

4E-BP2 / EIF4EBP2 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17167**Specification**

4E-BP2 / EIF4EBP2 Antibody - Product Information

Application	IHC-P
Primary Accession	Q13542
Other Accession	1979
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	12939

4E-BP2 / EIF4EBP2 Antibody - Additional Information**Gene ID** 1979**Other Names**

EIF4EBP2, 4E-BP2, 4EBP2, EIF4E-binding protein 2, PHASII

Target/Specificity

Human 4E-BP2 / EIF4EBP2

Reconstitution & Storage

PBS, pH 7.4, 0.03% Proclin 300, 50% glycerol. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

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

4E-BP2 / EIF4EBP2 Antibody - 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:30765518, PubMed:25533957). 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).

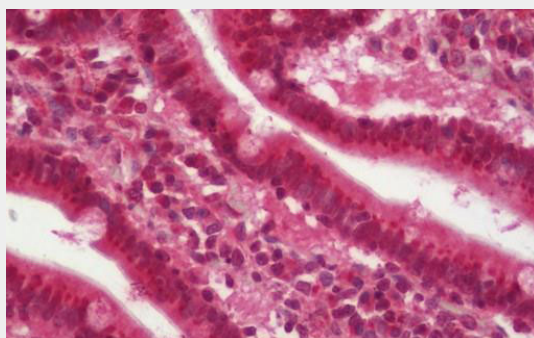
Cellular Location

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

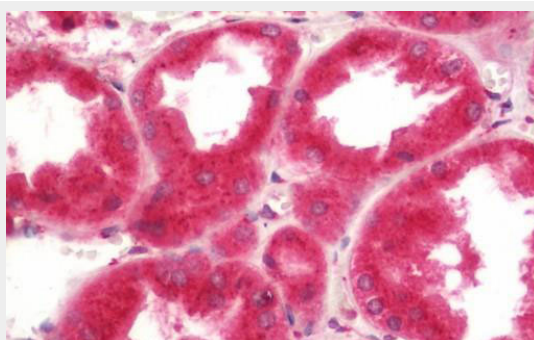
4E-BP2 / EIF4EBP2 Antibody - Protocols

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 - Images

Human Small Intestine: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)

4E-BP2 / EIF4EBP2 Antibody - 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 - References

Pause A.,et al.Nature 371:762-767(1994).
Kalnine 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).