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**Product Name: EIF4E Mouse Monoclonal Antibody****Catalog #: AMM80969**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,ICC,ELISA,FC
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Mouse IgG1
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	PBS containing 0.03% sodium azide.
<b>Purification</b>	Affinity Purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
<b>Molecular Weight</b>	25kDa

**Antigen Information**

<b>Gene Name</b>	EIF4E
<b>Alternative Names</b>	CBP; EIF4F; EIF4E1; EIF4EL1; MGC111573; EIF4E
<b>Gene ID</b>	1977.0
<b>SwissProt ID</b>	P06730
<b>Immunogen</b>	Purified recombinant fragment of human EIF4E expressed in E. Coli.

**Background**

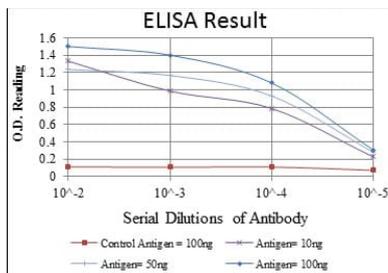
eIF4E, a protein modulates translation of maternal mRNAs in early embryos before the onset of zygotic transcription. eIF4E also influences the overall rate of translation. eIF4E binds to the 7 methyl GTP cap structure of eukaryotic mRNAs. Phosphorylation of eIF4E on serine 209 regulates the affinity of this protein for the 7 methyl GTP cap and/or RNA. Phosphorylation also enhances

the interaction of eIF4E with eIF4G, which form a complex known as eIF4F. eIF4E phosphorylation is correlated with increased translational rate in a number of cell types. Several kinases are currently being investigated as potential regulators of eIF4E including PKC and/or the MAP kinase activated Mnk.

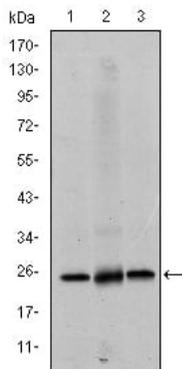
## Research Area

PI3K-Akt signaling pathway, mTOR signaling pathway

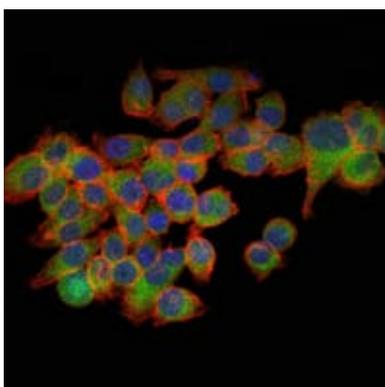
## Image Data



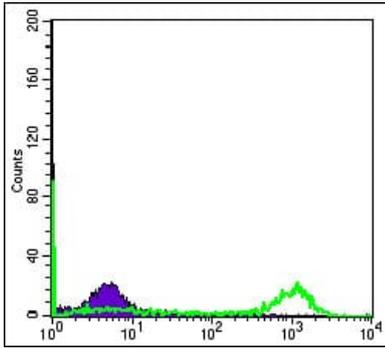
Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng);



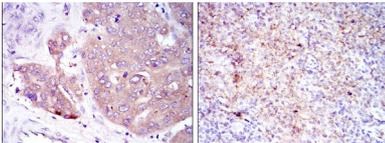
Western blot analysis using EIF4E mouse mAb against HeLa (1), HEK293 (2) and K562 (3) cell lysate.



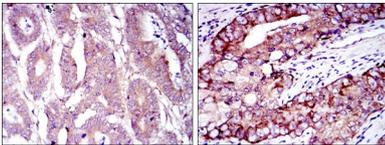
Immunofluorescence analysis of GC-7901 cells using EIF4E mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HeLa cells using EIF4E mouse mAb (green) and negative control (purple).



Immunohistochemical analysis of paraffin-embedded human liver cancer (left) and submaxillary tumor (right) using EIF4E mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human stomach cancer (left) and prostate cancer (right) using EIF4E mouse mAb with DAB staining.