

Goat Anti-4E-T / EIF4ENIF1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1002a**Specification**

Goat Anti-4E-T / EIF4ENIF1 Antibody - Product Information

Application	WB, IHC
Primary Accession	Q9NRA8
Other Accession	NP_001157974 , 56478 , 74203 (mouse)
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	108201

Goat Anti-4E-T / EIF4ENIF1 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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-4E-T / EIF4ENIF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-4E-T / EIF4ENIF1 Antibody - Protein Information**Name** EIF4ENIF1 ([HGNC:16687](#))**Function**EIF4E-binding protein that regulates translation and stability of mRNAs in processing bodies (P-bodies) (PubMed: <http://www.uniprot.org/citations/16157702> target="_blank">16157702, PubMed: <http://www.uniprot.org/citations/24335285> target="_blank">24335285, PubMed: <http://www.uniprot.org/citations/27342281> target="_blank">27342281, PubMed: <http://www.uniprot.org/citations/32354837>

target="_blank">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).

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

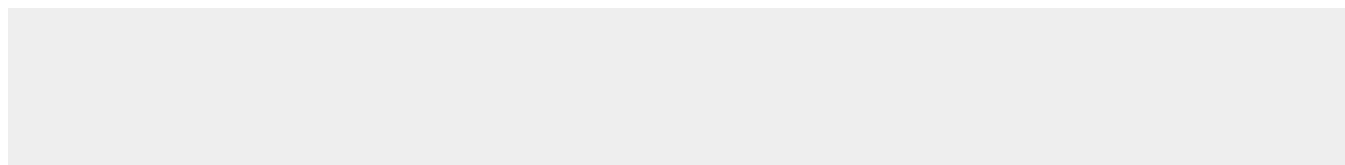
Widely expressed..

Goat Anti-4E-T / EIF4ENIF1 Antibody - Protocols

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

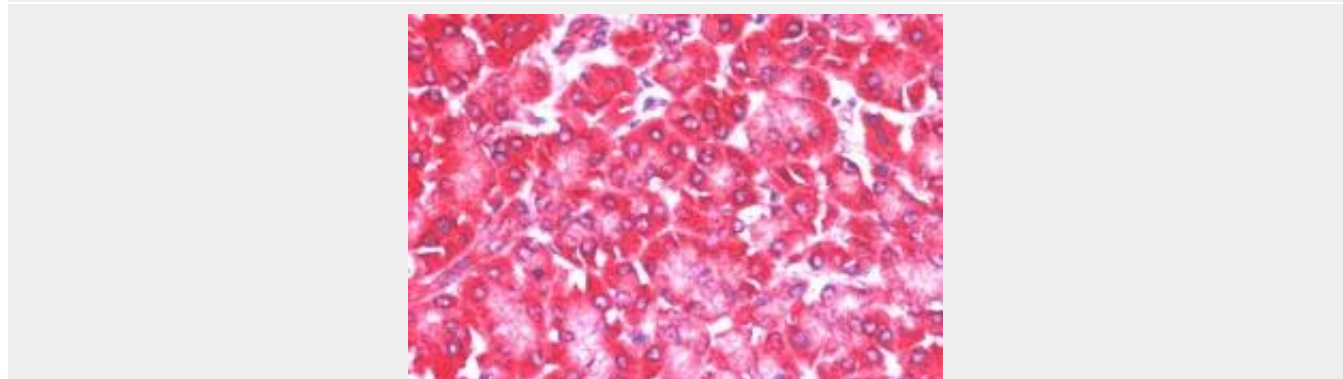
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-4E-T / EIF4ENIF1 Antibody - Images





AF1002a staining (0.25 µg/ml) of 293 lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



AF1002a (5 µg/ml) staining of paraffin embedded Human Pancreas. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-4E-T / EIF4ENIF1 Antibody - 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.

Goat Anti-4E-T / EIF4ENIF1 Antibody - References

The Hsp90 inhibitor geldanamycin abrogates colocalization of eIF4E and eIF4E-transporter into stress granules and association of eIF4E with eIF4G. Suzuki Y, et al. J Biol Chem, 2009 Dec 18. PMID 19850929.

An empirical framework for binary interactome mapping. Venkatesan K, et al. Nat Methods, 2009 Jan. PMID 19060904.

Ectopic expression of eIF4E-transporter triggers the movement of eIF4E into P-bodies, inhibiting steady-state translation but not the pioneer round of translation. Lee HC, et al. Biochem Biophys Res Commun, 2008 May 16. PMID 18343217.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

Prominent use of distal 5' transcription start sites and discovery of a large number of additional

exons in ENCODE regions. Denoeud F, et al. Genome Res, 2007 Jun. PMID 17567994.