



eIF4E Monoclonal Antibody

Catalog No	YP-Ab-03394
Isotype	IgG
Reactivity	Human
Applications	WB;IHC;IF;FCM;ELISA
Gene Name	EIF4E
Protein Name	Eukaryotic translation initiation factor 4E
Immunogen	Purified recombinant fragment of human eIF4E expressed in E. Coli.
Specificity	eIF4E Monoclonal Antibody detects endogenous levels of eIF4E protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EIF4E; EIF4EL1; EIF4F; Eukaryotic translation initiation factor 4E; eIF-4E; eIF4E; eIF-4F 25 kDa subunit; mRNA cap-binding protein
Observed Band	
Cell Pathway	Cytoplasm, P-body . Cytoplasm . Cytoplasm, Stress granule . Nucleus . Interaction with EIF4ENIF1/4E-T is required for localization to processing bodies (P-bodies) (PubMed:16157702, PubMed:24335285, PubMed:25923732). Imported in the nucleus via interaction with EIF4ENIF1/4E-T via a piggy-back mechanism (PubMed:10856257). .
Tissue Specificity	Brain,Fetal brain,Placenta,Pooled,Small intestine,Testis,
Function	caution:Was originally thought to be phosphorylated on Ser-53 (PubMed:3112145); this was later shown to be wrong (PubMed:7665584).,function: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.,PTM:Phosphorylation increases the ability of the protein to bind to mRNA caps and to form the eIF4F complex.,similarity:Belongs to the eukaryotic initiation factor 4E family.,subunit:eIF4F is a multi-subunit complex, the composition of which varies with external and internal environmental conditions. It is composed of at least EIF4A, EIF4E and EIF4G1/EIF4G3. EIF4E is also known to interact with other partners. The interaction with EIF4ENIF1 mediates the import into the nucleus.



Nonphosphorylated EIF4EBP1, EIF4EBP2 and EIF4EBP3 compete wi

Background

The protein encoded by this gene is a component of the eukaryotic translation initiation factor 4F complex, which recognizes the 7-methylguanosine cap structure at the 5' end of messenger RNAs. The encoded protein aids in translation initiation by recruiting ribosomes to the 5'-cap structure. Association of this protein with the 4F complex is the rate-limiting step in translation initiation. This gene acts as a proto-oncogene, and its expression and activation is associated with transformation and tumorigenesis. Several pseudogenes of this gene are found on other chromosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015],

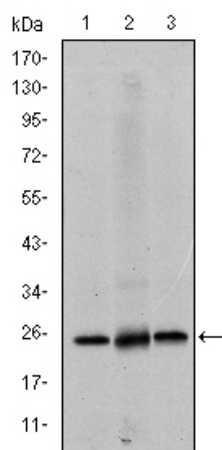
matters needing attention

Avoid repeated freezing and thawing!

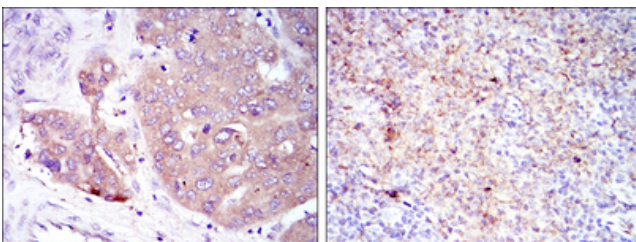
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

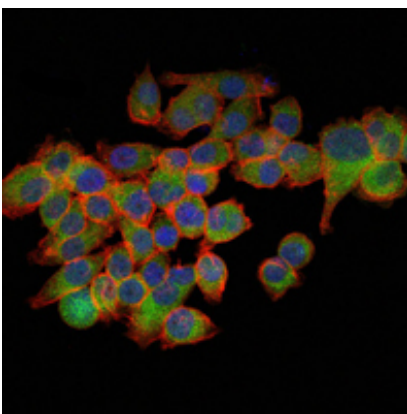
Products Images



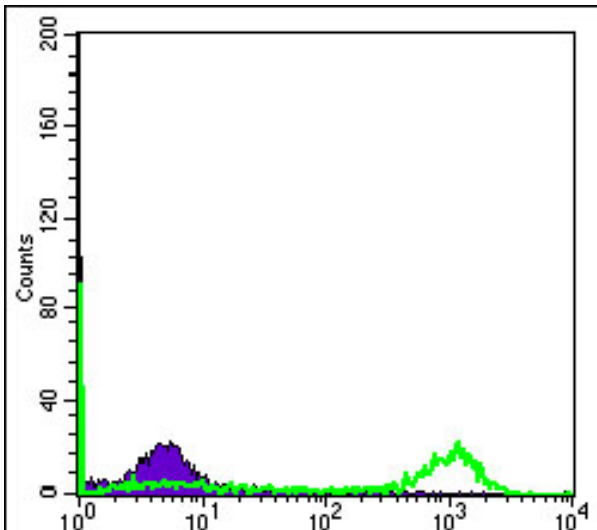
Western Blot analysis using eIF4E Monoclonal Antibody against HeLa (1), HEK293 (2) and K562 (3) cell lysate.



Immunohistochemistry analysis of paraffin-embedded liver cancer (left) and submaxillary tumor (right) with DAB staining using eIF4E Monoclonal Antibody.



Immunofluorescence analysis of GC-7901 cells using eIF4E Monoclonal Antibody (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 Monoclonal Antibody (green) and negative control (purple).

