

For Research Use Only

# 4EBP1 Polyclonal antibody

Catalog Number: 13988-1-AP

3 Publications



## Basic Information

### Catalog Number:

13988-1-AP

### Size:

500 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5056

### GenBank Accession Number:

BC004459

### GeneID (NCBI):

1978

### UNIPROT ID:

Q13541

### Full Name:

eukaryotic translation initiation

factor 4E binding protein 1

### Calculated MW:

118 aa, 12 kDa

### Observed MW:

15-24 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IF

### Species Specificity:

human

### Cited Species:

human, mouse

### Positive Controls:

WB : A549 cells, HL-60 cells, HeLa cells, HepG2 cells

IHC : human stomach tissue,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Eukaryotic translation initiation factor 4E-binding protein 1(4EBP1), is a member of 4EBPs family, which regulate the translation of a subset of mRNA by competing with eIF4G for binding to eIF4E, thus preventing the assembly of the eIF4F complex. The eIF4F facilitates the recruitment of other translation initiation factors to form the complex and then initiates cap-dependent translation. 4EBP1 also mediates the regulation of protein translation by growth factors, hormones and other stimuli that signal through the MAP kinase and mTORC1 pathways. There are three forms of 4EBP1, alpha, beta and gamma. typical pattern seen on Western blots for phosphorylated heat-acid stable protein 4EBP1 from rat gastrocnemius muscle. Three distinct bands are noted, with the most rapidly migrating band having an apparent molecular mass of ; 20 kDa and the slowest migrating band of; 24 kDa. The 3 bands are designated by convention as alpha, beta and gamma. (PMID: 10913029)

## Notable Publications

Author	Pubmed ID	Journal	Application
Guiqin Huang	39353532	J Adv Res	WB
Rong Li	36944636	Cell Death Discov	IF
Baomei Xia	33307051	J Ethnopharmacol	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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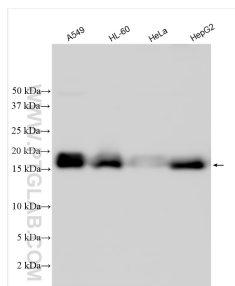
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E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

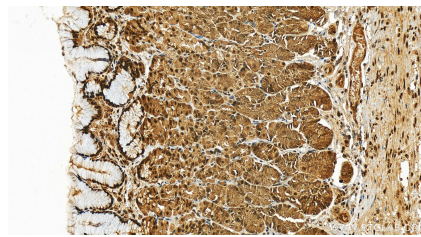
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 13988-1-AP (4EBP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 13988-1-AP (4EBP1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).