

Datasheet for ABIN499179

anti-eIF4EBP1 antibody (C-Term)

2 Images



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Overview

Quantity:	0.1 mg
Target:	eIF4EBP1 (EIF4EBP1)
Binding Specificity:	C-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This eIF4EBP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Enzyme Immunoassay (EIA)

Product Details

Immunogen:	A 14 amino acid peptide from near the carboxy-terminus of Human 4E-BP1
Isotype:	IgG
Specificity:	4E-BP1 antibody was raised against a 14 amino acid peptide from near the carboxy-terminus of human 4E-BP1.
Purification:	Affinity chromatography purified via peptide column

Target Details

Target:	eIF4EBP1 (EIF4EBP1)
Alternative Name:	EIF4EBP1 / 4E-BP1 (EIF4EBP1 Products)
Background:	The translation of mRNA in eukaryotic cells is regulated by the presence of amino acids

Target Details

through multiple mechanisms (reviewed in 1). 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 (reviewed in 2). 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 (1). Rapamycin inhibits TOR resulting in reduced cell growth and reduced rates of cell cycle and cell proliferation (reviewed in 3), at least in part by inhibiting the activity of TOR towards 4E-BP1. Synonyms: Eukaryotic translation initiation factor 4E-binding protein 1, PHAS-1, PHAS-I, PHAS1, Phosphorylated heat- and acid-stable protein regulated by insulin 1, eIF4E-binding protein 1

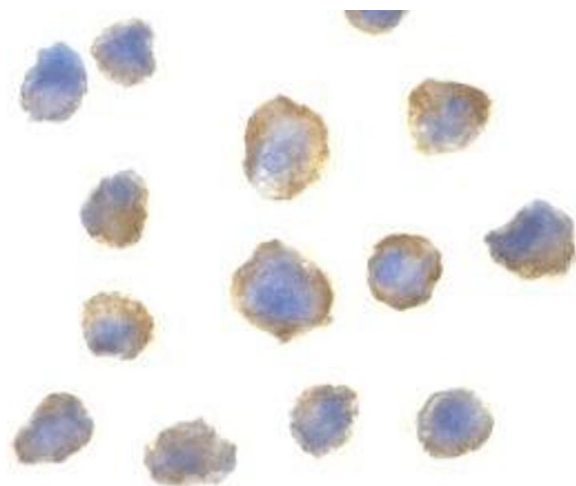
Gene ID:	1978
NCBI Accession:	NP_004086
UniProt:	Q13541
Pathways:	MAPK Signaling , PI3K-Akt Signaling , RTK Signaling , AMPK Signaling , Regulation of Cell Size , BCR Signaling

Application Details

Application Notes:	ELISA. Western Blot: 4E-BP1 antibody can be used for the detection of 4E-BP1 at 2.5 - 5 µg/mL. Immunofluorescence. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Restrictions:	For Research Use only

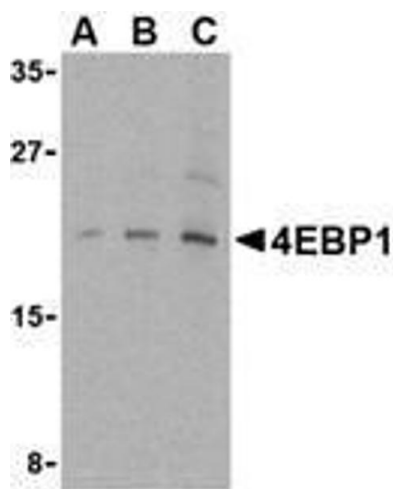
Handling

Buffer:	PBS containing 0.02 % Sodium Azide as preservative
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C.



Immunofluorescence

Image 1. Immunocytochemistry of AP30001PU-N 4E-BP1 antibody in 3T3 cells with 4E-BP1 antibody at 2 µg/ml.



Western Blotting

Image 2. Western blot analysis of AP30001PU-N 4E-BP1 antibody in 3T3 cell lysate with 4E-BP1 antibody at (A) 2.5, (B) 5 and (C) 10 µg/ml.