

4E-BP2 / EIF4EBP2 Antibody

Rabbit Polyclonal Antibody Catalog # ALS16484

Specification

4E-BP2 / EIF4EBP2 Antibody - Product Information

Application IHC
Primary Accession Q13542
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 13kDa KDa

4E-BP2 / EIF4EBP2 Antibody - Additional Information

Gene ID 1979

Other Names

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

Target/Specificity

Human 4E-BP2 / EIF4EBP2

Reconstitution & Storage

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

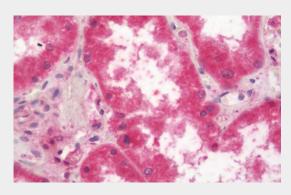
Cytoplasm {ECO:0000250|UniProtKB:P70445}. Nucleus {ECO:0000250|UniProtKB:P70445}

4E-BP2 / EIF4EBP2 Antibody - Protocols

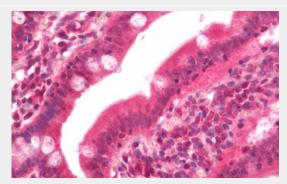
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

4E-BP2 / EIF4EBP2 Antibody - Images



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



Human Small Intestine: 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.