

## 4E-BP1 Antibody

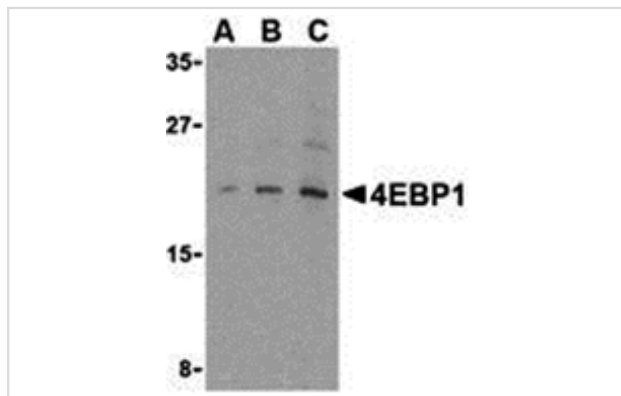
Catalog No: #24313

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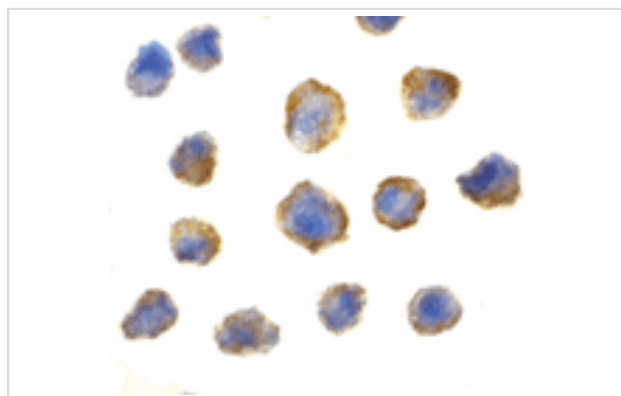
## Description

Product Name	4E-BP1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	E WB ICC
Species Reactivity	Hu Ms
Immunogen Type	Peptide
Immunogen Description	Raised against a 14 amino acid peptide from near the carboxy terminus of human 4E-BP1.
Target Name	4E-BP1
Other Names	initiation factor 4E binding protein 1
Accession No.	NP_004086
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for 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



Western blot analysis of 4E-BP1 in 3T3 cell lysate with 4E-BP1 antibody at (A) 2.5, (B) 5 and (C) 10 ug/mL.



Immunocytochemistry of 4E-BP1 in 3T3 cells with 4E-BP1 antibody at 2 ug/mL.

## Background

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 proliferation, at least in part by inhibiting the activity of TOR towards 4E-BP1.

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.