

## eIF4E Polyclonal Antibody

Catalog No: YT1516

**Reactivity:** Human; Mouse; Rat; Monkey

**Applications:** WB;IHC;IF;ELISA

Target: eIF4E

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>HIF-1 signaling

pathway;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Longevity

regulating pathway;>>Insulin signaling pathway

Gene Name: EIF4E

**Protein Name:** Eukaryotic translation initiation factor 4E

P06730

P63073

Human Gene Id: 1977

**Human Swiss Prot** 

No:

Mouse Gene Id: 13684

**Mouse Swiss Prot** 

No:

**Rat Gene Id:** 117045

Rat Swiss Prot No: P63074

Immunogen: The antiserum was produced against synthesized peptide derived from human

eIF4E. AA range:168-217

**Specificity:** eIF4E Polyclonal Antibody detects endogenous levels of eIF4E protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration:** 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:** 

Observed Band: 25kD

mTOR;Insulin Receptor; Cell Pathway:

**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],

**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-methylguanosinecontaining 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

Subcellular Cytoplasm, P-body . Cytoplasm . Cytoplasm, Stress granule . Nucleus . Location:

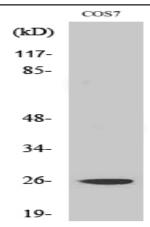
Interaction with EIF4ENIF1/4E-T is required for localization to processing bodies

(P-bodies) (PubMed:16157702, PubMed:24335285, PubMed:25923732). Imported in the nucleus via interaction with EIF4ENIF1/4E-T via a piggy-back

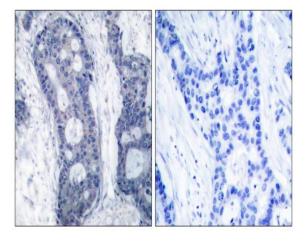
mechanism (PubMed:10856257). .

Brain, Fetal brain, Placenta, Pooled, Small intestine, Testis, **Expression:** 

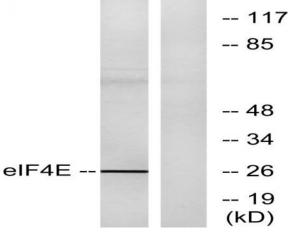
## **Products Images**



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.