

SCAF11 Antibody / SR-related CTD-associated factor 11 / SFRS2IP (FY13269)

Catalog No.	Formulation	Size
FY13269	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
UniProt	Q99590
Applications	Western Blot : 0.25-0.5ug/ml Immunohistochemistry : 2-5ug/ml Immunocytochemistry/Immunofluorescence : 5ug/ml Immunoprecipitation : 2-4ug/500ug of lysate Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This SCAF11 antibody is available for research use only.

Description

SCAF11 antibody detects SR-related CTD-associated factor 11, a nuclear protein that couples RNA processing to transcription by RNA polymerase II. The UniProt recommended name is SR-related CTD-associated factor 11 (SCAF11). Also known as SFRS2-interacting protein, SCAF11 belongs to a family of large SR-related proteins that integrate transcriptional elongation with pre-mRNA splicing and RNA surveillance pathways.

Functionally, SCAF11 antibody identifies a 1,450-amino-acid nuclear protein containing RNA recognition motifs (RRMs) and arginine/serine-rich (RS) domains characteristic of SR proteins. SCAF11 binds to the C-terminal domain (CTD) of RNA polymerase II, recognizing its phosphorylation state and linking elongating polymerases to RNA splicing machinery. It interacts with splicing factors such as SRSF2 and SF3B1 and participates in the coordination of cotranscriptional mRNA processing.

The SCAF11 gene is located on chromosome 12q24.33 and is ubiquitously expressed, with higher levels in actively proliferating and transcriptionally active cells. Expression peaks during S-phase and in tissues with elevated RNA synthesis such as liver and brain. SCAF11 plays a dual role as a structural component of the transcriptional complex and a modulator of RNA maturation efficiency.

Pathologically, dysregulation of SCAF11 has been linked to aberrant RNA processing and oncogenic transformation. Overexpression contributes to cancer progression by promoting transcriptional elongation of growth-associated genes, while knockdown disrupts RNA stability and gene expression homeostasis. SCAF11 has also been implicated in neurodegenerative conditions where transcriptional stress affects mRNA splicing fidelity. Research using SCAF11 antibody supports studies in transcriptional regulation, RNA processing, and chromatin biology.

SCAF11 antibody is validated for western blotting, immunofluorescence, and chromatin immunoprecipitation to detect transcription-associated RNA-binding proteins. NSJ Bioreagents provides SCAF11 antibody reagents optimized for studies in RNA polymerase II regulation, mRNA splicing, and gene expression coupling.

Structurally, SR-related CTD-associated factor 11 contains multiple RRM domains for RNA binding and long RS-rich regions that mediate protein-protein interactions with splicing and elongation factors. Its CTD-binding domain recognizes phosphorylated Ser2 residues on RNA polymerase II, positioning SCAF11 at sites of active transcription. This antibody facilitates investigation of SCAF11's role in coordinating transcription, RNA processing, and post-transcriptional regulation.

Application Notes

Optimal dilution of the SCAF11 antibody should be determined by the researcher.

Immunogen

E.coli-derived human SFRS2IP/SCAF11 recombinant protein (Position: D81-D1399) was used as the immunogen for the SCAF11 antibody.

Storage

After reconstitution, the SCAF11 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.