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KD-Validated Anti-EIF4E2 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2027

Specification

KD-Validated Anti-EIF4E2 Mouse Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	O60573
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**Predicted, 28 kDa, observed, 28 kDa KDa**
Gene Name	**EIF4E2**
Aliases	**EIF4E2; Eukaryotic Translation Initiation Factor 4E Family Member 2; Eukaryotic Translation Initiation Factor 4E-Like 3; EIF4EL3; IF4e; 4EHP; Eukaryotic Translation Initiation Factor 4E Homologous Protein; Eukaryotic Translation Initiation Factor 4E Type 2; MRNA Cap-Binding Protein Type 3; EIF4E-Like Protein 4E-LP; EIF-4E Type 2; H4EHP; EIF4E-Like Cap-Binding Protein; MRNA Cap-Binding Protein 4EHP; EIF4E Type 2; 4E-LP**
Immunogen	**Recombinant protein of human EIF4E2**

KD-Validated Anti-EIF4E2 Mouse Monoclonal Antibody - Additional Information

Gene ID	**9470**

Other Names
Eukaryotic translation initiation factor 4E type 2, eIF-4E type 2, eIF4E type 2, Eukaryotic translation initiation factor 4E homologous protein, Eukaryotic translation initiation factor 4E-like 3, eIF4E-like protein 4E-LP, mRNA cap-binding protein 4EHP, h4EHP, mRNA cap-binding protein type 3, EIF4E2 {ECO:0000303|PubMed:15153109, ECO:0000312|HGNC:HGNC:3293}

KD-Validated Anti-EIF4E2 Mouse Monoclonal Antibody - Protein Information

Name EIF4E2 {ECO:0000303|PubMed:15153109, ECO:0000312|HGNC:HGNC:3293}

Function
Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation. Acts as a repressor of translation initiation (PubMed:17368478, PubMed:22751931, PubMed:25624349, PubMed:33581076, PubMed:9582349). In contrast to

EIF4E, it is unable to bind eIF4G (EIF4G1, EIF4G2 or EIF4G3), suggesting that it acts by competing with EIF4E and block assembly of eIF4F at the cap (By similarity). In P-bodies, component of a complex that promotes miRNA-mediated translational repression (PubMed:28487484). Involved in virus-induced host response by mediating miRNA MIR34A-induced translational silencing which controls IFNB1 production by a negative feedback mechanism (PubMed:28487484, PubMed:33581076).

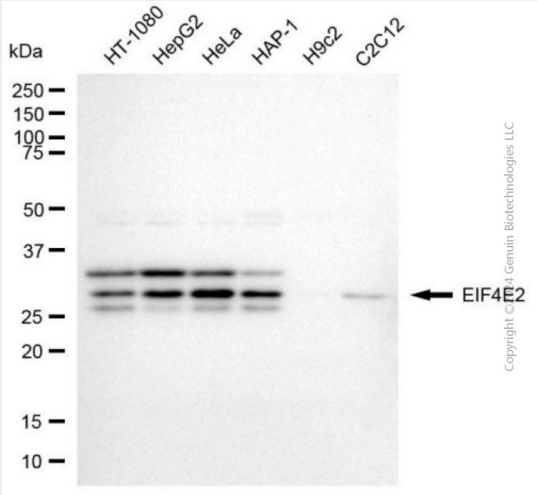
Cellular Location
Cytoplasm. Cytoplasm, P-body

KD-Validated Anti-EIF4E2 Mouse 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-EIF4E2 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-EIF4E2 antibody (Cat#63842). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-EIF4E2 antibody (Cat#63842, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).

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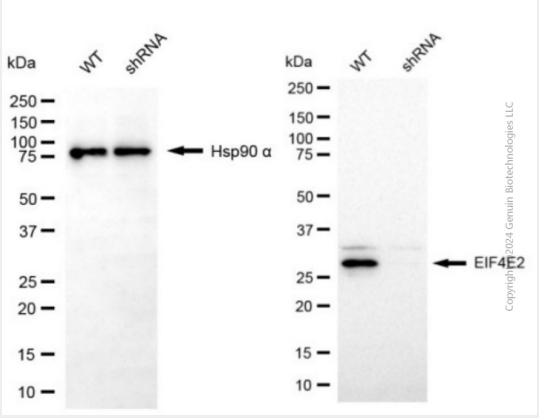
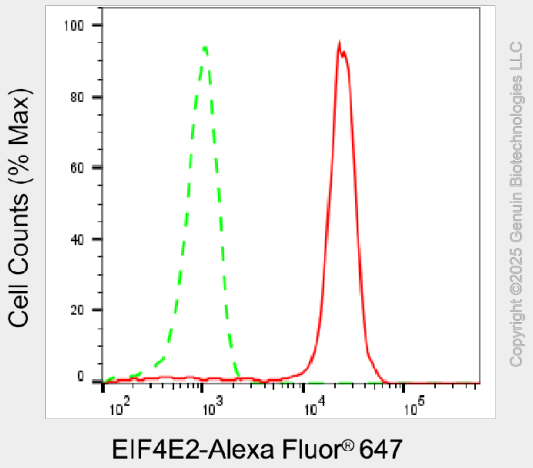


Western blotting analysis using anti-EIF4E2 antibody (Cat#63842). EIF4E2 expression in wild type (WT) and EIF4E2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-EIF4E2 antibody (Cat#63842, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of EIF4E2 expression in HepG2 cells using anti-EIF4E2 antibody (Cat#63842, 1:1,000). Green, isotype control; red, EIF4E2.