

**Phospho-4E-BP1 (Ser65)**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2503a****Specification**

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**Phospho-4E-BP1 (Ser65) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC, ICC, E        |
| Primary Accession | <a href="#">Q13541</a> |
| Reactivity        | Human                  |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |
| Isotype           | Mouse IgG1             |
| Calculated MW     | 12.6kDa KDa            |

**Immunogen**

Synthesized peptide of human Phospho-4E-BP1 (Ser65).

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**Phospho-4E-BP1 (Ser65) - Additional Information**

**Gene ID** 1978

**Other Names**

EIF4EBP1; BP-1; 4EBP1; 4E-BP1; PHAS-I

**Dilution**

WB~~1:1000  
IHC~~1/200 - 1/1000  
ICC~~ 1/100 - 1/500  
E~~ 1/10000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Phospho-4E-BP1 (Ser65) is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-4E-BP1 (Ser65) - Protein Information**

**Name** EIF4EBP1

**Function**

Repressor of translation initiation that regulates EIF4E activity by preventing its assembly into the eIF4F complex: hypophosphorylated form competes with EIF4G1/EIF4G3 and strongly binds to

EIF4E, leading to repress translation. In contrast, hyperphosphorylated form dissociates from EIF4E, allowing interaction between EIF4G1/EIF4G3 and EIF4E, leading to initiation of translation. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways.

#### Cellular Location

Cytoplasm. Nucleus. Note=Localization to the nucleus is unaffected by phosphorylation status.  
{ECO:0000250|UniProtKB:Q60876}

#### Phospho-4E-BP1 (Ser65) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Phospho-4E-BP1 (Ser65) - Images

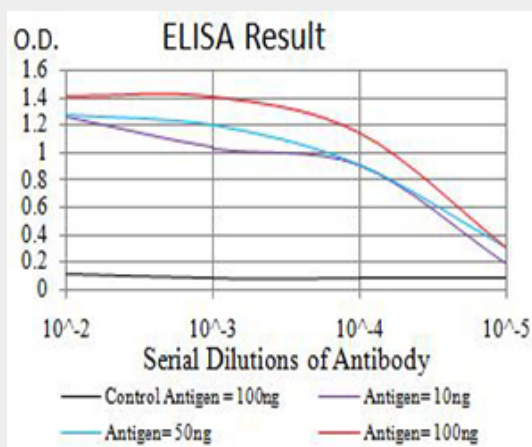


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

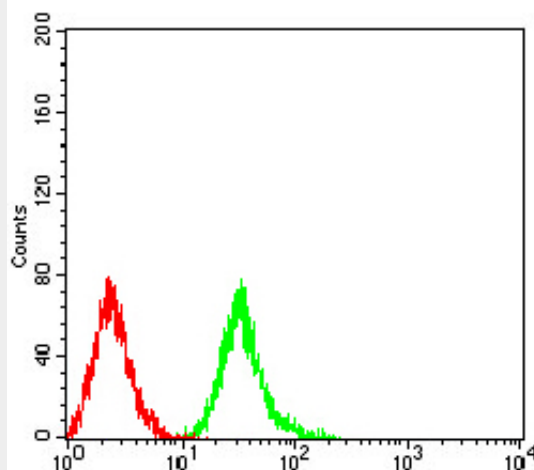


Figure 5:Flow cytometric analysis of Jurkat cells using Phospho-4E-BP1 (Ser65) mouse mAb (green) and negative control (red).

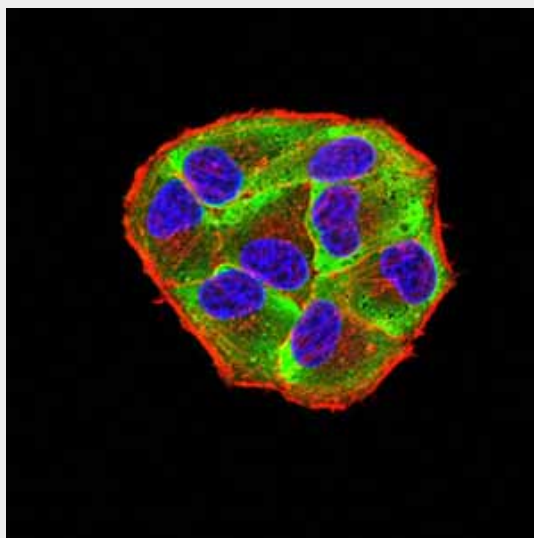


Figure 2:Immunofluorescence analysis of HeLa cells using Phospho-4E-BP1 (Ser65) mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

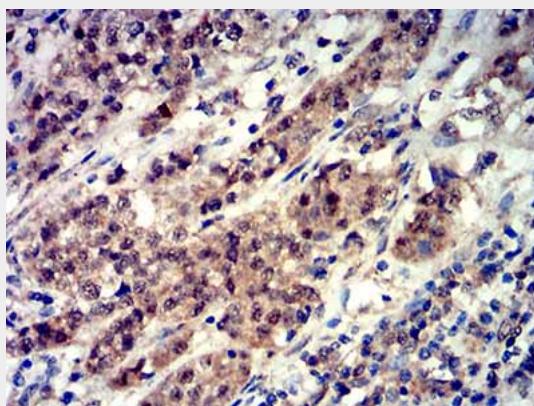


Figure 3:Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using Phospho-4E-BP1 (Ser65) mouse mAb with DAB staining.

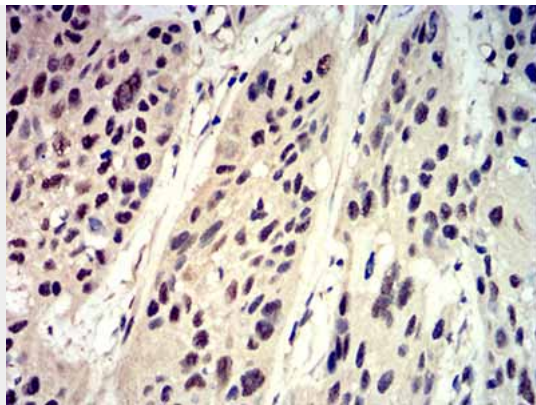


Figure 4:Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using Phospho-4E-BP1 (Ser65) mouse mAb with DAB staining.

#### **Phospho-4E-BP1 (Ser65) - References**

- 1.Sci Signal. 2015 Nov 17;8(403):ra116.2.Oncotarget. 2015 Sep 15;6(27):24092-104.