

For Research Use Only.
Not for use in diagnostic procedures.

RiboCluster Profiler™

RBP Antibody

Anti-SRSF3 (SRp20) pAb

CODE No.	RN080PW
CLONALITY	Polyclonal
ISOTYPE	Rabbit Ig, affinity purified
QUANTITY	100 µL
SOURCE	Purified Ig from rabbit serum
FORMULATION	PBS containing 50% Glycerol (pH 7.2). No preservative is contained.
STORAGE	This antibody solution is stable for one year from the date of purchase when stored at -20°C.

APPLICATIONS-CONFIRMED

<u>Western blotting</u>	1:1,000
<u>Immunoprecipitation</u>	5 µL/500 µL of cell extract from 2 x 10 ⁷ cells

APPLICATION-UNDER EVALUATION

<u>Immunocytochemistry</u>	1:100
----------------------------	-------

SPECIES CROSS REACTIVITY on WB

Species	Human	Mouse	Rat	Hamster
Cells	HeLa, 293T, Jurkat, MCF7	NIH/3T3	Rat1	CHO
Reactivity	+	+	+	+

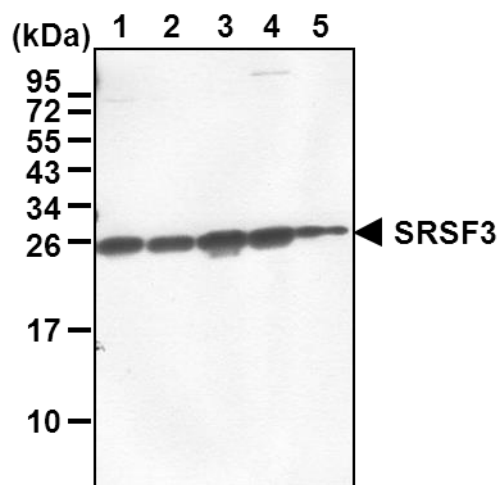
Entrez Gene ID 6428 (Human), 20383 (Mouse), 361814 (Rat)

For more information, please visit our web site <https://ruo.mbl.co.jp/je/rip-assay/>.

SDS-PAGE & Western blotting

- 1) Wash 1×10^7 cells 3 times with PBS and suspend them in 1 mL of Laemmli's sample buffer, then sonicate briefly (up to 20 sec.).
- 2) Boil the samples for 3 min. and centrifuge. Load 10 μ L of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel (15% acrylamide) for electrophoresis.
- 3) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm² for 1 hr. in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% methanol). See the manufacture's manual for precise transfer procedure.
- 4) To reduce nonspecific binding, soak the membrane in 5% skimmed milk (in PBS, pH 7.2) overnight at 4°C.
- 5) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 min. x 3).
- 6) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATIONS** for 1 hr. at room temperature. (The concentration of antibody will depend on the conditions.)
- 7) Wash the membrane with PBS-T (10 min. x 3).
- 8) Incubate the membrane with the 1:5,000 Anti-IgG (Rabbit) pAb-HRP (MBL, code no. 458) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature.
- 9) Wash the membrane with PBS-T (10 min. x 3).
- 10) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 min. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 11) Expose to an X-ray film in a dark room for 3 min. Develop the film as usual. The condition for exposure and development may vary.

(Positive controls for Western blotting; HeLa, Jurkat, MCF7, 293T and NIH/3T3)



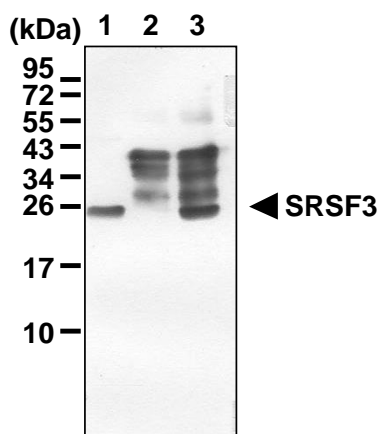
Western blot analysis of SRSF3

Lane 1: HeLa
Lane 2: Jurkat
Lane 3: MCF7
Lane 4: 293T
Lane 5: NIH/3T3
Immunoblotted with RN080PW

Immunoprecipitation

- 1) Wash 4×10^7 cells twice with PBS and resuspend them with 1 mL of ice-cold Lysis Buffer (150 mM NaCl, 20 mM Tris-HCl pH 8.0, 0.1% NP-40, 10 mM EDTA) containing appropriate protease inhibitors and 1.5 mM DTT. Vortex thoroughly and sonicate briefly, then incubate it on ice for 10 min.
- 2) Centrifuge the tube at 12,000 x g for 5 min. at 4°C and discard the supernatant.
- 3) Wash the pellet 3 times with PBS and resuspend them with 500 µL RIPA buffer, then sonicate briefly.
- 4) Centrifuge the tube at 12,000 x g for 5 min. at 4°C and transfer the supernatant to another fresh tube.
- 5) Add 500 µL of ice-cold Lysis buffer into the supernatant. Mix by pipetting up and down.
- 6) Add 40 µL of 50% protein G agarose beads slurry resuspended in Lysis Buffer into the sample (prepared from step 5). Incubate it at 4°C with rotating for 1 hour.
- 7) Centrifuge the tube at 2,000 x g for 2 minutes at 4°C and transfer the supernatant to another tube (precleared sample).
- 8) Mix 20 µL of 50% protein G agarose beads slurry resuspended in PBS with normal rabbit IgG (RIP-Assay Kit) or Anti-SRSF3 (SRp20) pAb (RN080PW) at the amount of suggested in the **APPLICATIONS**, then add 1 mL of Lysis Buffer into each tube. Incubate with gentle agitation for 1 hr. at 4°C.
- 9) Wash the beads once with 500 µL of ice-cold Lysis Buffer (centrifuge the tube at 2,000 x g for 1 min.). Carefully discard the supernatant using a pipette or without disturbing the beads.
- 10) Add 500 µL of nuclear extract (the sample from step 7), then incubate with gentle agitation for 3 hr. at 4°C.
- 11) Centrifuge the tube at 2,000 x g for 1 min and discard the supernatant.
- 12) Resuspend the agarose with ice-cold Lysis buffer.
- 13) Centrifuge the tube at 2,000 x g for 1 min and discard the supernatant.
- 14) Repeat steps 12)-13) 3 times.
- 15) Resuspend the beads in 20 µL of Laemmli's sample buffer, boil for 3 min., and centrifuge for 5 min. Use 20 µL of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel (15% acrylamide) for electrophoresis.
- 16) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm² for 1 hr. in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% methanol). See the manufacture's manual for precise transfer procedure.
- 17) To reduce nonspecific binding, soak the membrane in 5% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature, or overnight at 4°C.
- 18) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 min. x 3).
- 19) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATIONS** for 1 hr. at room temperature. (The concentration of antibody will depend on the conditions.)
- 20) Wash the membrane with PBS-T (10 min. x 3).
- 21) Incubate the membrane with the 1:1,000 Rabbit TrueBlot[®] anti-Rabbit IgG-HRP (Rockland, code no. 18-8816-33) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature.
- 22) Wash the membrane with PBS-T (10 min. x 3).
- 23) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 min. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 24) Expose to an X-ray film in a dark room for 3 min. Develop the film as usual. The condition for exposure and development may vary.

(Positive control for Immunoprecipitation; HeLa nuclear extract)

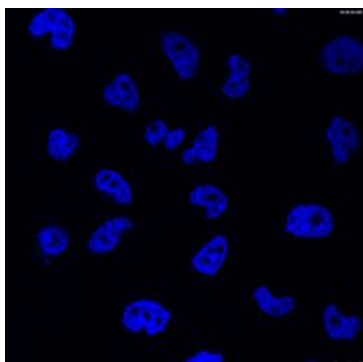


Immunoprecipitation of SRSF3 from HeLa

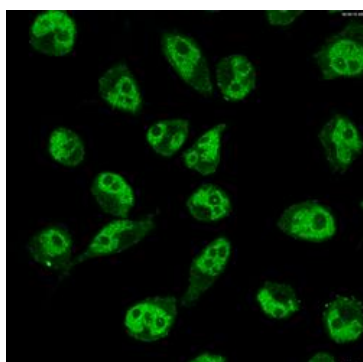
Lane 1: Input
Lane 2: IP with normal rabbit IgG
Lane 3: IP with RN080PW
Immunoblotted with RN080PW

Immunocytochemistry (Under evaluation)

DAPI

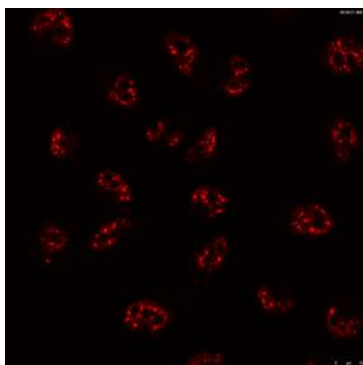


SRSF3

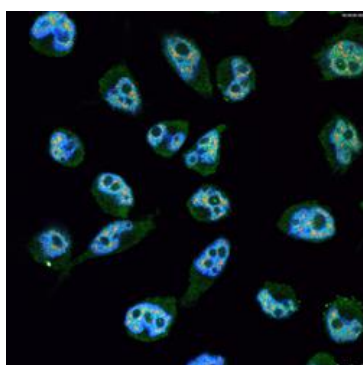


SC35

(Nuclear speckle marker)



Merge



Immunocytochemical detection of SRSF3 in HeLa Tet-Off cell

These data were provided by Dr. Akimitsu, The University of Tokyo.