

**Human Respiratory Syncytial Virus,  
A2001/3-12**

**Catalog No. NR-28526**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Paramyxoviridae, Pneumovirinae, Pneumovirus, Human respiratory syncytial virus*

Species: Human respiratory syncytial virus

Strain: A2001/3-12

Original Source: Human respiratory syncytial virus (RSV), A2001/3-12 was isolated from a nasal wash from an infant with RSV bronchiolitis in Nashville, Tennessee on March 12, 2001.<sup>1</sup>

Comments: A2001/3-12 is one of six clinical RSV isolates that recently were shown to induce variable disease severity, lung interleukin-13 (IL-13) levels, and gob-5 levels in BALB/cJ mice.<sup>2</sup> IL-13 is a cytokine linked to mucus production and gob-5 is a calcium-activated chloride channel family member implicated in airway inflammation.<sup>3,4</sup> Compared to mock infection, RSV A2001/3-12 infection led to relatively low levels of gob-5 in lung tissue, and no significant elevation in IL-13 expression, but did induce early weight loss and lung damage in infected mice.<sup>2</sup>

**Material Provided:**

Each vial contains approximately 1 mL of cell lysate and supernatant from HEP-2 cells (ATCC<sup>®</sup> CCL-23<sup>™</sup>) infected with human respiratory syncytial virus, A2001/3-12.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-28526 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

Host: HEP-2 cells (ATCC<sup>®</sup> CCL-23<sup>™</sup>)

Growth Medium: Eagle's Minimum Essential Medium supplemented with 2% fetal bovine serum

Infection: Cells should be 60% to 80% confluent

Incubation: 3 to 8 days at 37°C and 5% CO<sub>2</sub>

Cytopathic Effect: Syncytia formation

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Human Respiratory Syncytial Virus, A2001/3-12, NR-28526."

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. M. L. Moore, personal communication.

2. Stokes, K. L., et al. "Differential Pathogenesis of Respiratory Syncytial Virus Clinical Isolates in BALB/c Mice." J. Virol. 85 (2011): 5782-5793. PubMed: 21471228.
3. Nakanishi, A., et al. "Role of gob-5 in Mucus Overproduction and Airway Hyperresponsiveness in Asthma." Proc. Natl. Acad. Sci. U.S.A. 98 (2001): 5175-5180. PubMed: 11296262.
4. Walter, D. M., et al. "Critical Role for IL-13 in the Development of Allergen-Induced Airway Hyperreactivity." J. Immunol. 167 (2001): 4668-4675. PubMed: 11591797.

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