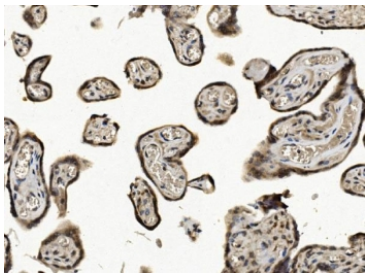
Eukaryotic translation initiation factor 1 Antibody / EIF1 (RQ7993)

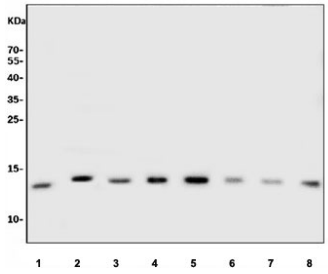
Catalog No.	Formulation	Size
RQ7993	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

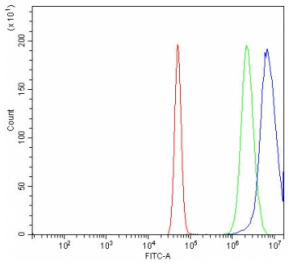
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P41567
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Eukaryotic translation initiation factor 1 antibody is available for research use only.



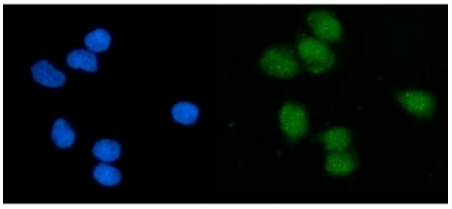
IHC staining of FFPE human placental tissue with Eukaryotic translation initiation factor 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HeLa, 2) human HEK293, 3) human Jurkat, 4) human Raji, 5) human K562, 6) rat pancreas, 7) mouse pancreas and 8) mouse NIH 3T3 cell lysate with Eukaryotic translation initiation factor 1 antibody. Predicted molecular weight ~13 kDa.



Flow cytometry testing of human A431 cells with Eukaryotic translation initiation factor 1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Eukaryotic translation initiation factor 1 antibody.



Immunofluorescent staining of FFPE human T-47D cells with Eukaryotic translation initiation factor 1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.

Description

Eukaryotic translation initiation factor 1 (eIF1) is a protein that in humans is encoded by the EIF1 gene. It is related to yeast SUI1. In mammalian cells, translation is controlled at the level of polypeptide chain initiation by initiation factors. Eukaryotic translation initiation factor 1 (eIF1) is crucial for the scanning process in vitro. During the scanning process, eIF1 is a component of a complex involved in recognition of the initiator codon. Translation is also initiated by the role of eIF1 in regulating the activity of ribosomal subunits 43S, 48S and 40S. eIF1 enables 43S ribosomal complexes to discern between cognate and near-cognate initiation codons, sensing the nucleotide content of initiation codons. It is also a promotor, along with eukar-yotic translation initiation factor 1A (eIF1A), for assembly of 48S ribosomal complexes at the initiation codon of a conventional capped mRNA. In addition, eIF1 and eIF1A, together with eukaryotic translation initiation factor 5 (eIF5), function in the formation of stable 40S ribosomal preinitiation complexes.

Application Notes

Optimal dilution of the Eukaryotic translation initiation factor 1 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids S2-D106) was used as the immunogen for the Eukaryotic translation initiation factor 1 antibody.

Storage

After reconstitution, the Eukaryotic translation initiation factor 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.