

4E-BP1 Antibody

Subcategory: Rabbit Polyclonal Antibody

Cat. No.: 253533

Unit: 0.1 mg

Description:

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.

Isotype: Rabbit Ig

Applications: E, WB, ICC

Species Reactivity: H, M

Format: Each vial contains 0.1 ml IgG in PBS pH 7.4 with 0.02% sodium azide. Antibody was purified by immunogen affinity chromatography.

Alternate Names: 4E-BP1; initiation factor 4E binding protein 1

Accession No.: NP_004086

Antigen: KLH-conjugated synthetic peptide encompassing a sequence within human 4E-BP1.

Application Notes: E: 1:500-1:1,000; WB: 1:100-1:500; ICC: 1:100-1:500

Storage: Store at -20°C. Minimize freeze-thaw cycles.

Product is guaranteed one year from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.