10320 Camino Santa Fe, Suite G
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KD-Validated Anti-Phospho-4E BP1 (Thr46) Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1815

Specification

KD-Validated Anti-Phospho-4E BP1 (Thr46) Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q13541
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 13 kDa, observed, 15-20 kDa KDa**
Gene Name	**EIF4EBP1**
Aliases	**EIF4EBP1; Eukaryotic Translation Initiation Factor 4E Binding Protein 1; PHAS-I ; 4E-BP1; Phosphorylated Heat- And Acid-Stable Protein Regulated By Insulin 1; Eukaryotic Translation Initiation Factor 4E-Binding Protein 1; EIF4E-Binding Protein 1; 4EBP1; BP-1**
Immunogen	**A synthesized peptide derived from human Phospho-4E BP1 (Thr46)**

KD-Validated Anti-Phospho-4E BP1 (Thr46) Rabbit Monoclonal Antibody - Additional Information

Gene ID	**1978**

Other Names
Eukaryotic translation initiation factor 4E-binding protein 1, 4E-BP1, eIF4E-binding protein 1, Phosphorylated heat- and acid-stable protein regulated by insulin 1, PHAS-I, EIF4EBP1

KD-Validated Anti-Phospho-4E BP1 (Thr46) Rabbit Monoclonal Antibody - 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.

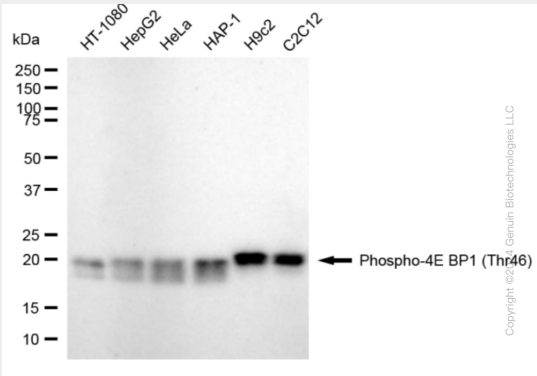
{ECO:0000250|UniProtKB:Q60876}

KD-Validated Anti-Phospho-4E BP1 (Thr46) Rabbit Monoclonal Antibody - Protocols

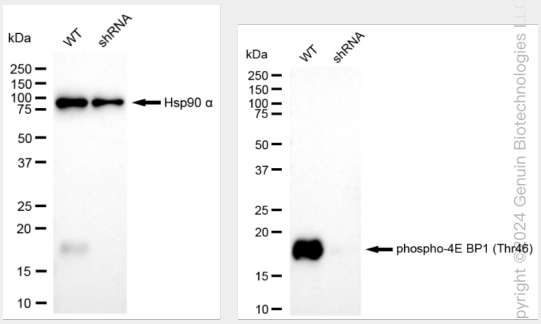
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Phospho-4E BP1 (Thr46) Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-phospho-4E BP1 (Thr46) antibody (Cat#AGI1815). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-phospho-4E BP1 (Thr46) antibody (Cat#AGI1815, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-phospho-4E BP1 (Thr46) antibody (Cat#AGI1815). Phospho-4E BP1 (Thr46) expression in wild-type (WT) and EIF4EBP1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-phospho-4E BP1 (Thr46) antibody (Cat#AGI1815, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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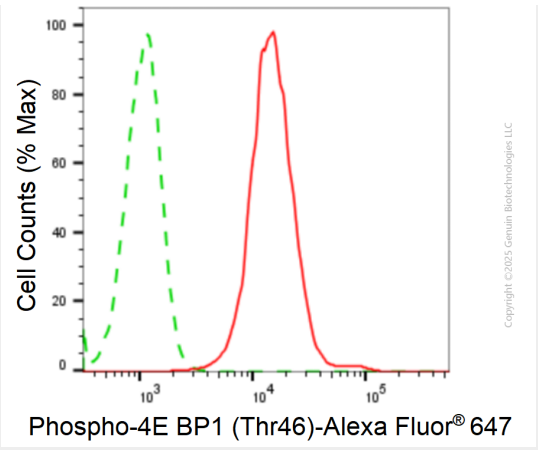
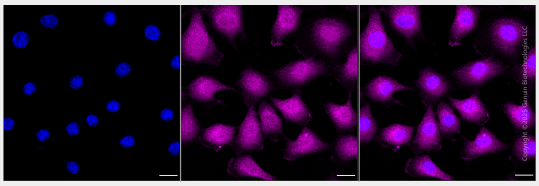


Flow cytometric analysis of phospho-4E BP1 (Thr46) expression in C2C12 cells using anti-phospho-4E BP1 (Thr46) antibody (Cat#AGI1815, 1:2,000). Green, isotype control; red, phospho-4E BP1 (Thr46).



Immunocytochemical staining of C2C12 cells with anti-Phospho-4E BP1 (Thr46) antibody (Cat#AGI1815, 1:1,000). Nuclei were stained blue with DAPI; Phospho-4E BP1 (Thr46) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.