

POLYCLONAL ANTIBODY

Anti-Sendai Virus pAb

Code No.	Quantity	Form
PD029	50 μ L	Serum

BACKGROUND: Sendai virus (SeV), also known as murine parainfluenza virus type 1, is a negative sense, single-stranded RNA virus of the paramyxovirus subfamily Paramyxovirinae, genus Respirovirus, members of which primarily infect mammals. It was originally recovered in Sendai, Japan, so it is also called hemagglutinating virus of Japan (HVJ). SeV is responsible for a highly transmissible respiratory tract infection in mice, hamsters, guinea pigs, rats, and occasionally pigs, with infection passing through both air and direct contact routes. The virus can be detected in mouse colonies worldwide, generally in suckling to young adult mice. It is believed that the natural host of Sendai virus is the mouse and that the virus is usually nonpathogenic for humans. The SeV genome is organized starting with the short 3' leader region, followed by six genes encoding the nucleocapsid protein (NP), phosphoprotein (P), matrix protein (M), fusion protein (F), hemagglutinin-neuraminidase protein (HN), and large protein (L), and ending with a short 5' trailer region. The SeV now has been developed as gene transfer vectors for expressing foreign genes to a wide range of mammalian cells and tissues with high efficiency.

SOURCE: This antibody was whole serum. The rabbit was immunized with wild type Sendai virus.

FORMULATION: 50 μ L volume of whole serum containing 0.09% NaN₃.

*Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at 4°C.

REACTIVITY: This antibody reacts with Sendai virus on Western blotting and Immunocytochemistry.

SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat	Other
Recombinant	Not tested	Not tested	Not tested	GFP/dF-SeV
Reactivity on WB				+

INTENDED USE:

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

APPLICATIONS:

Western blotting: 1:2,000 for chemiluminescence detection system

Immunoprecipitation: Not tested

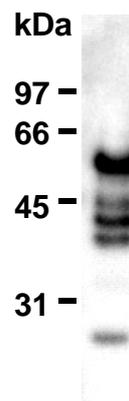
Immunohistochemistry: Not tested

Immunocytochemistry: 1:500 (for methanol fixed cells)

Flow cytometry: Not tested*

*It is reported that this antibody can be used in Flow cytometry in the reference number 1).

Detailed procedure is provided in the following **PROTOCOLS.**



Western blot analysis of Sendai virus protein in recombinant GFP/dF-SeV using PD029.

PROTOCOLS:

SDS-PAGE & Western Blotting

- 1) Mix the sample with Laemmli's sample buffer.
- 2) Boil the samples for 3 minutes and centrifuge. Load 20 μ L of sample per lane on a 1-mm-thick SDS-polyacrylamide gel and carry out electrophoresis.
- 3) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm² for 1 hour in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacturer'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 for 1 hour at room temperature with primary antibody diluted with PBS (pH 7.2) containing 1% skimmed milk as suggested in the **APPLICATIONS.** (The concentration of antibody will depend on the conditions.)

- 6) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 minutes x 3 times).
 - 7) Incubate the membrane with 1:10,000 Anti-IgG (Rabbit) pAb-HRP (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 (5 minutes x 3 times).
 - 9) Wipe excess buffer off the membrane, and incubate membrane with an appropriate chemiluminescence reagent for 1 minute.
 - 10) Remove extra reagent from the membrane by dabbing with a paper towel, and seal it in plastic wrap.
 - 11) Expose the membrane onto an X-ray film in a dark room for 10 minutes. Develop the film under usual settings. The conditions for exposure and development may vary.
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(Positive control for Western blotting; Recombinant)

Immunocytochemistry

- 1) Wash the cells twice with pre-chilled PBS, and then fix the cells by immersing the slide in methanol pre-cold at -20°C for 10 minutes on ice.
- 2) Allow the cells air dry, and then wash the cells twice with PBS for 3-5 minutes each.
- 3) Add the primary antibody diluted with PBS as suggested in the **APPLICATIONS** onto the cells and incubate for 45 minutes at 37°C. (Optimization of antibody concentration or incubation condition is recommended if necessary.)
- 4) Wash as in step 2).
- 5) Add FITC-conjugated anti-rabbit IgG antibody diluted with PBS onto the cells. Incubate for 30 minutes at room temperature. Keep out light by aluminum foil.
- 6) Wash as in step 2).
- 7) Wipe excess liquid off the slide but take care not to touch the cells. Never leave the cells to dry.
- 8) Promptly add mounting medium onto the slide, then put a cover slip on it.

(Positive control for Immunocytochemistry; Transfectant)

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