

eIF4ENIF1 Rabbit pAb

eIF4ENIF1 Rabbit pAb Catalog # AP55622

Product Information

Application IHC-P, IHC-F, IF

Primary Accession Q9NRA8
Reactivity Mouse, Rat

Predicted Human, Horse, Rabbit, Turkey, Pig, Chimpanzee, Rhesus, Gorilla

Host Rabbit
Clonality Polyclonal
Calculated MW 108201
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]

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

(HGNC:16687)

Target/Specificity Widely expressed.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

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.

Protein Information

EIF4ENIF1 (HGNC:16687) Name

EIF4E-binding protein that regulates translation and stability of mRNAs in **Function**

processing bodies (P-bodies) (PubMed:16157702, PubMed:24335285, PubMed: 27342281, PubMed: 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, PubMed: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, PubMed: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, PubMed:27342281, PubMed:28487484). Required for the formation of P-bodies (PubMed:16157702, PubMed:22966201, PubMed:27342281, PubMed:32354837). Involved in mRNA translational repression mediated by the miRNA effector TNRC6B by protecting

TNRC6B-targeted mRNAs from decapping and subsequent decay (PubMed:32354837). Also acts as a nucleoplasmic shuttling protein, which mediates the nuclear import of EIF4E and DDX6 by a piggy-back mechanism

(PubMed: 10856257, PubMed: 28216671).

Cytoplasm, P-body. Cytoplasm. Nucleus. Nucleus, PML body. Nucleus speckle. **Cellular Location**

> 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

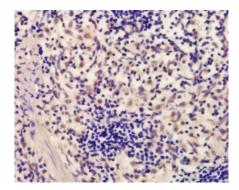
transcription (PubMed:22090346)

Tissue Location Widely expressed..

Background

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]

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(AP55622) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.