

## 4E-BP1 (Phospho Ser65) Rabbit pAb

CatalogNo: YP0618 **Orthogonal Validated** 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 13kD (Calculated)
- 15kD (Observed)

#### Isotype

- IgG

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Recommended Dilution Ratios

**WB 1:500-1:2000****IHC 1:100-1:300****ELISA 1:10000****IF 1:50-200**

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human 4E-BP1 around the phosphorylation site of Ser64. AA range:30-79

## Specificity

Phospho-4E-BP1 (S64) Polyclonal Antibody detects endogenous levels of 4E-BP1 protein only when phosphorylated at S64. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):RNsPV

## Target Information

**Gene name** EIF4EBP1

**Protein Name** Eukaryotic translation initiation factor 4E-binding protein 1

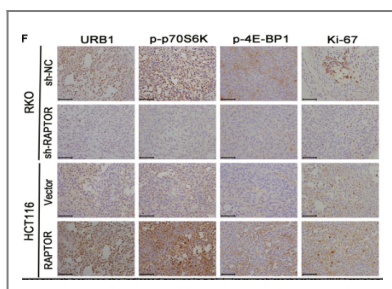
Organism	Gene ID	UniProt ID
Human	<a href="#">1978;</a>	<a href="#">Q13541;</a>
Mouse	<a href="#">13685;</a>	<a href="#">Q60876;</a>
Rat	<a href="#">116636;</a>	<a href="#">Q62622;</a>

**Cellular Localization** Nucleus

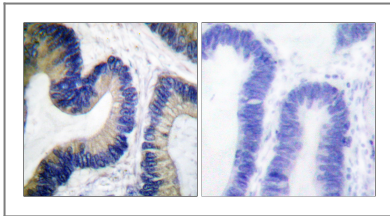
**Tissue specificity** Colon, Epithelium, Lung, Placenta, Platelet,

**Function** Function:Regulates eIF4E activity by preventing its assembly into the eIF4F complex. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase pathway.,PTM:Phosphorylated on serine and threonine residues in response to insulin, EGF and PDGF. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the eIF4E-binding protein family.,subunit:Nonphosphorylated EIF4EBP1 competes with EIF4G1/EIF4G3 to interact with EIF4E; insulin stimulated MAP-kinase (MAPK1 and MAPK3) phosphorylation of EIF4EBP1 causes dissociation of the complex allowing EIF4G1/EIF4G3 to bind and consequent initiation of translation. Rapamycin can attenuate insulin stimulation, mediated by FKBP.,

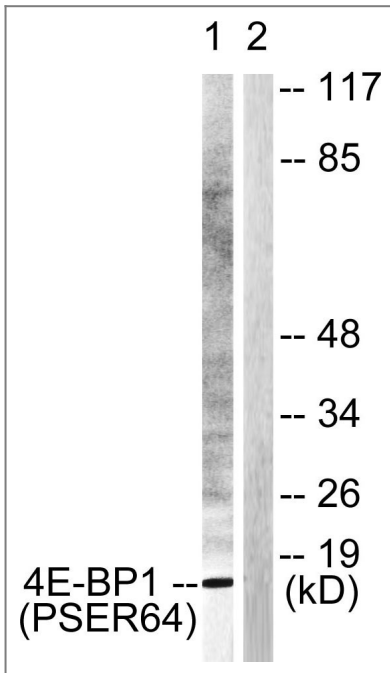
## Validation Data



Wang, Tao, et al. "RAPTOR promotes colorectal cancer proliferation by inducing mTORC1 and upregulating ribosome assembly factor URB1." *Cancer medicine* 9.4 (2020): 1529-1543.



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using 4E-BP1 (Phospho-Ser64) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with Insulin 0.01U/ml 15', using 4E-BP1 (Phospho-Ser64) Antibody. The lane on the right is blocked with the phospho peptide.

## Contact information

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Please scan the QR code to access additional product information:  
**4E-BP1 (Phospho Ser65) Rabbit pAb**

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