

eIF4EBP1 Antibody

Rabbit mAb Catalog # AP91014

Product Information

Application WB, IHC, IF, FC, ICC, IP, IHF

Primary Accession <u>Q13541</u>

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names 4E-BP1; 4EBP1; BP-1; MGC4316; PHAS-I;

IsotypeRabbit IgGHostRabbitCalculated MW12580

Additional Information

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

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

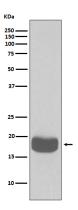
translation. In contrast, hyperphosphorylated form dissociates from EIF4E, allowing interaction between EIF4G1/EIF4G3 and EIF4E, leading to initiation of translation. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and

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.

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