

4E-BP2 / EIF4EBP2 Antibody (aa99-120)
Rabbit Polyclonal Antibody
Catalog # ALS12947**Specification**

4E-BP2 / EIF4EBP2 Antibody (aa99-120) - Product Information

Application	IHC
Primary Accession	Q13542
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	13kDa KDa

4E-BP2 / EIF4EBP2 Antibody (aa99-120) - Additional Information**Gene ID** 1979**Other Names**

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

Target/Specificity

Detects 17 and 20 kD proteins, corresponding to the apparent molecular mass of PHAS-II and its phosphorylated state on SDS-PAGE immunoblots.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. For maximum product recovery, after thawing, centrifuge the product vial before removing cap.

Precautions

4E-BP2 / EIF4EBP2 Antibody (aa99-120) is for research use only and not for use in diagnostic or therapeutic procedures.

4E-BP2 / EIF4EBP2 Antibody (aa99-120) - 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

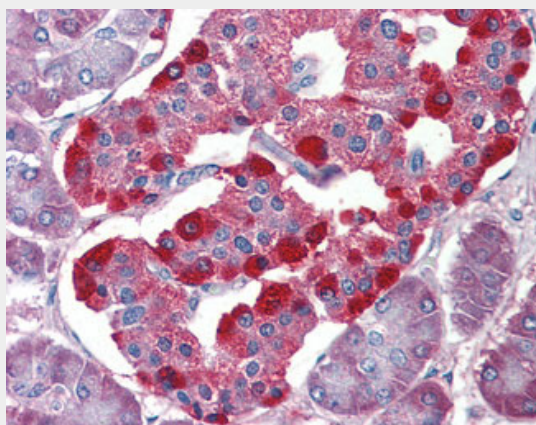
Cytoplasm {ECO:0000250|UniProtKB:P70445}. Nucleus {ECO:0000250|UniProtKB:P70445}

4E-BP2 / EIF4EBP2 Antibody (aa99-120) - 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](#)

4E-BP2 / EIF4EBP2 Antibody (aa99-120) - Images



Anti-EIF4EBP2 / 4EBP2 antibody IHC of human pancreas.

4E-BP2 / EIF4EBP2 Antibody (aa99-120) - Background

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.

4E-BP2 / EIF4EBP2 Antibody (aa99-120) - References

- Pause A., et al. Nature 371:762-767(1994).
Kalinine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Dephoure N., et al. Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).
Gauci S., et al. Anal. Chem. 81:4493-4501(2009).
Mayya V., et al. Sci. Signal. 2:RA46-RA46(2009).