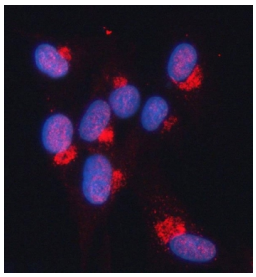
Snurportin 1 Antibody / SNUPN (RQ7741)

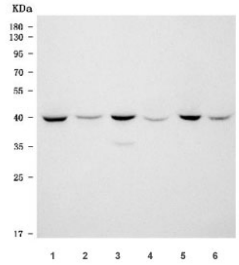
Catalog No.	Formulation	Size
RQ7741	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

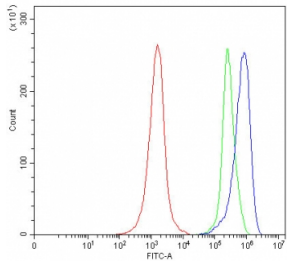
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O95149
Localization	Nuclear, cytoplasmic
Applications	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 Snurportin 1 antibody is available for research use only.



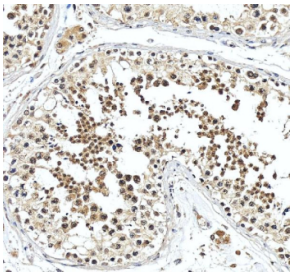
Immunofluorescent staining of FFPE human U-87 MG cells with Snurportin 1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HeLa, 2) human ThP-1, 3) rat testis, 4) rat brain, 5) mouse testis and 6) mouse brain tissue lysate with Snurportin 1 antibody. Predicted molecular weight ~41 kDa.



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



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

Description

Snurportin 1 (SNUPN) is a nuclear import receptor that plays an essential role in the biogenesis and function of small nuclear ribonucleoproteins (snRNPs). These snRNPs are critical components of the spliceosome, the molecular machinery responsible for pre-mRNA splicing. Snurportin 1 functions by recognizing and binding the trimethylguanosine (m3G) cap structure of U snRNAs, facilitating their transport into the nucleus through interaction with importin beta. A Snurportin 1 antibody is commonly used to investigate nuclear transport, RNA processing, and splicing regulation.

Once inside the nucleus, Snurportin 1 is released from its cargo and recycled back to the cytoplasm, enabling multiple rounds of snRNP import. This process ensures efficient spliceosome assembly and accurate gene expression. Because pre-mRNA splicing is tightly linked to gene regulation, employing a Snurportin 1 antibody allows researchers to explore how alterations in nuclear import pathways may affect RNA metabolism and cellular homeostasis.

Aberrant function or regulation of Snurportin 1 has been implicated in disease processes, including cancer and neurodegenerative disorders, where splicing fidelity is often disrupted. In addition, its role in nuclear-cytoplasmic transport connects it to broader cellular processes such as stress responses and signal transduction. Studying Snurportin 1 with a Snurportin 1 antibody provides insights into these disease mechanisms and may inform therapeutic strategies targeting RNA splicing and transport pathways.

NSJ Bioreagents offers a high-quality Snurportin 1 antibody validated for applications including western blot, immunoprecipitation, and immunofluorescence. Choosing a Snurportin 1 antibody from NSJ Bioreagents ensures reproducible and accurate results in studies of RNA transport, splicing, and nuclear import.

Application Notes

Optimal dilution of the Snurportin 1 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids M1-N360) was used as the immunogen for the Snurportin 1 antibody.

Storage

After reconstitution, the Snurportin 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.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com