



# eIF4E Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03848
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	EIF4E
<b>Protein Name</b>	Eukaryotic translation initiation factor 4E
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human eIF4E. AA range:168-217
<b>Specificity</b>	eIF4E Polyclonal Antibody detects endogenous levels of eIF4E protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	EIF4E; EIF4EL1; EIF4F; Eukaryotic translation initiation factor 4E; eIF-4E; eIF4E; eIF-4F 25 kDa subunit; mRNA cap-binding protein
<b>Observed Band</b>	25kD
<b>Cell Pathway</b>	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). .
<b>Tissue Specificity</b>	Brain,Fetal brain,Placenta,Pooled,Small intestine,Testis,
<b>Function</b>	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**

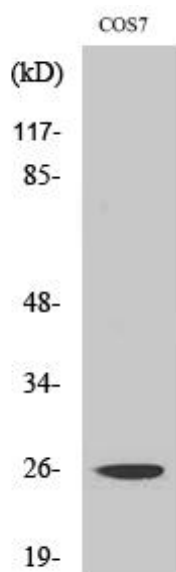
Avoid repeated freezing and thawing!

**Usage suggestions**

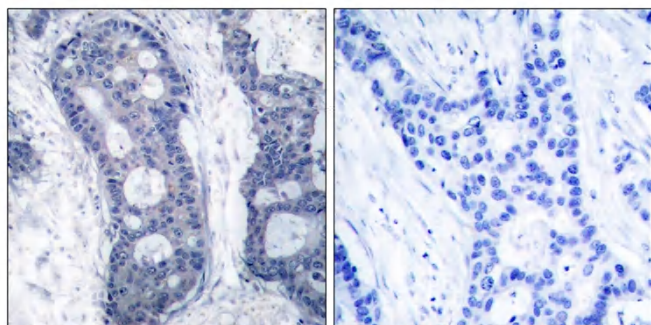
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



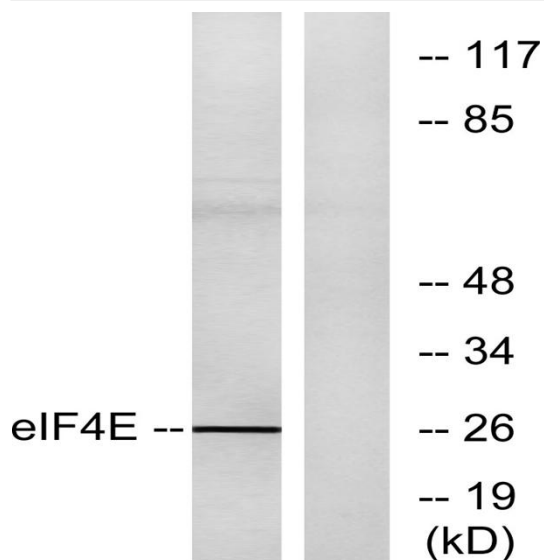
## Products Images



Western Blot analysis of various cells using eIF4E Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using eIF4E Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, treated with FBS, using eIF4E Antibody. The lane on the right is blocked with the synthesized peptide.