Human Respiratory Syncytial Virus, A1998/12-21

Catalog No. NR-28528

For research use only. Not for use in humans.

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Manufacturer:
BEI Resources

Product Description:

Virus Classification: Pneumoviridae, Orthopneumovirus
Species: Human Respiratory Syncytial Virus
Strain: A1998/12-21
Original Source: Human respiratory syncytial virus (RSV), A1998/12-21 was isolated from a nasal wash from an infant with RSV bronchiolitis in Nashville, Tennessee on December 12, 1998.
Comments: A1998/12-21 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 channel family member implicated in airway inflammation. Compared to mock infection, RSV A1998/12-21 infection led to relatively high levels of gob-5 in lung tissue, but no significant elevation in IL-13 expression, and no weight loss in infected mice. The complete genome of hRSV, A1998/12-21 has been sequenced (GenBank: JX069802.1).

RSV was first isolated from infants in 1957 and is recognized as the primary cause of hospitalization for lower respiratory tract illnesses among infants and young children worldwide. RSV has a negative-sense RNA genome encoding for 10 proteins, of which 2 are nonstructural. RSV envelope glycoprotein (G protein) is integral to the immunity and pathogenesis of the virus, and depending on its sequence variation, RSV is divided into two groups, A and B. No vaccine for RSV is available; however, intravenous prophylaxis with RSV immune globulins has been shown to be effective.

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from Homo sapiens epithelial carcinoma cells (HEp-2; ATCC® CCL-23™) infected with hRSV, A1998/12-21.

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

Packaging/Storage:
NR-28528 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: Homo sapiens epithelial carcinoma cells (HEp-2; ATCC® CCL-23™)
Growth Medium: Eagle's minimum essential medium modified to contain Earle's Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate, and 1500 milligrams per liter sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent
Incubation: 4 to 11 days at 37°C and 5% CO₂
Cytopathic Effect: Cell rounding and syncytia formation

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Human Respiratory Syncytial Virus, A1998/12-21, NR-28528.”

Biosafety Level: 2

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References:

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