Human Respiratory Syncytial Virus, A2001/3-12, Purified from HEp-2 Cells

Catalog No. NR-44231

For research use only. Not for use in humans.

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Manufacturer:
BEI Resources

Product Description:

Virus Classification: Pneumoviridae, Orthopneumovirus, Human orthopneumovirus
Species: Human respiratory syncytial virus
Strain/Isolate: A2001/3-12

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

Comments: hRSV, A2001/3-12 is one of six clinical hRSV 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, hRSV, 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.

NR-44231 was prepared by inoculation of human epithelial carcinoma cells (HEp-2; ATCC® CCL-23™) with hRSV, A2001/3-12. 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 purified virus in TBS (0.15 M sodium chloride, 0.05 M Tris-HCl, pH 7.6).

Packaging/Storage:
NR-44231 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: Human Epithelial carcinoma cells (HEp-2; ATCC® CCL-23™)
Growth Medium: Eagle’s Minimum Essential Medium containing Earle’s Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g/L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 60% to 80% confluent
Incubation: 5 to 10 days at 37°C and 5% CO₂
Cytopathic Effect: Syncytia, cell rounding and sloughing

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Human Respiratory Syncytial Virus, A2001/3-12, Purified from HEp-2 Cells, NR-44231.”

Biosafety Level: 2

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References:


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