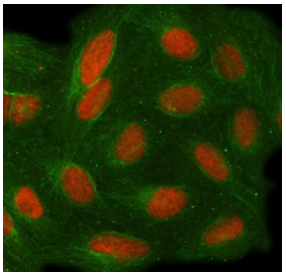
Target of EGR1 protein 1 Antibody / TOE1 (RQ7573)

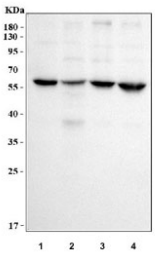
Catalog No.	Formulation	Size
RQ7573	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

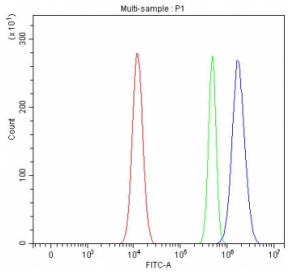
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q96GM8
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Target of EGR1 protein 1 antibody is available for research use only.



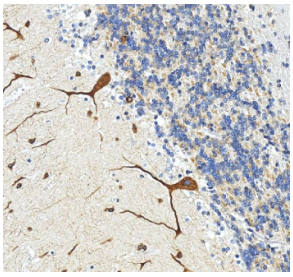
Immunofluorescent staining of FFPE human U-2 OS cells with Target of EGR1 protein 1 antibody (red) and Alpha Tubulin mAb (green). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) Jurkat, 3) 293T and 4) HepG2 cell lysate with Target of EGR1 protein 1 antibody. Predicted molecular weight ~57 kDa.



Flow cytometry testing of fixed and permeabilized human Ramos cells with Target of EGR1 protein 1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Target of EGR1 protein 1 antibody.



IHC staining of FFPE human cerebellum tissue with Target of EGR1 protein 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Target of EGR1 protein 1 (TOE1) is a multifunctional protein that plays an important role in RNA processing and cellular growth regulation. Initially identified as a transcriptional target of the early growth response 1 (EGR1) gene, TOE1 participates in the control of cell proliferation and differentiation. It has also been linked to the regulation of telomerase activity, cell cycle progression, and RNA metabolism. Researchers frequently use a Target of EGR1 protein 1 antibody to investigate gene regulation, RNA biology, and pathways involved in cell growth.

TOE1 is localized to the nucleus and is particularly enriched in Cajal bodies, subnuclear structures that are central to RNA biogenesis and ribonucleoprotein assembly. Within this context, TOE1 contributes to the maturation and turnover of small nuclear RNAs (snRNAs), thereby supporting accurate pre-mRNA splicing. Employing a Target of EGR1 protein 1 antibody enables scientists to explore these functions and study its roles in maintaining RNA integrity.

Mutations in the TOE1 gene have been associated with neurological disorders, including pontocerebellar hypoplasia, underscoring its importance in neurodevelopment and RNA homeostasis. Disruption of TOE1 function can impair RNA metabolism, leading to severe developmental phenotypes. Because of this, TOE1 is increasingly studied as a link between transcriptional regulation and post-transcriptional RNA processing. A Target of EGR1 protein 1 antibody is therefore a valuable tool for researchers investigating RNA-related diseases and basic mechanisms of gene expression.

NSJ Bioreagents offers a high-quality Target of EGR1 protein 1 antibody validated for applications such as western blot, immunoprecipitation, and immunofluorescence. Choosing a Target of EGR1 protein 1 antibody from NSJ Bioreagents ensures reproducibility and accuracy in studies of RNA metabolism, transcriptional regulation, and disease mechanisms.

Application Notes

Optimal dilution of the Target of EGR1 protein 1 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids E28-Q501) was used as the immunogen for the Target of EGR1 protein 1 antibody.

Storage

After reconstitution, the Target of EGR1 protein 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.

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