Product Information Sheet for NR-22240

Human Metapneumovirus, TN/93-32

Catalog No. NR-22240

For research use only. Not for use in humans.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Virus Classification: *Paramyxoviridae*, *Pneumovirinae, Metapneumovirus*
Species: Human metapneumovirus
Strain/Isolate: TN/93-32
Original Source: Human metapneumovirus (HMPV), TN/93-32 was isolated in 1993 from a human specimen collected in Tennessee, USA.[1,2]
Comments: Additional information for HMPV TN/93-32 is available at the Virus Pathogen Resource. The complete genome of the TN/93-32 isolate has been sequenced (GenBank: KC562223).

Human metapneumovirus was first isolated from young children with acute respiratory tract disease in the Netherlands in 2001, and subsequently recognized as a major cause of respiratory illness in infants and children worldwide.[3,4] Retrospective serological analyses indicated that the virus had been circulating in humans for at least half a century. Two serotypes of HMPV have been defined, with two genetic lineages within each serotype.[5] TN/93-32 is classified as a type B2 virus.[2,6]

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from *Macaca mulatta* kidney epithelial cells (LLC-MK2 Derivative; ATCC® CCL-7.1™) infected with HMPV, TN/93-32.

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

Packaging/Storage:
NR-22240 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: LLC-MK2 Derivative cells (ATCC® CCL-7.1™)
Growth Medium: Opti-MEM® Minimal Essential Medium supplemented with 2 mM L-glutamine, 100 µg per mL $CaCl_2$, and 5 µg per mL trypsin
Infection: Cells should be 40% to 90% confluent
Incubation: 6 to 14 days at 37°C and 5% CO_2
Cytopathic Effect: Rounding, sloughing and syncytia formation.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Human Metapneumovirus, TN/93-32, NR-22240."

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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:
1. Williams, J. V., Personal Communication.
2. Yang, C. F., et al. "Human Metapneumovirus G Protein is Highly Conserved within but not between Genetic

Lineages." Arch. Virol. 158 (2013): 1245-1252. PubMed: 23385328.
3. van den Hoogen, B. G., et al. "A Newly Discovered Human Pneumovirus Isolated from Young Children with Respiratory Tract Disease." Nat. Med. 7 (2001): 719-724. PubMed: 11385510.
4. Williams, J. V. "Human Metapneumovirus: An Important Cause of Respiratory Disease in Children and Adults." Curr. Infect. Dis. Rep. 7 (2005): 204-210. PubMed: 15847723.
5. van den Hoogen, B. G., et al. "Antigenic and Genetic Variability of Human Metapneumoviruses." Emerg. Infect. Dis. 10 (2004): 658-666. PubMed: 15200856.
6. Yang, C. F., et al. "Genetic Diversity and Evolution of Human Metapneumovirus Fusion Protein Over Twenty Years." Virol. J. 6 (2009): 138. PubMed: 19740442.

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