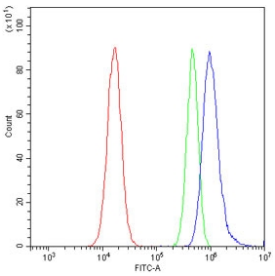
SNRPN Antibody / Small nuclear ribonucleoprotein polypeptide N [clone 6F12] (RQ4917)

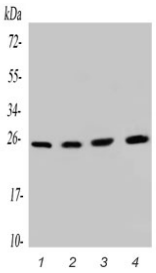
Catalog No.	Formulation	Size
RQ4917	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	6F12
Purity	Purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P63162
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This SNRPN antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human A549 cells with SNRPN antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SNRPN antibody.



Western blot testing of 1) human U-87 MG, 2) human Caco-2, 3) rat brain and 4) mouse brain lysate with SNRPN antibody. Predicted molecular weight ~26 kDa.

Description

SNRPN Antibody targets Small nuclear ribonucleoprotein polypeptide N, a nuclear protein encoded by the SNRPN gene that functions as a core component of the spliceosomal machinery. SNRPN is part of the small nuclear ribonucleoprotein complex involved in pre-mRNA splicing, a fundamental process required for accurate gene expression in eukaryotic cells. Through its role in RNA processing, SNRPN contributes to proper maturation of messenger RNA transcripts and regulation of transcript diversity.

Functionally, Small nuclear ribonucleoprotein polypeptide N associates with small nuclear RNAs and additional spliceosomal proteins to facilitate recognition and removal of intronic sequences from pre-mRNA. This coordinated activity ensures precise exon joining and generation of mature mRNA molecules capable of directing protein synthesis. A SNRPN Antibody enables investigation of spliceosome organization, RNA processing dynamics, and regulatory mechanisms governing pre-mRNA maturation in research settings.

SNRPN expression is observed broadly across tissues, reflecting its involvement in essential cellular processes. At the subcellular level, SNRPN is predominantly localized to the nucleus, where it concentrates in nuclear speckles associated with active RNA splicing. Changes in SNRPN localization or expression may indicate alterations in splicing activity, transcriptional output, or cellular differentiation state, making it a useful marker in studies of nuclear organization and RNA metabolism.

At the molecular level, SNRPN contains conserved domains that support interaction with RNA and other spliceosomal components. These structural features allow SNRPN to integrate into ribonucleoprotein complexes and participate in coordinated RNA processing events. Regulation of SNRPN function occurs through transcriptional control and assembly into spliceosomal complexes, ensuring appropriate splicing activity in response to cellular demands.

From a biological and disease relevance perspective, the SNRPN gene is located within a genomically imprinted region and has been extensively studied in the context of neurodevelopmental disorders. Disruption of gene regulation within this chromosomal region has been associated with altered expression of SNRPN and related transcripts, highlighting the importance of precise control of RNA processing genes in normal development. These associations underscore the relevance of SNRPN in studies of gene regulation, imprinting, and RNA biology.

SNRPN Antibody reagents are valuable tools for studying spliceosome composition, nuclear RNA processing, and mechanisms of pre-mRNA regulation. Such antibodies support research into RNA metabolism, nuclear structure, and disease-associated changes in splicing machinery. NSJ Bioreagents provides SNRPN Antibody products intended for research use.

Application Notes

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

Immunogen

Amino acids QHIDYRMRCILQDGRIFIGTFKAFDKHMN from the human protein were used as the immunogen for the SNRPN antibody.

Storage

After reconstitution, the SNRPN 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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