

EIF4ENIF1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55622**Specification**

EIF4ENIF1 Polyclonal Antibody - Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9NRA8
Reactivity	Rat, Pig, Chimpanzee, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	108 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human EIF4ENIF1
Epitope Specificity	51-150/985
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus. Predominantly cytoplasmic. Shuttles between the nucleus and the cytoplasm in a CRM1-dependent manner.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

The protein encoded by this gene is a nucleocytoplasmic shuttle protein for the translation initiation factor eIF4E. This shuttle protein interacts with the importin alpha-beta complex to mediate nuclear import of eIF4E. It is predominantly cytoplasmic; its own nuclear import is regulated by a nuclear localization signal and nuclear export signals. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2009]

EIF4ENIF1 Polyclonal Antibody - Additional Information**Gene ID** 56478**Other Names**

Eukaryotic translation initiation factor 4E transporter, 4E-T, eIF4E transporter, Eukaryotic translation initiation factor 4E nuclear import factor 1, EIF4ENIF1 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=16687)
HGNC:16687

Target/Specificity

Widely expressed.

Dilution

IHC-P ~ ~ N/A
IHC-F ~ ~ N/A
IF ~ ~ 1:50 ~ 200
ICC ~ ~ N/A
E ~ ~ N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

EIF4ENIF1 Polyclonal Antibody - Protein Information

Name EIF4ENIF1 ([HGNC:16687](#))

Function

EIF4E-binding protein that regulates translation and stability of mRNAs in processing bodies (P-bodies) (PubMed:[16157702](http://www.uniprot.org/citations/16157702), PubMed:[24335285](http://www.uniprot.org/citations/24335285), PubMed:[27342281](http://www.uniprot.org/citations/27342281), PubMed:[32354837](http://www.uniprot.org/citations/32354837)). Plays a key role in P-bodies to coordinate the storage of translationally inactive mRNAs in the cytoplasm and prevent their degradation (PubMed:[24335285](http://www.uniprot.org/citations/24335285), PubMed:[32354837](http://www.uniprot.org/citations/32354837)). Acts as a binding platform for multiple RNA-binding proteins: promotes deadenylation of mRNAs via its interaction with the CCR4-NOT complex, and blocks decapping via interaction with EIF4E (EIF4E and EIF4E2), thereby protecting deadenylated and repressed mRNAs from degradation (PubMed:[27342281](http://www.uniprot.org/citations/27342281), PubMed:[32354837](http://www.uniprot.org/citations/32354837)). Component of a multiprotein complex that sequesters and represses translation of proneurogenic factors during neurogenesis (By similarity). Promotes miRNA-mediated translational repression (PubMed:[24335285](http://www.uniprot.org/citations/24335285), PubMed:[27342281](http://www.uniprot.org/citations/27342281), PubMed:[28487484](http://www.uniprot.org/citations/28487484)). Required for the formation of P- bodies (PubMed:[16157702](http://www.uniprot.org/citations/16157702), PubMed:[22966201](http://www.uniprot.org/citations/22966201), PubMed:[27342281](http://www.uniprot.org/citations/27342281), PubMed:[32354837](http://www.uniprot.org/citations/32354837)). Involved in mRNA translational repression mediated by the miRNA effector TNRC6B by protecting TNRC6B-targeted mRNAs from decapping and subsequent decay (PubMed:[32354837](http://www.uniprot.org/citations/32354837)). Also acts as a nucleoplasmic shuttling protein, which mediates the nuclear import of EIF4E and DDX6 by a piggy-back mechanism (PubMed:[10856257](http://www.uniprot.org/citations/10856257), PubMed:[28216671](http://www.uniprot.org/citations/28216671)).

Cellular Location

Cytoplasm, P-body. Cytoplasm. Nucleus. Nucleus, PML body. Nucleus speckle. Note=Predominantly cytoplasmic (PubMed:10856257). Mainly localizes to processing bodies (P-bodies) (PubMed:16157702). Shuttles between the nucleus and the cytoplasm in a CRM1-dependent manner (PubMed:10856257). Localization to nuclear foci and speckles requires active transcription (PubMed:22090346)

Tissue Location

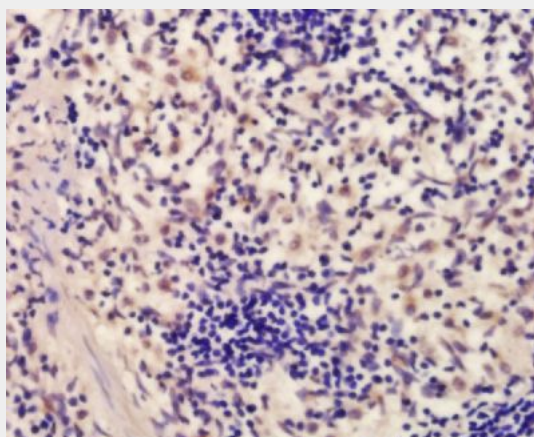
Widely expressed..

eIF4ENIF1 Polyclonal 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](#)

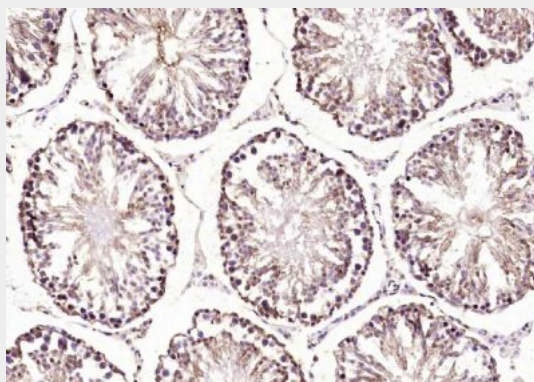
eIF4ENIF1 Polyclonal Antibody - Images



Tissue/cell: rat spleen tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

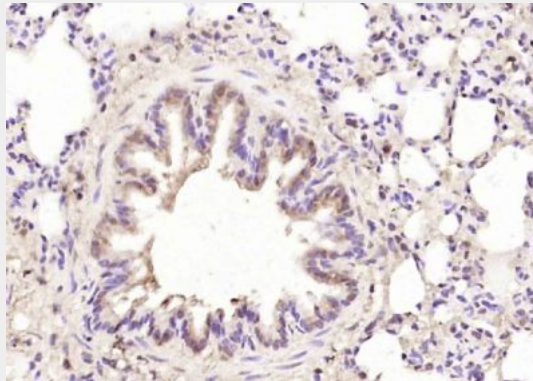
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-eIF4ENIF1 Polyclonal Antibody, Unconjugated(bs-14561R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

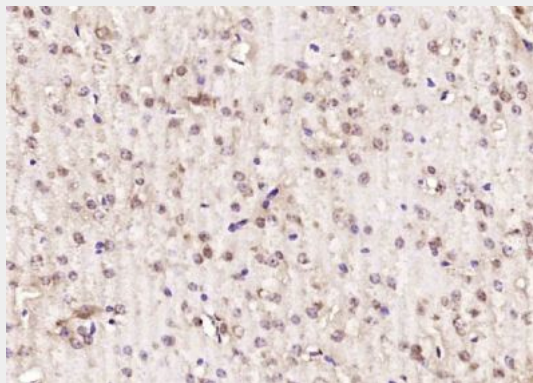


Paraformaldehyde-fixed, paraffin embedded (rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20

minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (eIF4ENIF1) Polyclonal Antibody, Unconjugated (bs-14561R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (eIF4ENIF1) Polyclonal Antibody, Unconjugated (bs-14561R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (eIF4ENIF1) Polyclonal Antibody, Unconjugated (bs-14561R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.