

## Rabbit anti-Human, Mouse 4E-BP1 Polyclonal Antibody | anti-EIF4EBP1 antibody

4E-BP1 Antibody

|                              |                       |                                   |                                                                 |
|------------------------------|-----------------------|-----------------------------------|-----------------------------------------------------------------|
| CATALOG #<br><b>AAA39931</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human, Mouse</b> | APPLICATIONS<br><b>Immunocytochemistry, Western Blot, ELISA</b> |
|------------------------------|-----------------------|-----------------------------------|-----------------------------------------------------------------|

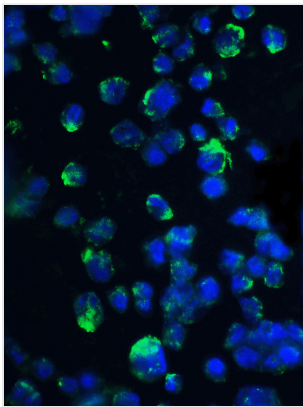
### PRODUCT SYNONYMS

4E-BP1; Polyclonal Antibody; 4E-BP1 Antibody; BP-1; 4EBP1; PHAS-I; Eukaryotic translation initiation factor 4E-binding protein 1; Phosphorylated heat- and acid-stable protein regulated by insulin 1; eukaryotic translation initiation factor 4E binding protein 1; anti-EIF4EBP1 antibody

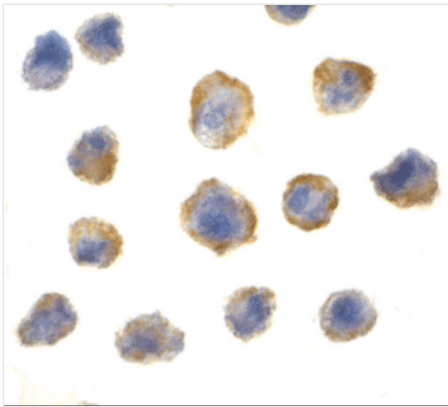
### PRODUCT SPECIFICATIONS

|                                                    |                                                                                                                                                                                                                                                              |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                               | Rabbit                                                                                                                                                                                                                                                       |
| Reactivity                                         | Human, Mouse                                                                                                                                                                                                                                                 |
| Clonality                                          | Polyclonal                                                                                                                                                                                                                                                   |
| Isotype                                            | IgG                                                                                                                                                                                                                                                          |
| Purity/Purification                                | 4E-BP1 Antibody is affinity chromatography purified via peptide column.                                                                                                                                                                                      |
| Form/Format                                        | Liquid                                                                                                                                                                                                                                                       |
| Concentration                                      | 1 mg/mL (varies by lot)                                                                                                                                                                                                                                      |
| Sequence Length                                    | 118                                                                                                                                                                                                                                                          |
| Applicable Applications for anti-EIF4EBP1 antibody | ICC (Immunocytochemistry), WB (Western Blot), ELISA                                                                                                                                                                                                          |
| Conjugate                                          | Unconjugated                                                                                                                                                                                                                                                 |
| Immunogen                                          | 4E-BP1 antibody was raised against a 14 amino acid synthetic peptide from near the carboxy terminus of human 4E-BP1.                                                                                                                                         |
| Buffer                                             | 4E-BP1 Antibody is supplied in PBS containing 0.02% sodium azide.                                                                                                                                                                                            |
| Preparation and Storage                            | 4E-BP1 antibody can be stored at 4 degree C for three months and -20 degree C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |

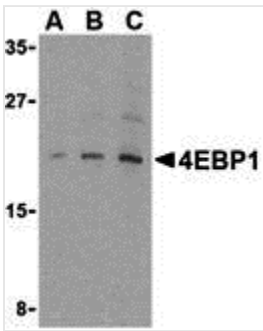
IMAGES



**IF (Immunofluorescence)**  
Immunofluorescence of 4E-BP1 in 3T3 cells with 4E-BP1 antibody at 20 &#956;g/ml.Green: 4E-BP1 Antibody (3513)Blue: DAPI staining



**ICC (Immunocytochemistry)**  
Immunocytochemistry of 4E-BP1 in 3T3 cells with 4E-BP1 antibody at 2 &#956;g/mL.



**WB (Western Blot)**  
Western blot analysis of 4E-BP1 in 3T3 cell lysate with 4E-BP1 antibody at (A) 2.5, (B) 5 and (C) 10 &#956;g/mL.

ADDITIONAL INFORMATION

Related Product Information for anti-EIF4EBP1 antibody

4E-BP1 Antibody: The translation of mRNA in eukaryotic cells is regulated by the presence of amino acids through multiple mechanisms. One such mechanism involves the evolutionarily conserved serine/threonine kinase TOR (Target of rapamycin, also known as mTOR), which regulates cell growth and cell cycle through its ability to integrate signals from nutrient levels and growth factors. One downstream target of TOR is the eukaryotic initiation factor 4E binding protein 1 (4E-BP1) whose phosphorylation prevents its association with eIF4E, preferentially stimulating translation of mRNAs containing long, highly structured 5'-UTRs. Rapamycin inhibits TOR resulting in reduced cell growth and reduced rates of cell cycle and cell proliferationl, at least in part by inhibiting the activity of TOR towards 4E-BP1.

NCBI AND UNIPROT INFORMATION

|                                  |                                                               |
|----------------------------------|---------------------------------------------------------------|
| NCBI GI #                        | 4758258                                                       |
| NCBI GeneID                      | 1978                                                          |
| NCBI Accession #                 | NP_004086                                                     |
| NCBI GenBank Nucleotide #        | NM_004095.3                                                   |
| UniProt Accession #              | Q13541; Q6IBN3; B2R502; D3DSW8                                |
| Molecular Weight                 | 12,580 Da                                                     |
| NCBI Official Full Name          | eukaryotic translation initiation factor 4E-binding protein 1 |
| NCBI Official Synonym Full Names | eukaryotic translation initiation factor 4E binding protein 1 |
| NCBI Official Symbol             | EIF4EBP1                                                      |

|                                      |                                                                                                                                                             |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NCBI Official Synonym Symbols</b> | BP-1; 4EBP1; 4E-BP1; PHAS-I                                                                                                                                 |
| <b>NCBI Protein Information</b>      | eukaryotic translation initiation factor 4E-binding protein 1; eIF4E-binding protein 1; phosphorylated heat- and acid-stable protein regulated by insulin 1 |
| <b>UniProt Protein Name</b>          | Eukaryotic translation initiation factor 4E-binding protein 1                                                                                               |
| <b>UniProt Gene Name</b>             | <b>EIF4EBP1</b>                                                                                                                                             |
| <b>UniProt Synonym Gene Names</b>    | 4E-BP1; eIF4E-binding protein 1; PHAS-I                                                                                                                     |
| <b>UniProt Entry Name</b>            | 4EBP1_HUMAN                                                                                                                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/4e-bp1-antibody-immunocytochemistry-western-blot-elisa/39931>