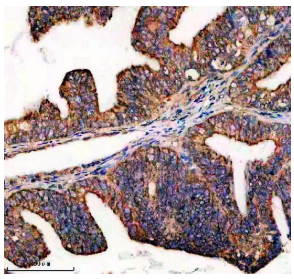
EEF1E1 Antibody / Eukaryotic translation elongation factor 1 epsilon-1 Antibody (FY13610)

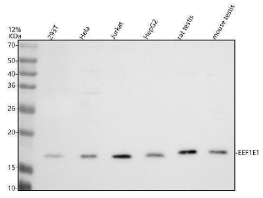
Catalog No.	Formulation	Size
FY13610	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

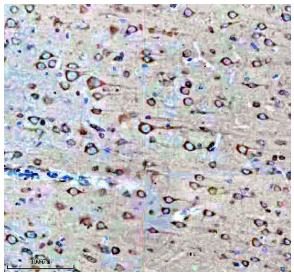
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	O43324
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml ELISA: 0.1-0.5 ug/ml
Limitations	Intended solely for research purposes, this EEF1E1 Antibody / Eukaryotic translation elongation factor 1 epsilon-1 Antibody is not for clinical use.



EEF1E1 Antibody by IHC in human endometrial carcinoma. Immunohistochemistry of paraffin-embedded human endometrial carcinoma using Eukaryotic translation elongation factor 1 epsilon-1 Antibody shows widespread brown cytoplasmic staining in malignant glandular epithelium. Following heat-mediated antigen retrieval in EDTA buffer (pH 8.0), tissue sections were blocked with 10% goat serum and incubated with primary antibody at 2 ug/mL overnight at 4oC. Immunoreactivity was visualized with an HRP-conjugated secondary antibody and DAB chromogen; hematoxylin counterstaining identifies tissue nuclei.



EEF1E1 Antibody by WB in human and rodent samples. Western blot analysis using Eukaryotic translation elongation factor 1 epsilon-1 Antibody detects a band near 16 kDa in human 293T (lane 1), HeLa (lane 2), Jurkat (lane 3), HepG2 (lane 4), rat testis (lane 5), and mouse testis (lane 6). This band migrates below the calculated molecular weight of approximately 20 kDa. Reduced lysates containing 30 ug protein per lane were separated by 12% SDS-PAGE and transferred to nitrocellulose. Following blocking with 5% nonfat milk, the membrane was incubated with primary antibody at 0.5 ug/mL overnight at 4oC. Bound antibody was detected using an HRP-conjugated secondary antibody and chemiluminescence.



EEF1E1 Antibody by IHC in rat brain. Immunohistochemistry of paraffin-embedded rat brain using Eukaryotic translation elongation factor 1 epsilon-1 Antibody shows brown staining in scattered neuronal cell bodies and neuropil. Following heat-mediated antigen retrieval in EDTA buffer (pH 8.0), tissue sections were blocked with 10% goat serum and incubated with primary antibody at 2 ug/mL overnight at 4oC. Immunoreactivity was visualized with an HRP-conjugated secondary antibody and DAB chromogen; hematoxylin counterstaining identifies tissue nuclei.

Description

EEF1E1 Antibody / Eukaryotic translation elongation factor 1 epsilon-1 Antibody recognizes EEF1E1, a protein with important roles in cellular physiology. EEF1E1 encodes eukaryotic translation elongation factor 1 epsilon-1, also known as AIMP3 or p18. It is a component of the multisynthetase complex, a large cytoplasmic assembly containing several aminoacyl-tRNA synthetases and associated scaffold proteins. Aminoacyl-tRNA synthetases attach amino acids to their corresponding transfer RNAs, supplying charged tRNAs for accurate protein synthesis.

Within the multisynthetase complex, EEF1E1 contributes to the organization and stability of interactions among the constituent enzymes and auxiliary factors. The complex is more than a collection of catalytic proteins: its architecture helps coordinate components of translation-related metabolism and can influence the availability of individual synthetases for other cellular functions. EEF1E1 itself does not function as a conventional peptide-chain elongation catalyst despite its historical naming. Eukaryotic translation elongation factor 1 epsilon-1 Antibody is a useful designation for this molecular target.

Beyond its structural role, AIMP3 has been studied in cellular stress responses and genome maintenance. Research has implicated it in signaling associated with DNA damage and the regulation of pathways involving p53, although the details and biological importance of these interactions vary with context. Such findings illustrate how proteins associated with translation machinery can acquire additional regulatory functions outside aminoacylation.

EEF1E1 therefore links the organization of protein-synthesis machinery with broader mechanisms of cell homeostasis. Its interactions with aminoacyl-tRNA synthetases are central to understanding multisynthetase complex architecture, while its proposed stress-related activities have motivated investigation of how translational components communicate with signaling pathways. NSJ Bioreagents provides EEF1E1 Antibody for research into the molecular biology of EEF1E1. An EEF1E1 Antibody supports investigation of the biological processes associated with this protein.

Explore related research targets in our Cell Biology Antibodies collection.

Application Notes

Working dilutions of the EEF1E1 Antibody / Eukaryotic translation elongation factor 1 epsilon-1 Antibody may require optimization according to the experimental protocol.

Immunogen

The EEF1E1 Antibody was generated using e. coli-derived human EEF1E1 recombinant protein (amino acids N20-H174).

Storage

Following reconstitution, the EEF1E1 Antibody can be kept at 4oC for one month. Aliquot for extended storage at -20oC for up to six months, avoiding repeated freezing and thawing.

Alternate Names

EEF1E1 antibody, Eukaryotic translation elongation factor 1 epsilon-1 antibody, eukaryotic translation elongation factor 1

epsilon 1 antibody, AIMP3 antibody, Aminoacyl tRNA synthetase complex-interacting multifunctional protein 3 antibody, P18 antibody

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