

**EIF4E2 Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1955d**

**Specification**

**EIF4E2 Antibody - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">O60573</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

**EIF4E2 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, mRNA cap-binding protein type 3, EIF4E2, EIF4EL3

**Target/Specificity**

This EIF4E2 antibody is generated from rabbits immunized with human EIF4E2 recombinant protein.

**Dilution**

WB~~1:2000

IHC-P~~1:25

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

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

**Precautions**

EIF4E2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**EIF4E2 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

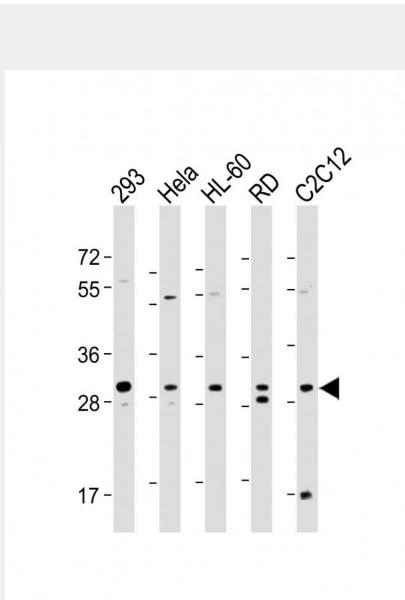
Cytoplasm. Cytoplasm, P-body

#### EIF4E2 Antibody - Protocols

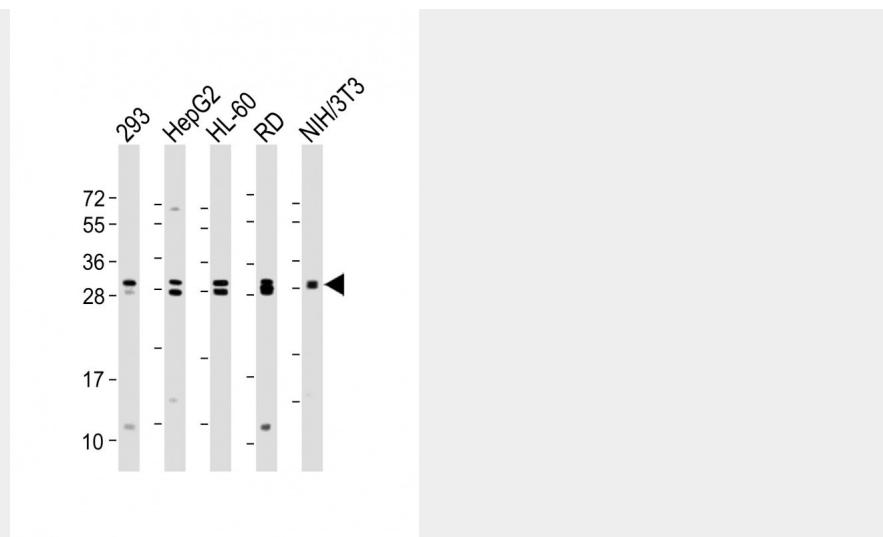
Provided below are standard protocols that you may find useful for product applications.

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

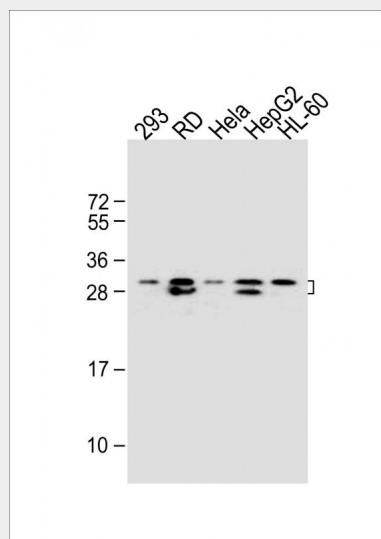
#### EIF4E2 Antibody - Images



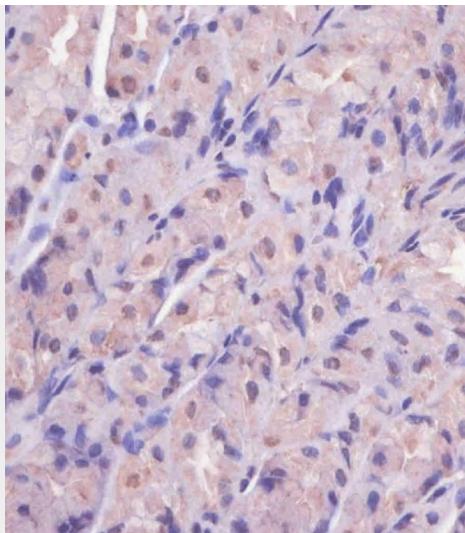
All lanes : Anti-EIF4E2 Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: HL-60 whole cell lysate Lane 4: RD whole cell lysate Lane 5: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 28, 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



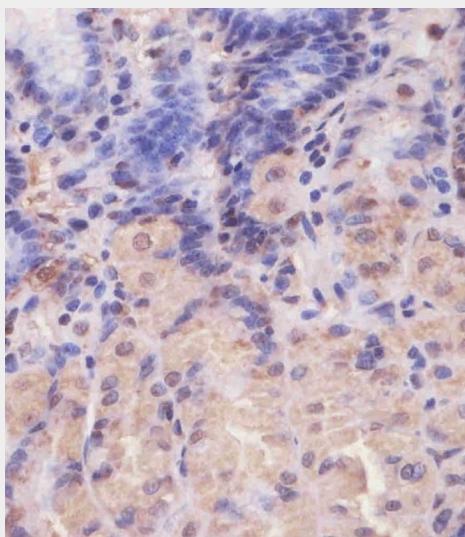
All lanes : Anti-EIF4E2 Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: HL-60 whole cell lysate Lane 4: RD whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 28, 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-EIF4E2 Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: RD whole cell lysate Lane 3: HeLa whole cell lysate Lane 4: HepG2 whole cell lysate Lane 5: HL-60 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AP1955d staining EIF4E2 in human stomach tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyclonal antibody was used as the secondary antibody.



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#### **EIF4E2 Antibody - Background**

EIF4E2 is expressed exclusively in the cytoplasm. This protein recognizes and binds the 7 methylguanosine containing mRNA cap during an early step in the initiation of protein synthesis and facilitates ribosome binding by inducing the unwinding of the mRNAs secondary structures.

#### **EIF4E2 Antibody - References**

Rom, E., et al., J. Biol. Chem. 273(21):13104-13109 (1998).  
Mao, M., et al., Proc. Natl. Acad. Sci. U.S.A. 95(14):8175-8180 (1998).

Tee, A.R., et al., FEBS Lett. 564 (1-2), 58-62 (2004) (): ()..