

eIF4EBP1 Rabbit mAb

Catalog No: #49297



Package Size: #49297-1 50ul #49297-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

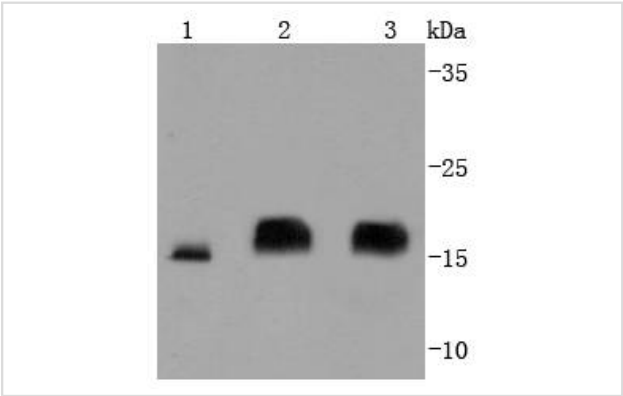
Description

Product Name	eIF4EBP1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JJ09-25
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	4E-BP1 antibody 4EBP1 antibody 4EBP1_HUMAN antibody BP 1 antibody eIF4E binding protein 1 antibody eIF4E-binding protein 1 antibody Eif4ebp1 antibody Eukaryotic translation initiation factor 4E-binding protein 1 antibody PHAS-I antibody PHASI antibody Phosphorylated heat- and acid-stable protein regulated by insulin 1 antibody
Accession No.	Swiss-Prot#:Q13541
Calculated MW	13 kDa
SDS-PAGE MW	17 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

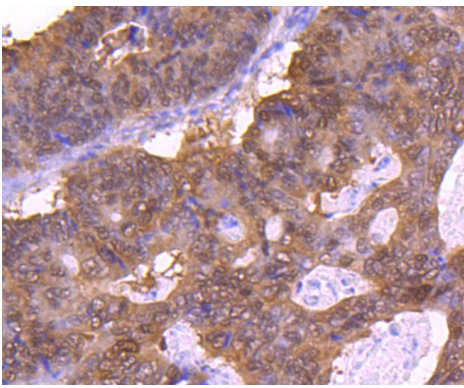
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

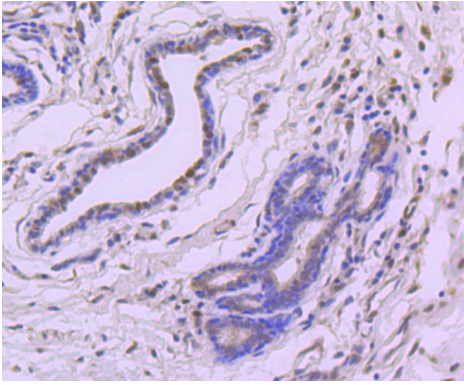
Images



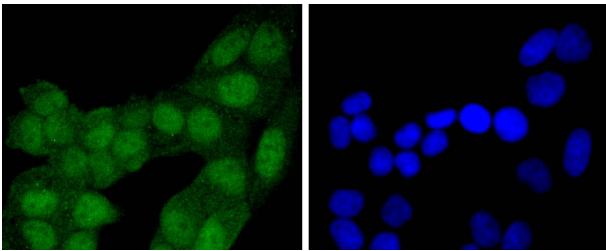
Western blot analysis of eIF4EBP1 on different lysates using anti-eIF4EBP1 antibody at 1/1,000 dilution. Positive control:
Lane 1: K562 Lane 2: HepG2 Lane 3: 293



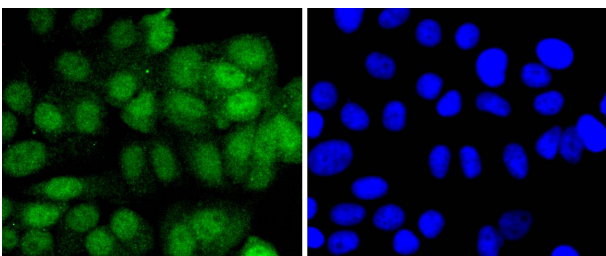
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-eIF4EBP1 antibody. Counter stained with hematoxylin.



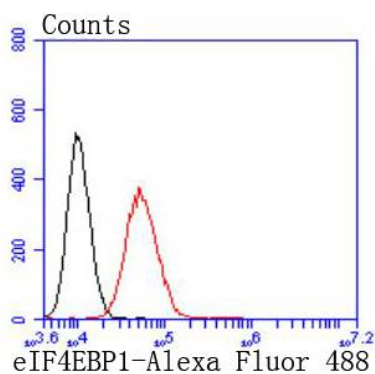
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-eIF4EBP1 antibody. Counter stained with hematoxylin.



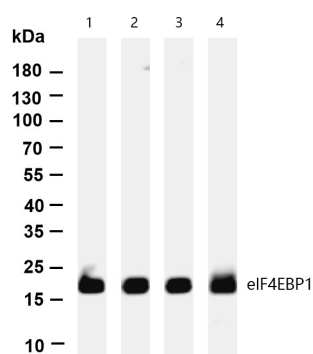
ICC staining eIF4EBP1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining eIF4EBP1 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of NIH/3T3 cells with eIF4EBP1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody

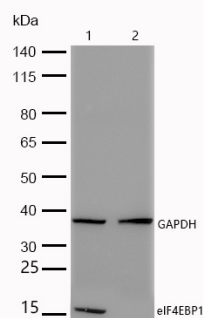


All lanes : eIF4EBP1 Rabbit mAb at 1/1k dilution

Lane 1 : JK cell lysate
Lane 2 : C6 cell lysate
Lane 3 : 3T3 cell lysate
Lane 4 : 293 cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 13kDa Observed band size: 17kDa



All lanes : eIF4EBP1 Rabbit mAb at 1/1k dilution

Lane 1 : Wild-type HAP1 cell lysate
Lane 2 : eIF4EBP1 knockout HAP1 cell lysate

Lysates/proteins at 20 µg per lane.

Background

The translation of proteins from eukaryotic mRNA is initiated by the multisubunit complex eIF-4F, which associates with the mRNA 5' cap structure. eIF-4E, a component of eIF-4F, is responsible for binding to the 5' cap structure and for the assembly of the eIF-4F complex. The regulatory protein 4E-BP1, also referred to as PHAS-I, inhibits eIF-4E function. Phosphorylation of 4E-BP1 by S6 kinase p70, MAP kinases or PKCs causes the disassociation of 4E-BP1 from eIF-4E, promoting translation. A protein that is functionally related to 4E-BP1, designated 4E-BP2, also associates with eIF-4E.

References

1. Hu Y et al. MiR-99a antitumor activity in human breast cancer cells through targeting of mTOR expression. PLoS One 9:e92099 (2014).
2. Zhang W et al. Activation of mTOR in the spinal cord is required for pain hypersensitivity induced by chronic constriction injury in mice. Pharmacol Biochem Behav 111:64-70 (2013).

Published Papers

Chao Zhu;Junru Zhu;Quyu Duan;Yue Jiang;Hao Yin;Yonglong He;Fu Li;XiaoPeng An et al., Exploration of the lactation function of protein phosphorylation sites in goat mammary tissues by phosphoproteome analysis, , (2021)

[PMID:34583635](#)

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