Human Respiratory Syncytial Virus, A1998/3-2

Catalog No. NR-28529

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: A1998/3-2
Original Source: Human respiratory syncytial virus (RSV), A1998/3-2 was isolated from nasal wash from an infant with RSV bronchiolitis in Tennessee, USA in 1998.1
Comments: RSV, A1998/3-2 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.2 IL-13 is a cytokine linked to mucus production and gob-5 is a calcium-activated chloride channel family member implicated in airway inflammation.3,4 Compared to mock infection, RSV, A1998/3-2 infection led to low levels of gob-5 in lung tissue, no significant elevation in IL-13 expression, and no weight loss in infected mice.2 The complete genome of RSV, A1998/3-2 has been sequenced (GenBank: JX069801.1).

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.5,6 RSV has a negative-sense RNA genome encoding for 10 proteins, of which 2 are nonstructural.6 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.6 No vaccine for RSV is available, however, intravenous prophylaxis with RSV immune globulins has been shown to be effective.7

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 RSV, A1998/3-2.

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

Packaging/Storage:
NR-28529 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: Dulbecco’s Modified Eagle’s Medium modified to contain 4 mM L-glutamine, 4500 mg per L glucose, 1 mM sodium pyruvate and 1500 mg per L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent
Infection: Cells should be approximately 80 to 90% confluent
Incubation: 5 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 contributed by Division of Viral Diseases, Centers for Disease Control and Prevention for distribution through BEI Resources, NIAID, NIH: Human Respiratory Syncytial Virus, A1998/3-2, NR-28529.”

Biosafety Level: 2

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References:

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