

Product Name: EIF4E (3K6) Rabbit Monoclonal Antibody
Catalog #: AMRe10386



Summary

Production Name	EIF4E (3K6) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Purification	Affinity purification

Immunogen

Gene Name	EIF4E
Alternative Names	CBP; eIF-4E; eIF-4F 25 kDa subunit; EIF4F; EIF4E1; EIF4EL1; MGC111573; EIF4E;
Gene ID	1977.0
SwissProt ID	P06730.A synthetic peptide of human eIF4E

Application

Dilution Ratio	WB: 1:5000
Molecular Weight	25kDa

Background

eIF4E, a protein modulates translation of maternal mRNAs in early embryos before the onset of zygotic transcription. eIF4E

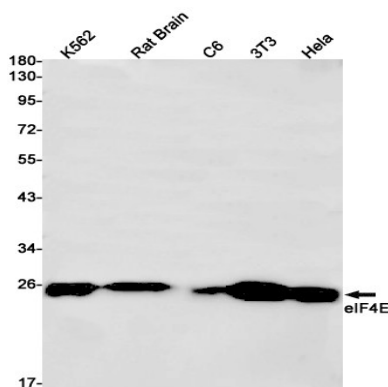
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also influences the overall rate of translation. eIF4E binds to the 7 methyl GTP cap structure of eukaryotic mRNAs. Phosphorylation of eIF4E on serine 209 regulates the affinity of this protein for the 7 methyl GTP cap and/or RNA. Phosphorylation also 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. Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation of protein synthesis and facilitates ribosome binding by inducing the unwinding of the mRNAs secondary structures (PubMed:[16271312](http://www.uniprot.org/citations/16271312), PubMed:[22578813](http://www.uniprot.org/citations/22578813)). In addition to its role in translation initiation, also acts as a regulator of translation and stability in the cytoplasm (PubMed:[24335285](http://www.uniprot.org/citations/24335285)). Component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression: in the complex, EIF4E mediates the binding to the mRNA cap (By similarity). Component of a multiprotein complex that sequesters and represses translation of proneurogenic factors during neurogenesis (By similarity). In P-bodies, component of a complex that mediates the storage of translationally inactive mRNAs in the cytoplasm and prevents their degradation (PubMed:[24335285](http://www.uniprot.org/citations/24335285)). May play an important role in spermatogenesis through translational regulation of stage-specific mRNAs during germ cell development (By similarity).

Research Area

Image Data



Western blot detection of eIF4E in K562,Rat Brain,C6,3T3,HeLa cell lysates using eIF4E antibody(1:1000 diluted).

Note

For research use only.