
Product Name: 4E-BP1 Rabbit Polyclonal Antibody**Catalog #: APRab06333**

For research use only.

Summary

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|----------------------|---|
| Description | Rabbit polyclonal Antibody |
| Host | Rabbit |
| Application | IHC,ICC/IF,ELISA |
| Reactivity | Human,Mouse,Rat |
| Conjugation | Unconjugated |
| Modification | Unmodified |
| Isotype | IgG |
| Clonality | Polyclonal |
| Form | Liquid |
| Concentration | 1mg/ml |
| Storage | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| Shipping | Ice bags |
| Buffer | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| Purification | Affinity purification |

Application

Dilution Ratio IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000

Molecular Weight

Antigen Information

| | |
|--------------------------|---|
| Gene Name | EIF4EBP1 |
| Alternative Names | EIF4EBP1; Eukaryotic translation initiation factor 4E-binding protein 1; 4E-BP1; eIF4E-binding protein 1; Phosphorylated heat- and acid-stable protein regulated by insulin 1; PHAS-I |
| Gene ID | 1978.0 |
| SwissProt ID | Q13541 |
| Immunogen | The antiserum was produced against synthesized peptide derived from human 4E-BP1. AA range:2-51 |

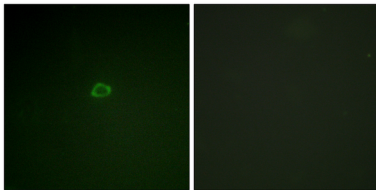
Background

eukaryotic translation initiation factor 4E binding protein 1(EIF4EBP1) Homo sapiens This gene encodes one member of a family of translation repressor proteins. The protein directly interacts with eukaryotic translation initiation factor 4E (eIF4E), which is a limiting component of the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs. Interaction of this protein with eIF4E inhibits complex assembly and represses translation. This protein is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation. [provided by RefSeq, Jul 2008],function:Regulates eIF4E activity by preventing its assembly into the eIF4F complex. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase pathway.,PTM:Phosphorylated on serine and threonine residues in response to insulin, EGF and PDGF. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the eIF4E-binding protein family.,subunit:Nonphosphorylated EIF4EBP1 competes 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 FKBP,

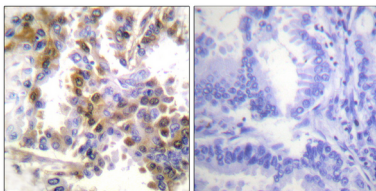
Research Area

Regulates Angiogenesis; Insulin Receptor; mTOR; ErbB/HER; PI3K/Akt; AMPK

Image Data



Immunofluorescence analysis of A549 cells, using 4E-BP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using 4E-BP1 Antibody. The picture on the right is blocked with the synthesized peptide.