

**EIF4EBP1 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1938b****Specification**

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**EIF4EBP1 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q13541</a>
Other Accession	<a href="#">NP_004086.1</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Calculated MW	12580

**EIF4EBP1 Antibody - Additional Information****Gene ID** 1978**Other Names**

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

**Target/Specificity**

This EIF4EBP1 monoclonal antibody is generated from mouse immunized with EIF4EBP1 recombinant protein.

**Dilution**

WB~~1:500~1000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

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.

**Precautions**

EIF4EBP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**EIF4EBP1 Antibody - Protein Information****Name** EIF4EBP1

**Function** 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

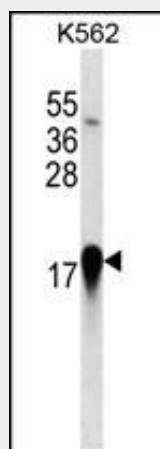
Cytoplasm. Nucleus. Note=Localization to the nucleus is unaffected by phosphorylation status.  
{ECO:0000250|UniProtKB:Q60876}

#### EIF4EBP1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### EIF4EBP1 Antibody - Images



EIF4EBP1 Antibody (Cat. #AM1938b) western blot analysis in K562 cell line lysates (35µg/lane). This demonstrates the EIF4EBP1 antibody detected the EIF4EBP1 protein (arrow).

#### EIF4EBP1 Antibody - Background

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].

**EIF4EBP1 Antibody - References**

She, Q.B., et al. Cancer Cell 18(1):39-51(2010)  
Aoyagi, M., et al. Proc. Natl. Acad. Sci. U.S.A. 107(6):2640-2645(2010)  
Naukkarinen, J., et al. PLoS Genet. 6 (6), E1000976 (2010) :  
Kumar, A., et al. PLoS ONE 5 (1), E8730 (2010) :  
Villalonga, P., et al. J. Biol. Chem. 284(51):35287-35296(2009)

**EIF4EBP1 Antibody - Citations**

- [20\(s\)-Protopanaxadiol \(PPD\) increases the radiotherapy sensitivity of laryngeal carcinoma.](#)