

eIF4E (phospho Ser209) Polyclonal Antibody

Catalog No: YP0094

**Reactivity:** Human; Mouse; Rat

**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 around the phosphorylation site of Ser209. AA range:168-217

**Specificity:** Phospho-elF4E (S209) Polyclonal Antibody detects endogenous levels of elF4E

protein only when phosphorylated at S209.

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

Source: Polyclonal, Rabbit, IgG

1/3



**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 25kD

**Cell Pathway:** mTOR;Insulin\_Receptor;

**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-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

Subcellular Location:

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).

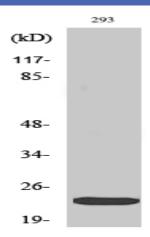
Imported in the nucleus via interaction with EIF4ENIF1/4E-T via a piggy-back

mechanism (PubMed:10856257). .

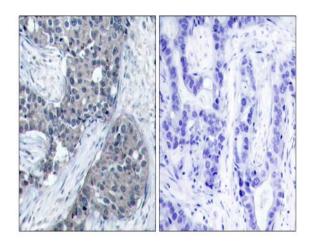
**Expression:** Brain, Fetal brain, Placenta, Pooled, Small intestine, Testis,



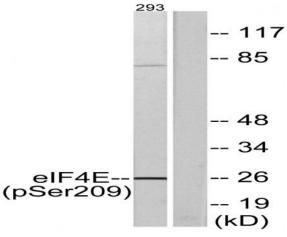
## **Products Images**



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.