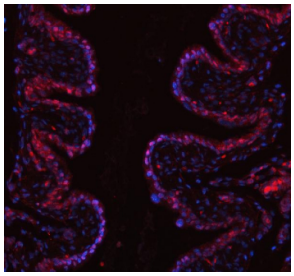
PUS7 Antibody / Pseudouridylate synthase 7 (RQ8434)

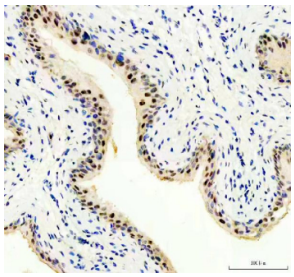
Catalog No.	Formulation	Size
RQ8434	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

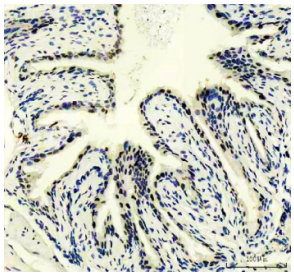
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q96PZ0
Localization	Nuclear
Applications	Western 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 PUS7 antibody is available for research use only.



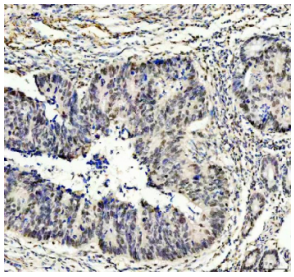
Immunofluorescent staining of FFPE mouse bladder tissue with PUS7 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



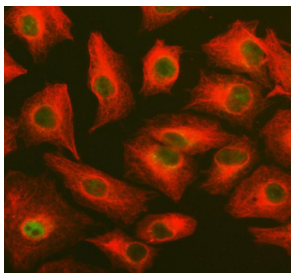
IHC staining of FFPE rat bladder tissue with PUS7 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



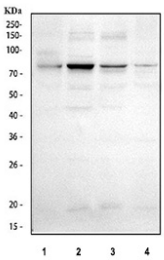
IHC staining of FFPE mouse bladder tissue with PUS7 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



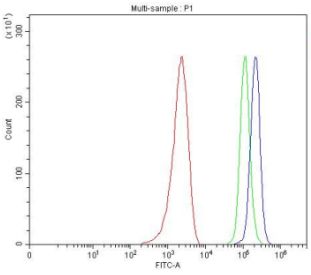
IHC staining of FFPE human colon cancer tissue with PUS7 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human A549 cells with PUS7 antibody (green) and Alpha Tubulin mAb (red). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) K562, 2) MCF7, 3) HeLa and 4) 293T cell lysate with PUS7 antibody. Predicted molecular weight ~75 kDa.



Flow cytometry testing of fixed and permeabilized human MCF7 cells with PUS7 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PUS7 antibody.

Description

PUS7 (Pseudouridylate synthase 7) is an enzyme that catalyzes the isomerization of uridine to pseudouridine in various classes of RNA, including tRNA and mRNA. This post-transcriptional modification enhances RNA stability, influences secondary structure, and can modulate translation efficiency. PUS7 activity is part of the broader RNA modification landscape that fine-tunes gene expression and cellular responses to environmental cues.

PUS7 is conserved across eukaryotes and is expressed in multiple tissues, with notable roles in developmental regulation and stress adaptation. Its function in mRNA pseudouridylation has been linked to regulation of gene networks involved in cell differentiation, proliferation, and response to metabolic changes. Because of its impact on RNA biology, PUS7 is of interest in studies exploring epitranscriptomic mechanisms and RNA-based regulation.

The **PUS7 antibody** is a valuable reagent for detecting endogenous PUS7 in applications such as western blot, immunohistochemistry, and immunofluorescence. Researchers use the PUS7 antibody from NSJ Bioreagents to evaluate expression patterns, study subcellular localization, and investigate the enzymeÃ¢Â€Â™s role in RNA modification pathways. With high specificity and reproducible performance, the PUS7 antibody supports detailed research in RNA biology, molecular genetics, and post-transcriptional regulation.

Application Notes

Optimal dilution of the PUS7 antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (D294-H541) was used as the immunogen for the PUS7 antibody.

Storage

After reconstitution, the PUS7 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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