

Phospho-4E-BP1 (Ser65)

Purified Mouse Monoclonal Antibody Catalog # AO2503a

Specification

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

Application WB, IHC, ICC, E

Primary Accession
Reactivity
Host
Clonality
Rotype
Calculated MW

Mouse
Mouse IgG1
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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho-4E-BP1 (Ser65) - Images

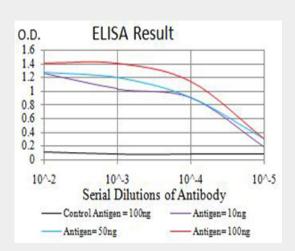


Figure 1:Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



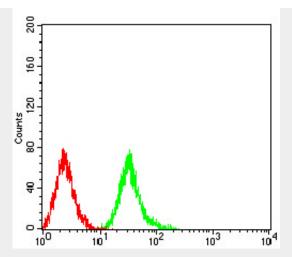


Figure 5:Flow cytometric analysis of Jurkat cells using Phospho-4E-BP1 (Ser65) mouse mAb (green) and negative control (red).

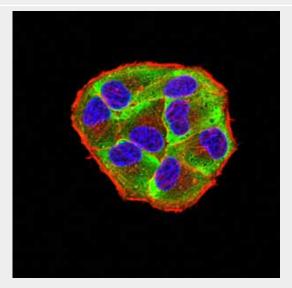


Figure 2:Immunofluorescence analysis of Hela cells using Phospho-4E-BP1 (Ser65) mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

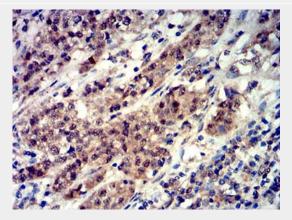


Figure 3:Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using Phospho-4E-BP1 (Ser65) mouse mAb with DAB staining.



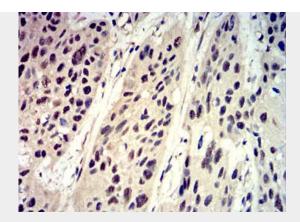


Figure 4:Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using Phospho-4E-BP1 (Ser65) mouse mAb with DAB staining.

Phospho-4E-BP1 (Ser65) - References

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