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



#### RiboCluster Profiler™

**RBP** Antibody

## Anti-HNRNPC pAb

Code No.: RN052PW

**SOURCE:** rabbit polyclonal antibody, affinity purified

**QUANTITY:**  $100 \mu L$ 

**FORMULATION:** 1 mg/ml in 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:** 

Western Blotting 1:5,000 for chemiluminescence detection system Immunoprecipitation 5  $\mu$ L/500  $\mu$ L of cell extract from 5 x 10<sup>6</sup> cells

For more information, please visit our web site at <a href="https://ruo.mbl.co.jp/">https://ruo.mbl.co.jp/</a>.

#### SPECIES CROSS REACTIVITY on WB:

Species	Human	Mouse	Rat	Hamster
Cells	293T, HeLa, K562	NIH/3T3, WR19L	Not tested	Not tested
Reactivity	+	+		

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**Entrez Gene ID:** 3183 (Human)

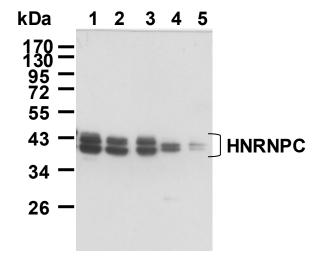
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The descriptions of the following protocols are examples. Each user should determine the appropriate condition.

#### **SDS-PAGE & Western blotting**

- 1) Wash 1 x 10<sup>7</sup> cells 3 times with PBS and suspend them in 1 mL of Laemmli's sample buffer, then sonicate briefly (up to 20 seconds).
- 2) Boil the samples for 2 minutes and centrifuge. Load 10 μL of the sample per lane in a 1 mm thick SDS-polyacrylamide gel for electrophoresis.
- 3) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm<sup>2</sup> for 1 hour 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) for 1 hour at room temperature, or overnight at 4°C.
- 5) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATIONS** for 1 hour at room temperature. (The concentration of antibody will depend on the conditions.)
- 6) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (10 minutes x 3 times).
- 7) Incubate the membrane with the 1:10,000 HRP-conjugated anti-rabbit IgG (MBL; code no. 458) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
- 8) Wash the membrane with PBS-T (10 minutes x 3 times).
- 9) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 minute. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 10) Expose to an X-ray film in a dark room for 3 minutes. Develop the film as usual. The condition for exposure and development may vary.

(Positive controls for Western blotting; 293T, HeLa, K562, NIH/3T3, WR19L)

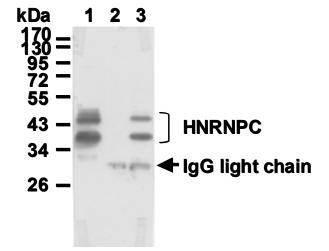


Western blotting analysis of HNRNPC in 293T (1), HeLa (2), K562 (3), NIH/3T3 (4) and WR19L (5) using RN052PW.

#### **Immunoprecipitation**

- 1) Wash 1 x 10<sup>7</sup> 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. Vortex for 10 seconds, then leave on ice for 10 minutes.
- 2) Centrifuge the tube at 12,000 x g for 5 minutes at 4°C and transfer the supernatant to another tube.
- 3) Add 40 µL of 50% protein A agarose beads slurry resuspended in Lysis Buffer into the supernatant. Incubate it at 4°C with rotating for 1 hour.
- 4) Centrifuge the tube at 2,000 x g for 1 minute at 4°C and transfer the supernatant to another tube (precleared sample).
- 5) Mix both 20 μL of 50% protein A agarose beads slurry resuspended in PBS and normal rabbit IgG (RIP-Assay Kit) or anti-HNRNPC antibody at the amount of suggested in the **APPLICATIONS**, and then add 1 mL of Wash Buffer into each tube. Incubate with gently agitation for 1 hour at 4°C.
- 6) Wash the beads once with ice-cold Lysis Buffer (centrifuge the tube at 2,000 x g for 1 minute). Carefully discard the supernatant using a pipettor without disturbing the beads.
- 7) Add 500 µL of cell lysate (precleared sample of step 4), then incubate with gentle agitation for 3 hours at 4°C.
- 8) Wash the beads 4 times with Wash Buffer (centrifuge the tube at 2,000 x g for 1 minute).
- 9) Resuspend the beads in 20 μL of Laemmli's sample buffer, boil for 3-5 minutes, and centrifuge for 5 minutes. Use 20 μL of the sample per lane in a 1 mm thick SDS-polyacrylamide gel for electrophoresis.
- 10) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm<sup>2</sup> for 1 hour 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.
- 11) To reduce nonspecific binding, soak the membrane in 5% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature, or overnight at 4°C.
- 12) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATIONS** for 1 hour at room temperature. (The concentration of antibody will depend on the conditions.)
- 13) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (10 minutes x 3 times).
- 14) Incubate the membrane with the 1:1,000 Rabbit True Blot HRP conjugated anti-Rabbit IgG (eBioscience; code no. 18-8816-33) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
- 15) Wash the membrane with PBS-T (10 minutes x 3 times).
- 16) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 minute. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 17) Expose to an X-ray film in a dark room for 3 minutes. Develop the film as usual. The condition for exposure and development may vary.

(Positive control for Immunoprecipitation; 293T)



# Immunoprecipitation of HNRNPC from 293T with normal rabbit IgG (2) or RN052PW (3).

After immunoprecipitated with antibody, immunocomplex was resolved on SDS-PAGE and immunoblotted with RN052PW.

Lane 1 is the input sample.