

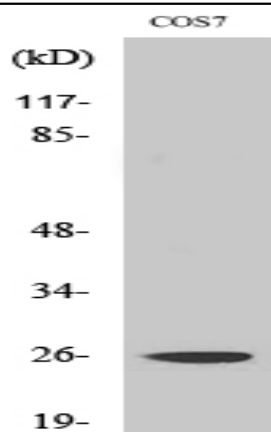
**eIF4E Polyclonal Antibody**

|                              |  |
|------------------------------|--|
| <b>Catalog No :</b>          | YT1516   |
| <b>Reactivity :</b>          | Human;Mouse;Rat;Monkey   |
| <b>Applications :</b>        | WB;IHC;IF;ELISA  |
| <b>Target :</b>              | eIF4E  |
| <b>Fields :</b>              | >>EGFR tyrosine kinase inhibitor resistance;>>HIF-1 signaling pathway;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Longevity regulating pathway;>>Insulin signaling pathway |
| <b>Gene Name :</b>           | EIF4E  |
| <b>Protein Name :</b>        | Eukaryotic translation initiation factor 4E  |
| <b>Human Gene Id :</b>       | 1977   |
| <b>Human Swiss Prot No :</b> | P06730   |
| <b>Mouse Gene Id :</b>       | 13684  |
| <b>Mouse Swiss Prot No :</b> | P63073   |
| <b>Rat Gene Id :</b>         | 117045   |
| <b>Rat Swiss Prot No :</b>   | P63074   |
| <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>Dilution :</b>            | WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200   |

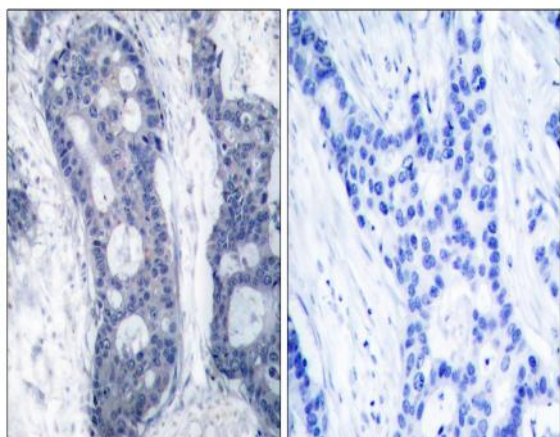
|                               |   |
|-------------------------------|---|
| <b>Purification :</b>         | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Concentration :</b>        | 1 mg/ml   |
| <b>Storage Stability :</b>    | -15°C to -25°C/1 year(Do not lower than -25°C)  |
| <b>Observed Band :</b>        | 25kD  |
| <b>Cell Pathway :</b>         | mTOR;Insulin_Receptor;  |
| <b>Background :</b>           | <p>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],</p>   |
| <b>Function :</b>             | <p>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</p> |
| <b>Subcellular Location :</b> | <p>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). .</p>  |
| <b>Expression :</b>           | Brain,Fetal brain,Placenta,Pooled,Small intestine,Testis,   |

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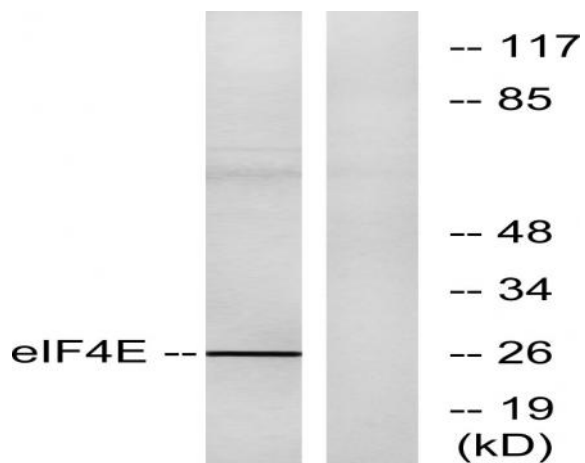
## Products Images



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.