

# EIF2A Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1904a

#### **Product Information**

**Application** WB, IHC, FC, ICC, E

Primary Accession

Reactivity

Human

Host

Clonality

Monoclonal

Clone Names

Isotype

IgG1

Calculated MW

Monoclonal

G4990

**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.

#### **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** WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A

E~~1/10000

**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.

#### **Protein Information**

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.

### **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.;;;

#### References

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

## **Images**

kDa

170-130-

> 95-72-55-43-34-26-17-11-

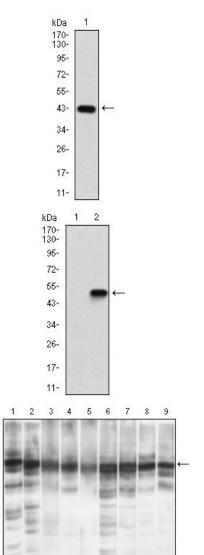
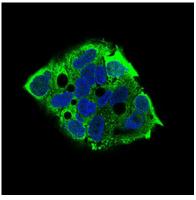


Figure 1: Western blot analysis using EIF2A mAb against human EIF2A (AA: 448-576) recombinant protein. (Expected MW is 40.3 kDa)

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)



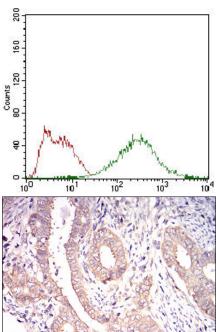


Figure 5: Flow cytometric analysis of HepG2 cells using EIF2A mouse mAb (green) and negative control (red).

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.