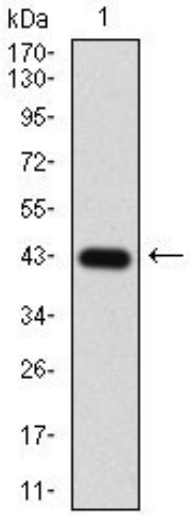


Figure 1: Western blot analysis using EIF2A mAb against human EIF2A (AA: 448-576) recombinant protein. (Expected MW is 40.3 kDa)

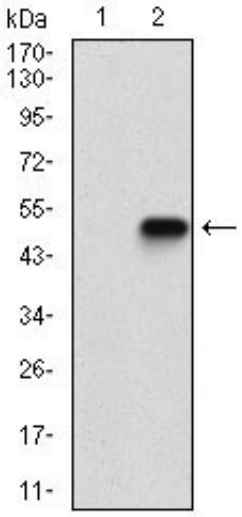


Figure 2: Western blot analysis using EIF2A mAb against HEK293 (1) and EIF2A (AA: 448-576)-hIgGFc transfected HEK293 (2) cell lysate.

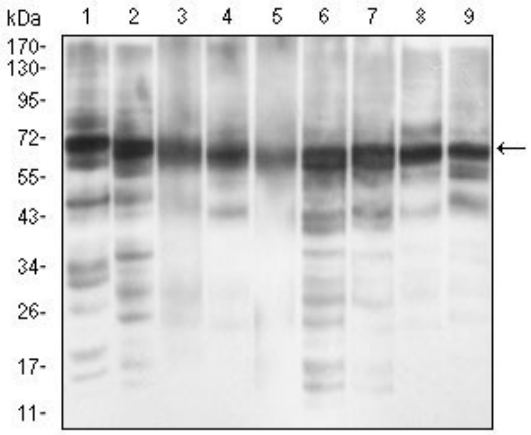


Figure 3: Western blot analysis using EIF2A mouse mAb against MCF-7 (1), PC-12 (2), HepG2 (3), Hela (4), Cos7 (5), K562 (6), Jurkat (7), A431 (8) and NIH/3T3 (9) cell lysate.

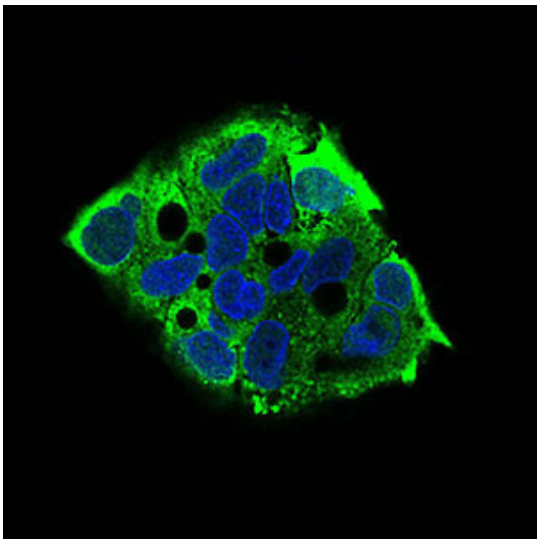


Figure 4: Immunofluorescence analysis of HepG2 cells using EIF2A mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Secondary antibody from Fisher (Cat#: 35503)

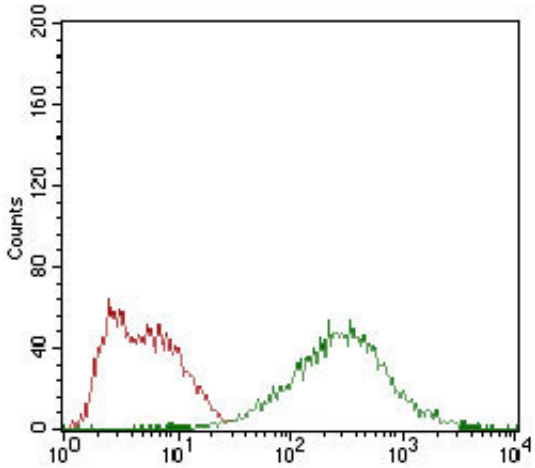


Figure 5: Flow cytometric analysis of HepG2 cells using EIF2A mouse mAb (green) and negative control (red).

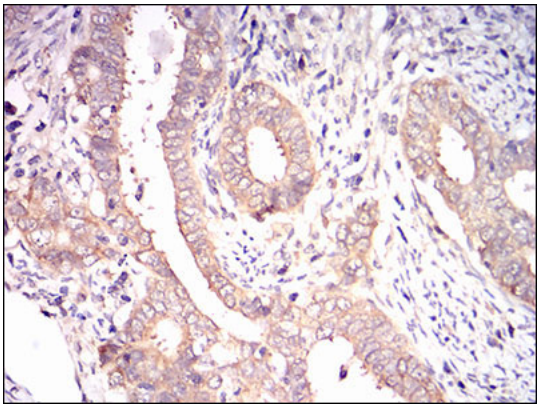


Figure 6: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using EIF2A mouse mAb with DAB staining.

EIF2A Antibody - Background

This gene encodes a telomere specific protein, TERF2, which is a component of the telomere nucleoprotein complex. This protein is present at telomeres in metaphase of the cell cycle, is a second negative regulator of telomere length and plays a key role in the protective activity of

telomeres. While having similar telomere binding activity and domain organization, TERF2 differs from TERF1 in that its N terminus is basic rather than acidic. ; ; ;

EIF2A Antibody - References

1. Mol Biol (Mosk). 2010 Sep-Oct;44(5):859-66. 2. Cancer Res. 2009 Feb 15;69(4):1545-52.