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# eIF4EBP1 Antibody

Rabbit mAb
Catalog # AP91014

## Product Information

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|---|---|
| **Application** | WB, IHC, IF, FC, ICC, IP, IHF |
| **Primary Accession** | Q13541 |
| **Reactivity** | Rat, Human, Mouse |
| **Clonality** | Monoclonal |
| **Other Names** | 4E-BP1; 4EBP1; BP-1; MGC4316; PHAS-I; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 12580 |

## Additional Information

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|---|---|
| **Dilution** | WB 1:1000~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human eIF4EBP1 |
| **Description** | Translation repressor protein 4E-BP1 (also known as PHAS-1) inhibits cap-dependent translation by binding to the translation initiation factor eIF4E. Hyperphosphorylation of 4E-BP1 disrupts this interaction and results in activation of cap-dependent translation. Both the PI3 kinase/Akt pathway and FRAP/mTOR kinase regulate 4E-BP1 activity. |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

## Protein Information

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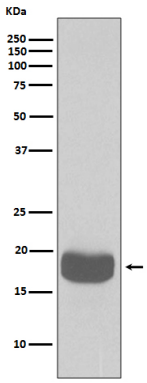
|---|---|
| **Name** | EIF4EBP1 |
| **Function** | Repressor of translation initiation that regulates EIF4E activity by preventing its assembly into the eIF4F complex: hypophosphorylated form competes with EIF4G1/EIF4G3 and strongly binds to EIF4E, leading to repress translation. In contrast, hyperphosphorylated 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} |

## Images




Western blot analysis of eIF4EBP1 expression in K562 cell lysate.

Image not found : 202311/AP91014-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using eIF4EBP1 Antibody.

Image not found : 202311/AP91014-IF.jpg

Immunofluorescent analysis of HeLa cells, using eIF4EBP1 Antibody.