

Anti-4E-BP1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

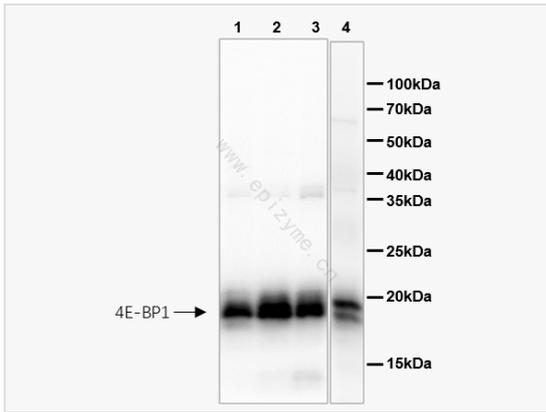
Catalog # R012956

Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:2,000; IHC-P 1:200; IF 1:100
Host	Rabbit
Clonality	Monoclonal
Clone No.	17M14K16
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human eIF4EBP1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-4E-BP1 antibody [17M14K16] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	EIF4EBP1, Eukaryotic translation initiation factor 4E-binding protein 1, 4E-BP1, eIF4E-binding protein 1, Phosphorylated heat- and acid-stable protein regulated by insulin 1, PHAS-I.
Calculated MW	Calculated MW: 15-20 kDa; Observed MW: 18 kDa
Uniprot ID	Q13541
Gene ID	1978
Background	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.



Western Blot - Anti-4E BP1 Rabbit mAb [17M14K16]

All lanes: R012956 at 1:1,000 dilution

Lane 1: HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysates

Lane 2: HCT116 (human colorectal cancer epithelial cell) whole cell lysates

Lane 3: SW620 (human colorectal cancer epithelial cell) whole cell lysates

Lane 4: Balb/c mouse heart whole tissue lysates

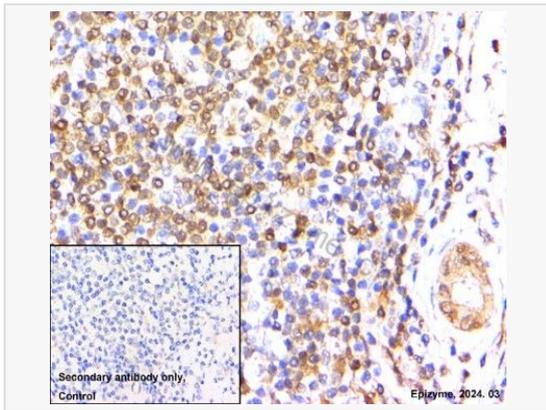
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 15-20 kDa

Observed band size: 18 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-4E BP1 Rabbit mAb [17M14K16]

Sample: Paraformaldehyde-fixed, paraffin embedded human hepatoma carcinoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R012956 at 1:200 dilution

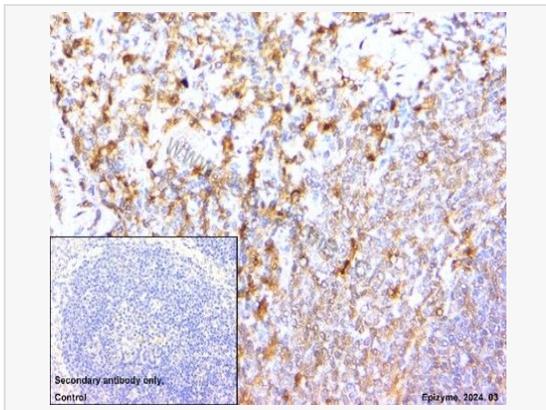
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-4E BP1 Rabbit mAb [17M14K16]

Sample: Paraformaldehyde-fixed, paraffin embedded human spleen cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R012956 at 1:200 dilution

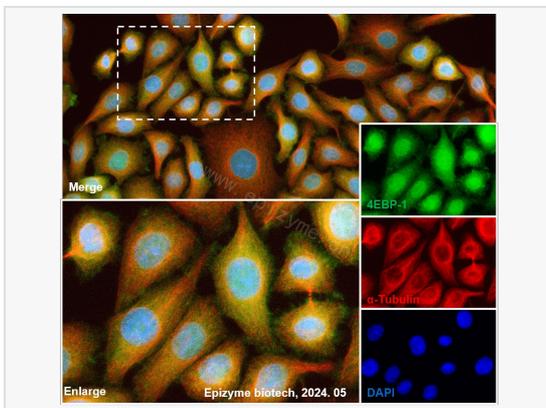
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-4E BP1 Rabbit mAb [17M14K16]

Sample: A431 cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R012956 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and

Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).