Product Name: eIF4E (phospho Ser209) Rabbit Polyclonal Antibody
Catalog #: APRab04600

Summary

Production Name	eIF4E (phospho Ser209) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	EIF4E
Alternative Names	EIF4E; EIF4EL1; EIF4F; Eukaryotic translation initiation factor 4E; eIF-4E; eIF4E; eIF-4F 25 kDa subunit; mRNA cap-binding protein
Gene ID	1977.0
SwissProt ID	P06730.The antiserum was produced against synthesized peptide derived from human eIF4E around the phosphorylation site of Ser209. AA range:168-217

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000..
Molecular Weight	25kD

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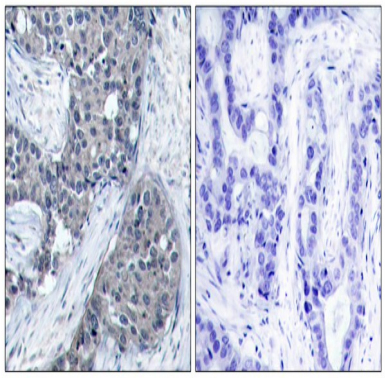
Background

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],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 EIF4G1/EIF4G3 to interact with EIF4E; insulin stimulated MAP-kinase (MAPK1 and MAPK3) phosphorylation of EIF4EBP1 causes dissociation of the complex allowing EIF4G1/EIF4G3 to bind and consequent initiation of translation. Rapamycin can attenuate insulin stimulation, mediated by FKBPs. Interacts mutually exclusive with EIF4A1 and EIF4A2. Interacts with NGDN and PIWIL2 (By similarity). Interacts with Lassa virus Z protein.,

Research Area

mTOR;Insulin_Receptor;

Image Data



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

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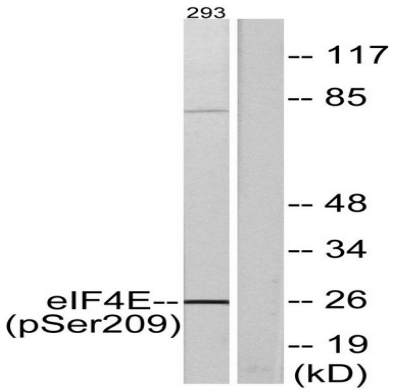
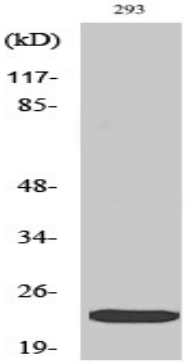


Western blot analysis of lysates from 293 cells treated with Anisomycin 25ug/ml 30 ', using eIF4E (Phospho-Ser209) Antibody. The lane on the right is blocked with the phospho peptide.



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

Note

For research use only.