Human Respiratory Syncytial Virus, A2001/2-20, Purified From HEp-2 Cells

Catalog No. NR-43938

For research use only. Not for human use.

Contributor: Martin L. Moore, Ph. D., Department of Pediatrics, Emory University, Atlanta, Georgia

Manufacturer: BEI Resources

Product Description:

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

**Species:** Human respiratory syncytial virus

**Strain:** A2001/2-20

**Original Source:** Human respiratory syncytial virus (RSV), A2001/2-20 was isolated from a nasal wash from an infant with RSV bronchiolitis in Nashville, Tennessee on February 20, 2001.

**Comments:** A2001/2-20 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. IL-13 is a cytokine linked to mucus production and gob-5 is a calcium-activated chloride channel family member implicated in airway inflammation. Compared to mock infection, RSV A2001/2-20 infection led to relatively high levels of gob-5 and significantly elevated levels of IL-13 in lung tissue.

This isolate also induced a bimodal weight loss pattern in infected mice, with peaks at day 2 and day 6 post-infection. RSV A2001/2-20 infection caused the most severe disease of any isolate tested, and was characterized by airway hyperresponsiveness and mucin expression, perivascular edema, epithelial desquamation, bronchiolitis, and increased breathing effort.

NR-43938 was prepared by inoculation of HEp-2 cells (ATCC® CCL-23™) with RSV, A2001/2-20. The virus was purified from clarified supernatant by high speed centrifugation.

A similarly processed preparation of mock-infected HEp-2 cell clarified supernatant, suitable for use as a control, is available as BEI Resources NR-43974.

Material Provided:

Each vial contains approximately 0.5 mL of NR-43938 in TBS (0.15 M sodium chloride, 0.05 M Tris-HCl, pH 7.6).

Packaging/Storage: NR-43938 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -80°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® CCL-23™)

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

**Infection:** Cells should be 60% to 80% confluent

**Incubation:** 5 to 6 days at 37°C and 5% CO₂

**Cytopathic Effect:** Rounding and sloughing

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Human Respiratory Syncytial Virus, A2001/2-20, Purified From HEp-2 Cells, NR-43938.”

**Biosafety Level:** 2


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References:

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