

KD-Validated Anti-EIF4EBP1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1015

Specification

KD-Validated Anti-EIF4EBP1 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession 013541

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 13 kDa, observed, 18 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

elF4EBP1

KD-Validated Anti-EIF4EBP1 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-EIF4EBP1 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}

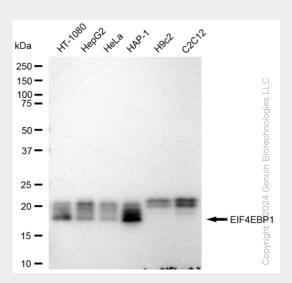


KD-Validated Anti-EIF4EBP1 Rabbit Monoclonal Antibody - Protocols

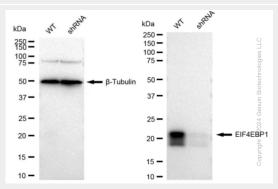
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-EIF4EBP1 Rabbit Monoclonal Antibody - Images

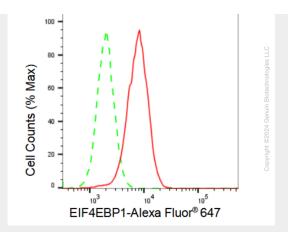


Western blotting analysis using anti-EIF4EBP1 antibody (Cat#AGI1015). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-EIF4EBP1 antibody (Cat#AGI1015, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

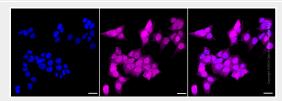


Western blotting analysis using anti-EIF4EBP1 antibody (Cat#AGI1015). EIF4EBP1 expression in wild type (WT) and EIF4EBP1 shRNA knockdown (KD) Hela cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-EIF4EBP1 antibody (Cat#AGI1015, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Flow cytometric analysis of EIF4EBP1 expression in HAP-1 cells using EIF4EBP1 antibody (Cat#AGI1015, 1:2,000). Green, isotype control; red, EIF4EBP1.



Immunocytochemical staining of HAP-1 cells with EIF4EBP1 antibody (Cat#AGI1015, 1:1,000). Nuclei were stained blue with DAPI; EIF4EBP1 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 μ m.