

# Phospho-EIF4EBP1(T36) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP3417a

## Product Information

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<b>Application</b>	DB, E
<b>Primary Accession</b>	<a href="#">Q13541</a>
<b>Other Accession</b>	<a href="#">Q62622</a> , <a href="#">Q60876</a> , <a href="#">Q0P5A7</a> , <a href="#">NP_004086</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Bovine, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB11405
<b>Calculated MW</b>	12580

## Additional Information

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<b>Gene ID</b>	1978
<b>Other Names</b>	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, EIF4EBP1
<b>Target/Specificity</b>	This EIF4EBP1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T36 of human EIF4EBP1.
<b>Dilution</b>	DB~~1:500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Phospho-EIF4EBP1(T36) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	EIF4EBP1
<b>Function</b>	Repressor of translation initiation that regulates EIF4E activity by preventing its assembly into the eIF4F complex: hypophosphorylated form competes

with EIF4G1/EIF4G3 and strongly binds to EIF4E, leading to repress translation. In contrast, hyperphosphorylated form dissociates from EIF4E, allowing interaction between EIF4G1/EIF4G3 and EIF4E, leading to initiation of translation. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways.

#### Cellular Location

Cytoplasm. Nucleus. Note=Localization to the nucleus is unaffected by phosphorylation status. {ECO:0000250|UniProtKB:Q60876}

## Background

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EIF4EBP1 is a member of a family of translation repressor proteins. This 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. It is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation.

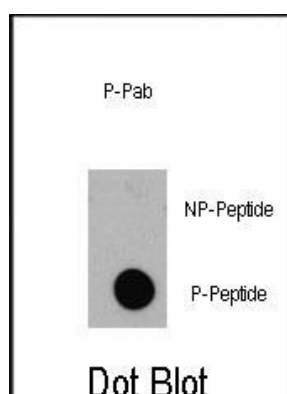
## References

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Fonseca,B.D., J. Biol. Chem. 282 (34), 24514-24524 (2007)  
Armengol,G., Cancer Res. 67 (16), 7551-7555 (2007)

## Images

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Dot blot analysis of anti-EIF4EBP1-pT36 Phospho-specific Pab (Cat.#AP3416a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.