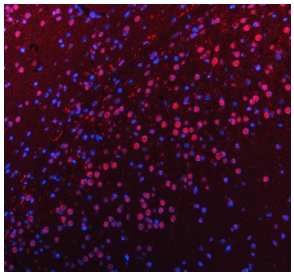
PUS7L Antibody / Pseudouridylate synthase 7 homolog-like protein (RQ8439)

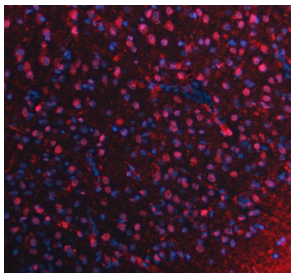
Catalog No.	Formulation	Size
RQ8439	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

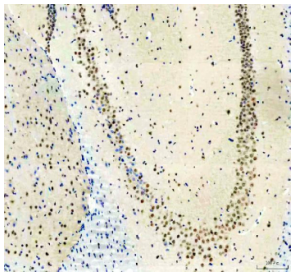
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9H0K6
Applications	Western blot: 0.5-1ug/ml Direct ELISA: 0.1-0.5ug/ml Immunohistochemistry (FFEP): 2-5ug/ml Immunofluorescence: 5ug/ml Immunoprecipitation: 2ug per 500 ug of lysate
Limitations	This PUS7L antibody is available for research use only.



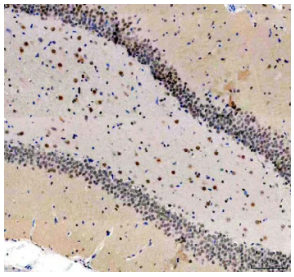
Immunofluorescent staining of FFPE mouse brain tissue with PUS7L antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



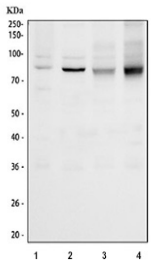
Immunofluorescent staining of FFPE rat brain tissue with PUS7L antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



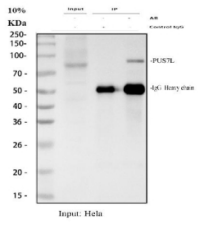
IHC staining of FFPE mouse brain tissue with PUS7L antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat brain tissue with PUS7L antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) 293T, 2) HeLa, 3) PC-3 and 4) Caco-2 cell lysate with PUS7L antibody. Predicted molecular weight ~81 kDa.



Immunoprecipitation of PUS7L protein from 500ug of human HeLa whole cell lysate with 2ug of PUS7L antibody.

Description

PUS7L antibody is a research tool for studying RNA modification and gene regulation. The encoded protein, pseudouridylate synthase 7 homolog-like protein, belongs to the pseudouridine synthase family, which catalyzes the isomerization of uridine to pseudouridine in RNA. This modification, one of the most common and conserved post-transcriptional RNA changes, contributes to RNA stability, folding, and function. Although the precise activity of PUS7L remains under investigation, its sequence homology to known pseudouridine synthases suggests an important role in regulating RNA metabolism and cellular homeostasis.

Pseudouridylation impacts a broad range of RNA species, including tRNAs, rRNAs, snRNAs, and mRNAs. These

modifications influence translation efficiency, splicing, and ribosome function. Proteins such as PUS7L may therefore participate in fine-tuning gene expression through RNA modification. Ongoing studies aim to determine whether PUS7L acts on specific RNA targets and whether it functions independently or in concert with other pseudouridine synthases.

Research interest in PUS7L has grown due to associations with disease. Genetic studies suggest that altered expression or mutation of pseudouridylate synthase family members, including PUS7L, may contribute to developmental abnormalities, cancer progression, or neurological dysfunction. By influencing RNA structure and stability, PUS7L may impact pathways central to cell growth, differentiation, and stress responses. Clarifying these connections is a current focus of biomedical research.

On a molecular level, PUS7L contains conserved catalytic motifs characteristic of pseudouridine synthases. These domains likely mediate RNA binding and the isomerization reaction. Although direct substrates for PUS7L are not yet fully identified, bioinformatic analysis and structural predictions provide evidence for its functional conservation within the pseudouridine synthase family. Such features make PUS7L a candidate for deeper investigation in RNA biology and epitranscriptomics.

The PUS7L antibody is used in western blotting, immunohistochemistry, immunofluorescence, and flow cytometry to detect protein expression and distribution. These applications allow scientists to investigate the presence and regulation of pseudouridylate synthase 7 homolog-like protein in tissues and cell lines. For researchers examining RNA modification, translational control, or disease-related changes in RNA metabolism, the PUS7L antibody is a reliable reagent. NSJ Bioreagents provides validated antibodies designed to deliver reproducibility and accuracy for advanced molecular studies.

Application Notes

Optimal dilution of the PUS7L antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (R165-H699) was used as the immunogen for the PUS7L antibody.

Storage

After reconstitution, the PUS7L 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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