



# eIF4E (phospho Ser209) Polyclonal Antibody

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| <b>Catalog No</b>                  | YP-Ab-03516                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Gene Name</b>                   | EIF4E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human eIF4E around the phosphorylation site of Ser209. AA range:168-217                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Specificity</b>                 | Phospho-eIF4E (S209) Polyclonal Antibody detects endogenous levels of eIF4E protein only when phosphorylated at S209.                                                                                                                                                                                                                                                                                                                                                                                                               |
| <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: 1/20000.. 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>                    | eIF 4E;eIF-4E;EIF4EL1;EIF4F;eIF-4F 25 kDa subunit;eIF4E;Eukaryotic translation initiation factor 4E;mRNA cap-binding protein                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Observed Band</b>               | 25kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Calculated Molecular Weight</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 with

### 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],

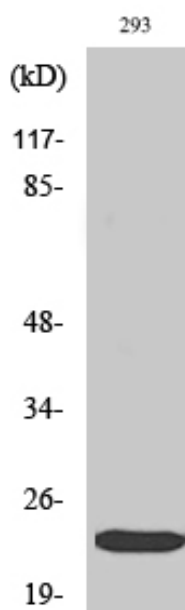
### matters needing attention

Avoid repeated freezing and thawing!

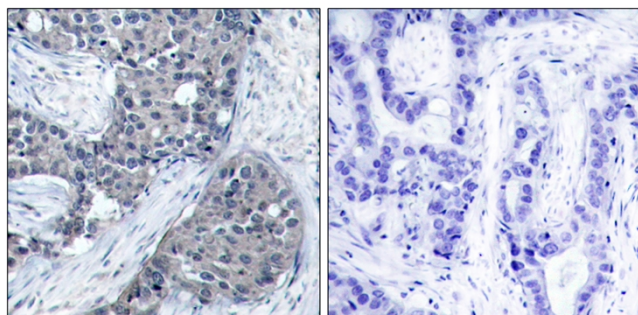
### Usage suggestions

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

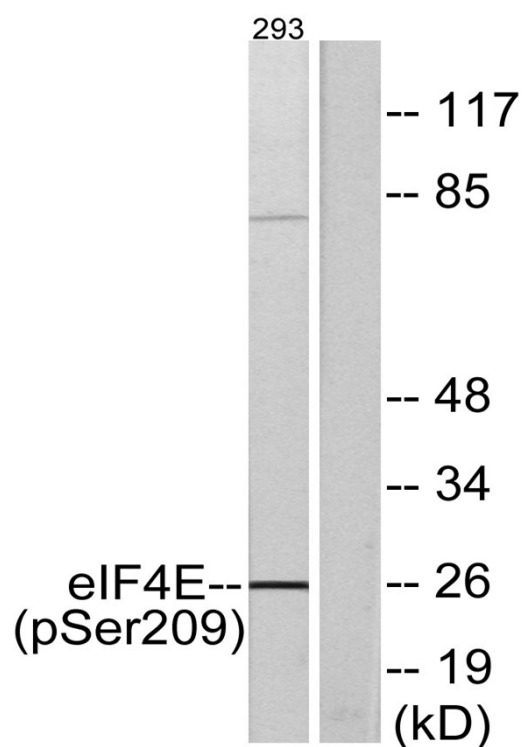
## Products Images



Western Blot analysis of various cells using Phospho-eIF4E (S209) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using eIF4E (Phospho-Ser209) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with Anisomycin 25ug/ml 30', using eIF4E (Phospho-Ser209) Antibody. The lane on the right is blocked with the phospho peptide.