

**EIF4EBP2 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19950b****Specification**

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**EIF4EBP2 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q13542</a>
Other Accession	<a href="#">NP_004087.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	12939
Antigen Region	87-115

**EIF4EBP2 Antibody (C-term) - Additional Information****Gene ID** 1979**Other Names**

Eukaryotic translation initiation factor 4E-binding protein 2, 4E-BP2, eIF4E-binding protein 2, EIF4EBP2

**Target/Specificity**

This EIF4EBP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 87-115 amino acids from the C-terminal region of human EIF4EBP2.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

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.

**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**

EIF4EBP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**EIF4EBP2 Antibody (C-term) - Protein Information****Name** EIF4EBP2 ([HGNC:3289](#))

**Function** Repressor of translation initiation involved in synaptic plasticity, learning and memory formation (PubMed:[30765518](#)). Regulates EIF4E activity by preventing its assembly into the eIF4F complex: hypophosphorylated form of EIF4EBP2 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 (PubMed:[25533957](#), PubMed:[30765518](#)). EIF4EBP2 is enriched in brain and acts as a regulator of synapse activity and neuronal stem cell renewal via its ability to repress translation initiation (By similarity). Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways (By similarity).

#### Cellular Location

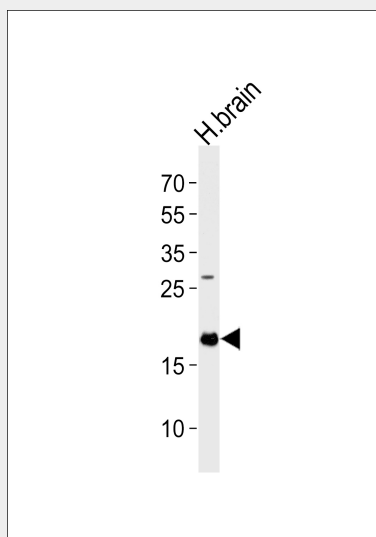
Cytoplasm {ECO:0000250|UniProtKB:P70445}. Nucleus {ECO:0000250|UniProtKB:P70445}

#### EIF4EBP2 Antibody (C-term) - 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](#)

#### EIF4EBP2 Antibody (C-term) - Images



Western blot analysis of lysate from human brain tissue lysate, using EIF4EBP2 Antibody (C-term)(Cat. #AP19950b). AP19950b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

#### EIF4EBP2 Antibody (C-term) - Background

This gene encodes a member of the eukaryotic translation initiation factor 4E binding protein family. The gene products of this family bind eIF4E and inhibit translation initiation. However,

insulin and other growth factors can release this inhibition via a phosphorylation-dependent disruption of their binding to eIF4E. Regulation of protein production through these gene products have been implicated in cell proliferation, cell differentiation and viral infection.

#### **EIF4EBP2 Antibody (C-term) - References**

Bailey, S.D., et al. Diabetes Care (2010) In press :  
Bidinosti, M., et al. J. Biol. Chem. 285(25):19402-19408(2010)  
Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :  
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)  
Gingras, A.C., et al. Virology 237(1):182-186(1997)