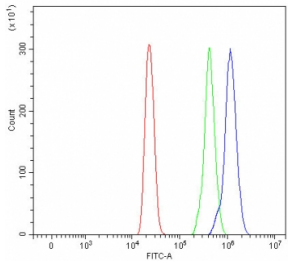
4E-T Antibody / EIF4ENIF1 (RQ7948)

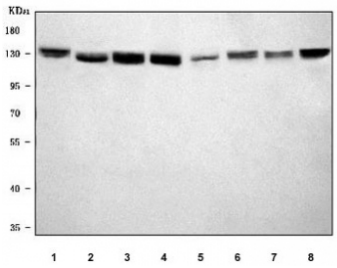
Catalog No.	Formulation	Size
RQ7948	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

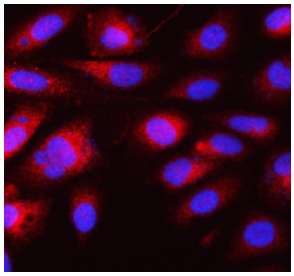
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9NRA8
Localization	Cytoplasmic, Nuclear
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml Immunofluorescence : 5ug/ml
Limitations	This 4E-T antibody is available for research use only.



Flow cytometry testing of human HL60 cells with 4E-T antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= 4E-T antibody.



Western blot testing of 1) human HeLa, 2) human 293T, 3) human MCF7, 4) human HepG2, 5) rat brain, 6) rat NRK, 7) mouse brain and 8) mouse NIH 3T3 cell lysate with 4E-T antibody. Expected molecular weight ~88/108 kDa (multiple isoforms but can be observed at ~140 kDa (possibly due to phosphorylation or high proline content-Ref 1).



Immunofluorescent staining of FFPE human PC-3 cells with 4E-T antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.

Description

4E-T protein, also known as EIF4ENIF1, is a translation repressor that regulates mRNA stability and localization by interacting with the eukaryotic translation initiation factor 4E (EIF4E). It plays a critical role in the formation of processing bodies (P-bodies), which are cytoplasmic granules involved in mRNA decay and translational repression.

4E-T contributes to post-transcriptional gene regulation, linking RNA-binding proteins to translation initiation machinery. Dysregulation of this protein has been associated with altered mRNA metabolism, impacting processes such as cell cycle progression, differentiation, and stress response.

The use of a 4E-T antibody is valuable for studying RNA processing pathways and translational control in cellular models. Researchers utilize a 4E-T antibody in applications like western blot, immunoprecipitation, and immunofluorescence. NSJ Bioreagents offers a high-quality 4E-T antibody to support investigations into RNA regulation and protein synthesis control.

Application Notes

Optimal dilution of the 4E-T antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids D13-Q985) was used as the immunogen for the 4E-T antibody.

Storage

After reconstitution, the 4E-T antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

References (1)